

D.A.V. INSTITUTIONS WEST BENGAL ZONE
HALF YEARLY EXAMINATION
SESSION 2024-2025

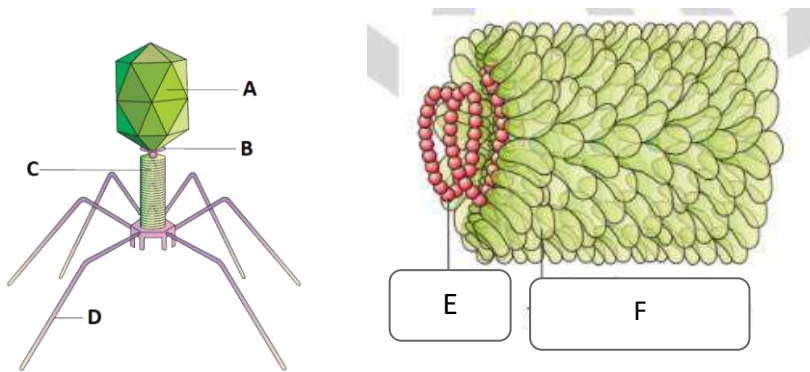
CLASS: XI
SUBJECT: BIOLOGY

MAXIMUM MARKS: 70
TIME: 3 HOURS

- (i) The question paper has five sections and 33 questions. All questions are compulsory.
(ii) Section–A has 16 questions of 1 mark each; Section–B has 5 questions of 2 marks each; Section– C has 7 questions of 3 marks each; Section– D has 2 case-based questions of 4 marks each; and Section–E has 3 questions of 5 marks each.
(iii) There is no overall choice. However, internal choices have been provided in some questions. A student has to attempt only one of the alternatives in such questions.
(iv) Wherever necessary, neat and properly labeled diagrams should be drawn.

Section A

1. Identify the correct sequence of taxonomic categories. 1
 - (a) Species →Order →Phylum →Kingdom
 - (b) Genus →Species →Order →Kingdom
 - (c) Species →Genus →Order →Phylum
 - (d)Species →Genus →Kingdom →Phylum
2. Identify both the diagrams and choose the correct option of names of the structures marked A, B, C, D, E and F. 1



- a) A–Head, B– Collar, C–Tail fibres, D–Sheath, E–RNA, F–Capsid
 - b) A–Head, B– Sheath, C–Collar, D–Tail fibres, E–RNA, F–Capsid
 - c) A–Head, B– Collar, C–Sheath, D–Tail fibres, E–RNA, F–Capsid
 - d) A–Head, B– Collar, C–Sheath, D–Tail fibres, E–Capsid, F–RNA
3. Agar is obtained from 1
 - a) *Gelidium*
 - b) *Porphyria*
 - c) *Chara*
 - d) *Spirogyra*
 4. Which one of the following is correctly matched? 1

	Animal	Phylum	Character
a)	<i>Planaria</i>	Plathelminthes	Regeneration
b)	<i>Pleurobrachia</i>	Cnidaria	Comb plate
c)	<i>Adamsia</i>	Annelida	Cnidoblast
d)	<i>Pheretima</i>	Aschelminthes	Parapodia

5. Rearrange the following zones as seen in the root in vertical section and choose the correct option. 1
 - A. Root hair zone
 - B. Zone of meristems

- C. Root cap zone
 D. Zone of maturation
 E. Zone of elongation
 a) E, D, C, B, A
 b) A, B, C, D, E
 c) D, E, A, C, B
 d) C, B, E, A, D
6. Different cells have different sizes. Arrange the following cells in an ascending order of their size. Choose the correct option among the followings: 1.
 (i) Mycoplasma (ii) Ostrich eggs (iii) Human RBC (iv) Bacteria
 a) i, iv, iii & ii
 b) i, iii, iv & ii
 c) ii, i, iii & iv
 d) iii, ii, i & iv
7. Which is an INCORRECT statement for Krebs cycle? 1
 a) There are three points in the cycle where NAD^+ is reduced to $\text{NADH} + \text{H}^+$
 b) The cycle starts with the condensation of acetyl group (Acetyl CoA) with Pyruvic acid to yield Citric acid.
 c) During the conversion of succinyl CoA to succinic acid, a molecule of GTP is synthesized.
 d) There is one point in the cycle where FAD^+ is reduced to FADH_2 .
8. Which of the statements is NOT TRUE? 1
 a) Glycolysis occurs in cytosol
 b) Glycolysis operates as long as it is supplied with NAD that can pick up hydrogen atoms.
 c) Enzymes of TCA cycle are present in mitochondrial matrix.
 d) Oxidative phosphorylation takes place in outer mitochondrial membrane
9. Which of the events listed below is not observed during mitosis? 1
 a) Chromatin condensation
 b) Movement of centrioles to opposite poles
 c) Appearance of chromosomes with two chromatids joined together at the centromere.
 d) Crossing over
10. Identify the correct and incorrect match about respiratory volume and capacities and mark the correct answer. 1
 i) Inspiratory capacity (IC) = Tidal volume (TV) + Residual volume (RV)
 ii) Vital capacity (VC) = Tidal volume (TV) + Inspiratory Reserve Volume (IRV) + Expiratory Reserve Volume (ERV).
 iii) Residual volume (RV) = Vital Capacity (VC) – Inspiratory Reserve Volume (IRV)
 iv) Tidal volume (TV) = Inspiratory capacity (IC) – Inspiratory Reserve Volume (IRV)
 a) i. Incorrect, ii. Incorrect, iii. Incorrect, iv. Correct
 b) i. Incorrect, ii. Correct, iii. Incorrect, iv. Correct
 c) i. Correct, ii. Correct, iii. Incorrect, iv. Correct
 d) i. Correct, ii. Incorrect, iii. Correct, iv. Incorrect.
11. Identify the name of the compound formed when CO_2 is carried by Haemoglobin 1
 a) Carboxy- haemoglobin
 b) Carbamino-haemoglobin
 c) Carbo-haemoglobin
 d) De-oxyhaemoglobin

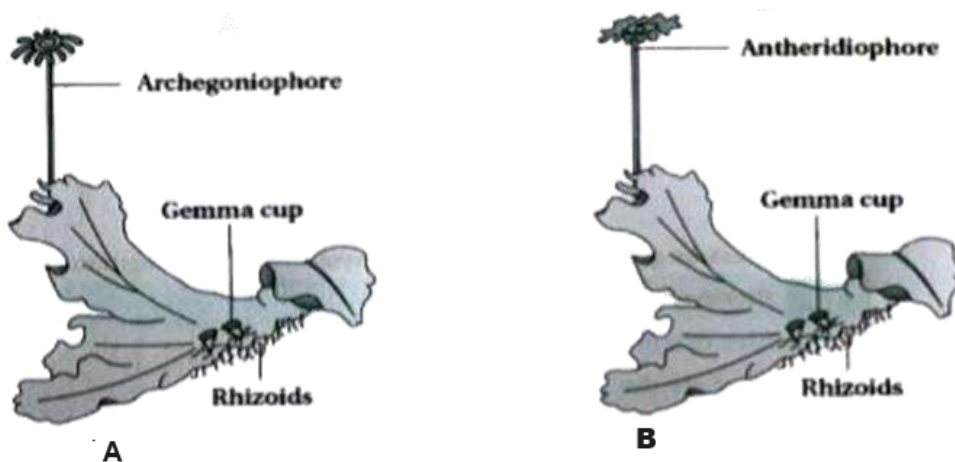
12. What would be the cardiac output of a person having 72 heart beats per minute and a stroke volume of 50 mL? 1
- 360 ml
 - 720 ml
 - 3600 ml
 - 5000 ml

Question No. 13 to 16 consist of two statements – Assertion (A) and Reason (R). Answer these questions selecting the appropriate option given below:

- Both (A) and (R) are true and (R) is the correct explanation of (A).
 - Both (A) and (R) are true and R is not the correct explanation of (A)
 - (A) is true but (R) is false.
 - (A) is false but (R) is true.
13. Assertion (A): Osteichthyes can float at any point under water. 1
Reason (R): They have swim bladder.
14. Assertion (A): Mitosis maintains the genetic similarity of somatic cells. 1
Reason (R): Chromosomes undergo crossing over in Mitosis.
15. Assertion (A): 3 percent of CO₂ is carried in a dissolved state through plasma. 1
Reason (R): 70 percent of CO₂ is transported via bicarbonate.
16. Assertion (A): Reduction in number of Platelets can lead to excessive blood loss from the body in case of injury. 1
Reason (A): Platelets help in blood coagulation.

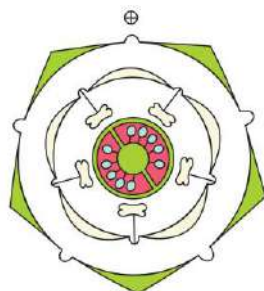
Section: B

17. Observe the diagram carefully and answer the following question. 2



Out of A and B which one will develop into sporophyte and why?

18. Observe the floral diagram and answer the following questions: 2



- Name the family of the floral diagram.
 - Write and explain the nature of the stamen.
19. Explain the importance of F₀-F₁ particles in ATP production during aerobic respiration. 2
20. Mention the difference between Cytokinesis of Animal cells and Plant cells. 2

OR

Measurements of the amount of DNA per nucleus were taken on a large number of cells from a growing fungus. The measured DNA levels ranged from 3 to 6 picograms per nucleus. In which stage of the cell cycle did the nucleus contain 6 picograms of DNA? Explain.

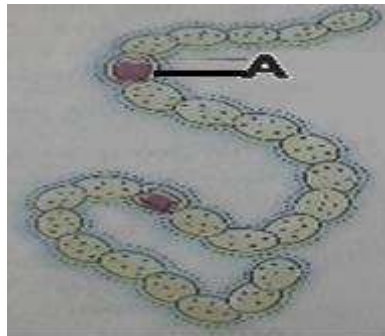
21. How does the structure of alveoli facilitate efficient gas exchange? Explain in brief 2

OR

Compare the respiratory adaptations of Birds and Earthworms by identifying the specialized structures they use for gas exchange and explaining how these structures suit their environments.

Section: C

22. Define taxon. What is meant by taxonomic hierarchy? Give a flow diagram from the lowest to highest category for a plant or an animal. 3
23. Observe the given picture carefully and answer the following question. 3

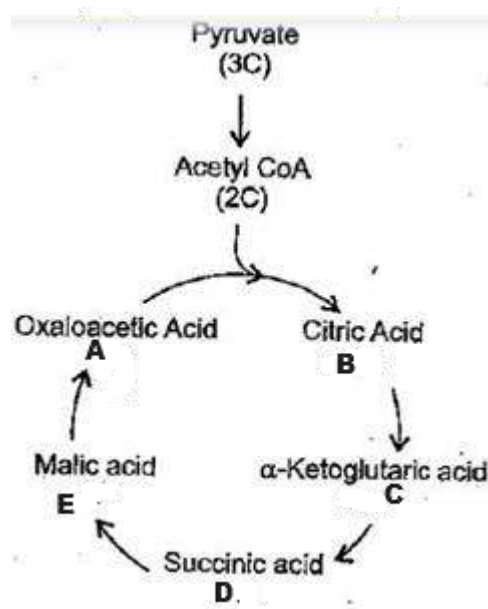


- a) Identify the labelled part A.
b) Name the kingdom and group in which the organism belongs.
c) Discuss briefly why the role of A is beneficial for environment.
24. Explain heterospory. In which plant it is found? Why Bryophytes are called 'Amphibians of Plant Kingdom'? 3
25. Carefully observe the above mentioned table and write the suitable words In place of A, B, C, D, E & F. 3

Phylum	Coelom	Segmentation	Distinctive features
Aschelminthes	A	Absent	Often worm shaped
Annelida	B	Present	C
Mollusca	D	E	F

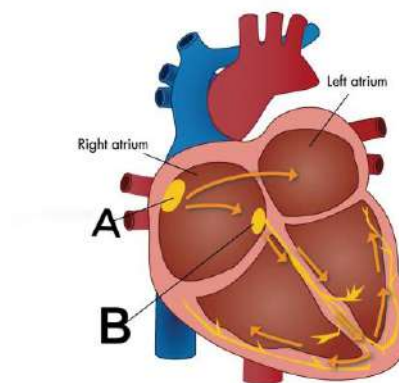
OR

- a) What is the basic difference of segmentation between annelids & arthropods?
b) Which phylum is considered as connecting link between chordates & non-chordates and Why?
26. Explain the transport of following molecules across the plasma membrane. 3
a) Neutral solutes b) Polar molecules c) Na/K^+ ions
27. The given diagram shows the pathway of TCA cycle. 3



- a) Analyse and write the number of carbon atoms present in A, B, C and D.
 b) Mention the significance of TCA cycle.
28. a) How A and B are important in controlling cardiac activity?
- b) Justify the statement that thrombokinese complex is essential for blood clotting.

3



Section: D (Case Based Question)

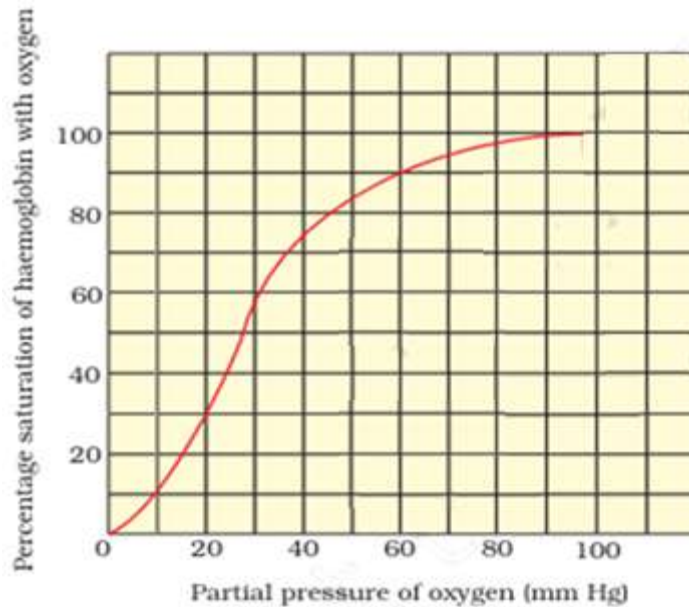
The section contains three sub parts, internal choice is provided in question number (c)

29. Algae are chlorophyll-bearing, simple, thalloid, autotrophic and largely aquatic (both fresh water and marine) organisms. They occur in a variety of other habitats: moist stones, soils and wood. Some of them also occur in association with fungi (lichen) and animals (Eg: on sloth bear). The algae are divided into three main classes: Chlorophyceae, Phaeophyceae and Rhodophyceae.
- a) Give an example of Green algae and Brown algae.
 b) Give reason- Why members of Chlorophyceae class are named as green algae?
 c) Give two points of differences between Chlorophyceae and Rhodophyceae.

4

OR

Name the pigment which determines the colour of brown algae. Define algin.



- Write the name of the given graph.
- Among the left ventricle, pulmonary vein and vena cava where the saturation of O_2 is least?
- Mention the conditions due to which the curve would shift to the right.

OR

‘The right-side shift of the curve is helpful for aerobic exercise’. Justify.

Section: E

- Analyze the roles of various cell organelles by explaining how the centrosome, cell wall, smooth ER, Golgi apparatus, and lysosome contribute to the overall functionality and health of a eukaryotic cell. 5

OR

Explain the fluid mosaic model given by Sanger and Nicolson of the plasma membrane with the help of a labelled diagram.

- Elucidate the events of Prophase I of meiosis with the help of diagrams. 5

OR

- Observe the diagram carefully and answer the following questions



- The phase corresponds to the interval between mitosis and initiation of DNA replication
 - The phase where centriole duplicates in the cytoplasm
 - State any two characteristic features of G_0 phase.
- Differentiate between Anaphase-I and Anaphase-II.

33. Given below is the Blood Grouping system in human. Observe the table carefully and answer the following questions.

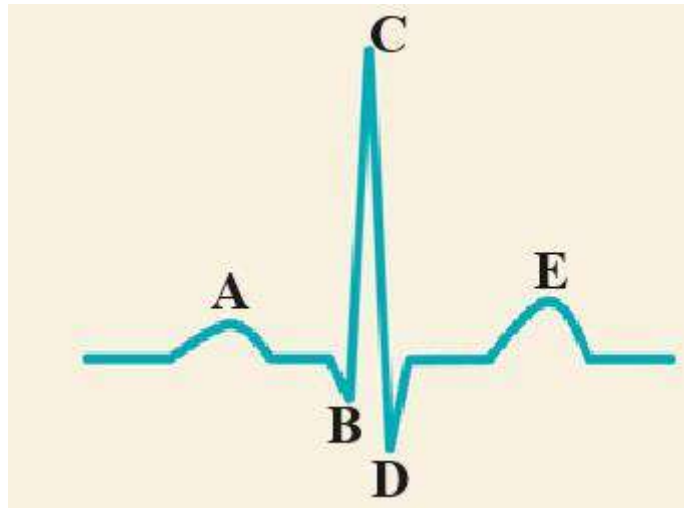
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Blood Group	Antigens on RBCs	Antibodies in Plasma	Donor's Group
A	i	anti-B	A, O
B	B	anti-A	ii
AB	iii	nil	iv
O	nil	v	vi

- Identify and name the items marked as i, ii, iii, iv, v & vi.
- Which blood group is called universal donor and Universal recipient? Give reason.

OR

Observe the ECG graph carefully and answer the following questions.



- What does A, B, C, D and E signify in the graph?
- Explain the characteristics of the waves represented in the graph.
- Give the clinical significance of the graph.

SESSION: 2024 – 2025**MAXIMUM MARKS: 80**

TIME: 3 HOURS

General instructions:

There are **34** questions in all. All questions are compulsory.

This question paper contains **06** printed pages.

Q.N. 01 to 20 are very short answer type questions carrying 1 mark each.

Q.N. 21 to 26 are short answer **type – I** questions carrying **3** marks each.

Q.N. 27 to 29 are short answer **type – II** questions carrying **4** marks each.

Q.N. 30 to 34 are long type answer questions carrying 6 marks each.

There is no overall choice. However, an internal choice has been provided in **4** questions of one mark, **2** questions of three marks and **2** questions of six marks.

- | | | |
|---|--|---|
| 1 | Book Keeping is concerned with | 1 |
| | (a) Recording financial data relating to business transactions. | |
| | (b) Classifying and summarising recorded data. | |
| | (c) Interpreting data for internal users. | |
| | (d) Determining the financial position. | |
| 2 | Creditors of the business want to know | 1 |
| | (a) Profitability of the Business. | |
| | (b) Capability of the business to pay higher salaries. | |
| | (c) Creditworthiness of the business. | |
| | (d) Employment Opportunities. | |
| 3 | Which of the following limitations of accounting states that accounts may be manipulated to conceal vital facts: | 1 |
| | (a) Accounting is not fully exact. | |
| | (b) Accounting may lead to window dressing. | |
| | (c) Accounting ignores price level changes. | |
| | (d) Accounting ignores qualitative elements. | |

OR

Which one of the following is not an objective of accounting?

- (a) To provide information about the assets, liabilities and capital of the enterprise.
 - (b) To provide information about the private assets and liabilities of the proprietor.
 - (c) To maintain records of the business.
 - (d) To provide information regarding the profit and loss of the enterprise.
- 4 **Assertion (A):** Capital is a liability of the firm towards the proprietor. 1
- Reasons (R):** Capital is a liability because the proprietor is separate and distinct from the business.

Select the correct option

- (a) Both Assertion (A) and Reason (R) are correct, and Reason (R) is the correct explanation of (A).
- (b) Both Assertion (A) and Reason (R) are correct, but Reason (R) is not the correct explanation of (A).
- (c) Assertion (A) is correct but Reason (R) is incorrect.
- (d) Assertion (A) is incorrect but Reason (R) is correct.
- 5 The term sales is used only for the sales of and is never used for the sale of 1
- (a) Assets, Investments (b) Assets, Goods
- (c) Intangible Assets, Goods (d) Goods, Assets
- 6 **Statements (i)** – Under the Cash Basis of Accounting, expenses are recorded on being incurred. 1
- Statement (ii)** – Under the Accrual Basis of Accounting, expenses are recorded on being incurred

Statement (iii) – Accrual Basis of Accounting gives a true and fair view of profit and financial position.

Statement (iv) – Cash Basis of Accounting recognises outstanding and prepaid expenses.

Select the correct option:

- (a) i. False, ii. True, iii. True, iv. False (b) i. False, ii. False, iii. True, iv. True
(c) i. True, ii. False, iii. False, iv. True (d) i. True, ii. True, iii. False, iv. True

7 **Match the following** 1

Column - I	Column - II
1. A business enterprise will not be sold or liquidated in near future	A. Entity Concept
2. Closing stock is valued at Cost price or Market Price whichever is lower.	B. Going Concern Concept
3. Recognition of expenses in the same period as associated with revenues.	C. Prudence Concept
4. The proprietor of the business is also treated as a creditor of the business.	D. Matching

- (a) 1 – A, 2 – B, 3 – C, 4 – D (b) 1 – A, 2 – C, 3 – B, 4 – D
(c) 1 – C, 2 – D, 3 – A, 4 – B (d) 1 – B, 2 – C, 3 – D, 4 – A

8 Accounting Standards are formulated - 1

- (a) By Planning Commission.
(b) By Institute of Chartered Accountant of India.
(c) By Companies Act.
(d) By Institute of Company Secretaries of India.

OR

Accounting Standards are needed –

- (a) To bring uniformity in the financial statement of different enterprises.
(b) To limit the area within which accountant has to function.
(c) To bring clarity in accounting terminology.
(d) All of the above.

9 The position of a businessman on 30th June, 2022 was as follows: Cash ₹.5000; Debtors ₹.20,000; Machinery ₹.60,000; Stock ₹.25,000; Capital ₹.75,000. The value of liabilities is – 1

- (a) ₹75,000 (b) ₹1,10,000
(c) ₹35,000 (d) ₹40,000

10 If a transaction has the effect of increasing an asset is the increase recorded as a debit or credit? 1

- (a) Increase in asset will be recorded on Debit Side.
(b) Increase in liability will be recorded on debit side.
(c) Increase in asset will be recorded on credit side.
(d) Decrease in asset will be recorded on credit side.

11 Which Statement is correct Statement? 1

- (a) Bank Account is a Personal Account since it is the account of some banking company or firm which is an artificial person.
(b) Bank Account is Real Account since Bank balance is a valuable asset of the business.
(c) Bank Account is a Personal Account Since it is debited when amount is deposited in the bank and credited when withdrawn by business.
(d) Bank account is personal Account because Bank is debtors as well as creditors.

12 Gopal is our debtor for ₹10,000. He became insolvent and only 60 paise in a ₹ 1 is received from him. The balance of ₹ 4,000 would be entered to – 1

- (a) Debit of Discount A/c (b) Credit of Discount A/c
(c) Debit of Bad Debts A/c (d) Credit of Bad Debts A/c

OR

Goods costing ₹40,000 is sold at a profit of 25% on cost and trade discount is allowed @ 10% and cash discount of 5% is also allowed. Half the payment was received at the time sale. What is the amount of cash received at the time of sale?

- (a) ₹21,375 (b) ₹ 22,500
(c) ₹20,250 (d) ₹ 40,500
- 13 Rohan has returned goods worth ₹20,000 to Radheyshyam as he found it defective. Which document will be prepared by Radheyshyam? 1
(a) Invoice or Bill (b) Debit note
(c) Credit voucher (d) Credit note
- 14 On Intra-state purchase of goods, which of the following accounts are debited? 1
(a) Input IGST Account
(b) Input CGST Account and Input SGST Account
(c) Input IGST Account and Input CGST Account
(d) Output CGST Account and Output SGST Account
- 15 On 1st April 2023, balance of cash column of cash book was ₹10,000. After receiving ₹2,000 from Anil, giving a cheque of ₹3,200 to Sunil and making payment of wages ₹500, balance of cash will be – 1
(a) ₹11,500 (b) ₹8,300
(c) ₹8,800 (d) ₹6,300
- 16 **Assertion (A):** Each transaction in the Cash Book is posted only in a ledger account. 1
Reasons (R): Cash Book itself serves the purpose of Cash Account also and as such the second aspect of a cash transaction is to be posted in the ledger.
Select the correct option
(a) Both Assertion (A) and Reason (R) are correct, and Reason (R) is the correct explanation of (A).
(b) Both Assertion (A) and Reason (R) are correct, but Reason (R) is not the correct explanation of (A).
(c) Assertion (A) is correct but Reason (R) is incorrect.
(d) Assertion (A) is incorrect but Reason (R) is correct.
- 17 A Bank Reconciliation statement is prepared to ascertain the causes of difference between: 1
(a) The balance as shown by the cash column of Cash Book with the balance of the Pass Book.
(b) The balance as shown by the bank column of Cash Book with the balance of the Pass Book.
(c) The balance as shown by the cash column of the Cash Book with that shown by its bank column.
(d) The balance as shown by the Cheque Book and Pass Book
- 18 Payment done by account holder through issuing a cheque is entered in 1
(a) The Pass Book at the time of issuing the cheque.
(b) The Pass Book at the time of presenting the cheque to the bank for payment.
(c) The Cash Book at the time of issuing the cheque.
(d) Both (b) and (c).
- 19 Bank charges ₹5,000 debited twice in pass book. What should be done in Bank Reconciliation Statement if overdraft as per cash book is starting point? 1
(a) ₹5,000 must be deducted (b) ₹5,000 must be added
(c) ₹10,000 must be deducted (d) ₹10,000 must be added
- 20 Bank Reconciliation Statement is – 1
(a) An Account
(b) A Subsidiary book
(c) Bank Column of Cash Book
(d) A Statement prepared to reconcile cash book and pass book balance.

OR

Bank Reconciliation Statement is prepared on –

- (a) At the end of each month (b) At the end of the year
(c) On certain date (d) Before the preparation of final accounts.
- 21 Confidence and trust that the reported information is a reasonable representation of the actual items and events, that have occurred, depicts which qualitative characteristic of 3

accounting information? Explain that qualitative characteristic.

- 22 Distinguish between Cash basis of accounting and Accrual basis of accounting on the following basis: (i) Nature (ii) Accuracy (iii) Acceptability 3

OR

Gurman gives following information about his income and expenses for the year ended 31st March 2024:

Transaction	Amount (₹)
Expenses paid	1,60,000
Expenses paid in advance (included in ₹1,60,000)	40,000
Expenses not yet paid	20,000
Income received	2,40,000
Income received in advance (included in ₹2,40,000)	30,000
Income not yet received	24,000

Determine his income if he adopts (i) Cash Basis Accounting and (ii) Accrual Basis of Accounting.

- 23 Pass necessary journal entries in the books of Samir & Bros. assuming all transactions have been entered within state of West Bengal, charging CGST and SGST @ 6 % each: 3
2023

- April 6 Returned goods by Manab Sen for ₹10,000
15 Advertisement charges of ₹20,000 paid by cheque
22 Goods destroyed by fire ₹9000

- 24 Post the following transaction into necessary ledger and balances them 3
a) Purchased goods from Ankur ₹20,000
b) Paid to Ankur ₹12,500
c) Purchased goods from Ankur ₹8,000
d) Goods returned to Ankur ₹1,000
d) Paid to Ankur ₹10,000

- 25 “Business transactions are usually evidenced by an appropriate document.” In the context of above statement name any two most common source documents and explain. 3

- 26 State any three reasons when the cash book balance will be higher than passbook balance. 3

OR

State any three needs for the preparation of Bank Reconciliation Statement.

- 27 Anjana started the business of buying and selling of readymade garments for ladies and kids. She made the initial investment of ₹25,00,000. She purchased clothes for ₹10,00,000 on cash and ₹5,00,000 on credit from Hanuman. She purchased Computer and Printer for ₹80,000. She sold clothes costing ₹12,00,000 at 20% profit, Half of which was on credit. She returned clothes being defective of ₹50,000. She withdrew cash of ₹10,000 and taken away two pairs of kid cloth for her daughter costing ₹2000 each. She sold the printer as it was damaged due to negligence of the operator for ₹5,000. From the above information, calculate the following: 4

- a) Capital
b) Drawings
c) Closing Stock
d) Revenue from operations

- 28 Journalise the given below transactions in the books of Mohin in January, 2024: 4

- Jan. 5 Purchased goods for Cash ₹10,000 and spent ₹200 for their carriage.
Jan. 10 Purchased machinery for Cash ₹50,000 and spent ₹500 for its carriage.
Jan. 15 Paid by cheque ₹2,00,000 for cement, ₹1,00,000 for timber and ₹50,000 as wages for the construction of building.
Jan. 17 Paid ₹4,000 for repairing some other machinery.

- 29 Record the following transactions in petty Cash Book with suitable column. The book is kept on imprest system, amount of imprest being ₹8,000. 4

Date	Particulars	Amount (₹)
2023		
July 1	Petty cash in hand ₹1080. Received cash to	

	make-up the imprest.	
July 3	Paid for postage	500
July 5	Paid telephone bill	400
July 8	Paid for cartage	1,400
July 9	Paid for postage	2,000
July 12	Paid for sundries	200
July 27	Paid for stationery	300

30 Identify and explain the attributes of accounting from the following statement: 6

- It is an art of presenting the classified data in a systematic manner which is understandable and useful to management.
- Only those transactions and events are recorded in accountings which are of a financial characteristic.
- In this process business is preparing Trading and Profit & Loss Account and Balance Sheet.
- After recording the transactions in journal or subsidiary books, the transactions are classified.

OR

Identify and explain the branches of Accounting from the following statement

- The main purpose is to ascertain the total cost and cost of goods sold.
- The main purpose is to present the accounting information in such a way as to assist the management for decision and action.
- Contribution of business towards the society.
- The main purpose is to record business transaction in a systematic manner to ascertain the profit or loss.

31 Prepare Accounting Equation from the following transactions in the books of Jeetendra 6

- Mahesh started business with cash ₹80,000 and goods ₹40,000.
- Sold half of the goods at a profit of 25% to Ramesh.
- Remaining goods sold at a loss of 10% for cash..
- Purchased goods ₹50,000 from Mohesh on credit.
- Ramesh paid 90% of his amount in full settlement.
- Paid salary ₹3,000 and received commission ₹2,000

32 From the following particulars provided by Ram Chandra, Prepare a cash book with suitable column 6

2023 Aug.		Amount (₹)
1	Cash in Hand	1,70,000
	Bank Balance with PNB	5,00,000
	Overdraft with SBI	3,50,000
3	Cash Sales	1,40,000
5	Paid Salary to staff by cheque on PNB	2,00,000
8	Cheque received from Raj deposited with SBI	1,80,000
10	Cash deposited into PNB	1,00,000
12	Amount transferred from PNB to SBI by using cheque	60,000
15	Cash withdrew from PNB for office use.	1,60,000

33 Enter the given below transactions in Purchases Book of M/s. Shiv Brothers, Mumbai, assuming CGST @ 6% and SGST 6% :- 6

2024 April 1	Purchased goods from Joshi Bros., Mumbai vide Invoice No. 210: 10 Philips Tube lights @ Rs. 200 each 50 Crompton Bulbs @ Rs. 100 each Trade Discount is 10%
April 6	Purchased against cash 20 Philips Tube lights @ Rs. 180 each less 10% Trade Discount
April 10	Purchased goods from Rajesh Electric Store, Delhi vide Invoice No. 18:

	25 Heaters @ Rs. 800 each, 10% Trade Discount 15 Crompton Fans @ Rs. 1600 each, 10% Trade Discount
April 15	Purchased a Furniture for Rs. 50,000 from Rajesh Bros.
April 16	Purchased goods from Supreme Electric Store, Delhi vide Invoice No. 125: 5 dozen Philips Bulbs @ Rs. 100 each 25 Power Plugs @ Rs. 80 each Trade Discount is 10%

34 On 31st December, 2023, the cash book of Subhash Bros. showed an overdraft of ₹19,890. From the following particulars, prepare a Bank Reconciliation Statement and ascertained the balance as per pass book.

6

- i) Debited by bank ₹315 on account of interest on overdraft and ₹75 on account of charges for collecting bills
- ii) Cheques drawn but not encashed before 31st December, 2023 for ₹6,500
- iii) The bank has collected interest and has credited ₹925 in pass book.
- iv) A bills receivables for ₹825 previously discounted with the bank had been dishonoured and debited the pass book.
- v) Cheques paid into bank but not collected and credited before 31st December, 2023 amounted ₹ 7,250.
- vi) Debit side of cash book (bank column) overcasted by ₹1,000

OR

On comparing the cash book with pass book of Naman, it is found that on 31st March, 2024, bank balance of ₹1,40,960 (debit) showed by the cash book differs from the bank balance of pass book with regard to the following.

- i) Bank charges ₹100 on 31st March, 2024, are not entered in the cash book.
- ii) On 21st March, 2024, a debtors paid ₹12,000 into the company's bank account in settlement of his account, but no entry was made in the cash book of the company in respect of this.
- iii) Cheques totaling ₹12,980 were issued by the company and duly recorded in the cash book before 31st March, 2024 but had not been presented at the bank for payment until after that date.
- iv) A bill for ₹6,900 discounted with the bank is entered in the cash book without recording the discount charge of ₹ 800.
- v) ₹13,520 is entered in the cash book as paid into bank on 31st March, 2024 but not credited by the bank until the following day.
- vi) No entry has made in the cash book to record the dishonour on 15th March, 2024 of a cheque for ₹650 received from Bhanu.

DAV INSTITUTIONS, WEST BENGALI ZONE
HALF YEARLY EXAMINATION
SESSION: 2024-25

CLASS: XI
SUBJECT: BANKING

MAXIMUM MARKS: 60
TIME: 3 Hours

General Instructions:

1. Please read the instructions carefully.
2. This question paper consists of 24 questions in two sections- Section A & Section B.
3. Section A has **objective** type questions and Section B contains **subjective** type questions.
4. All questions of a particular section must be attempted in correct order.
5. Section A- objective type questions (30 marks)
Section B- subjective type questions (30 marks)

SECTION – A (OBJECTIVE TYPE QUESTIONS)

- 1. Answer any 4 out of the given 6 questions: 1x4**
- i) Indirect ways of showing anger such as not doing a task and lying about it is _____ 1
type of communication style.
A. Aggressive B. Passive
C. Passive - Aggressive D. Assertive
- ii) By which / what method we can know what the receiver understood or got the message. 1
A. Transmitting B. Message
C. Feedback D. Listening
- iii) Neha gets up at 5 a.m. and goes for her dance classes. Then she comes home and finishes her 1
homework before going to school. She does this all by herself. What makes her complete her
work or studies herself?
A. Self confidence B. Communication
C. Self motivation D. Self esteem
- iv) The process of working together in a group is TEAM WORK. Here 'A' stands for _____ 1
A. Assertive B. Achieve C. Aggression D. Assurance
- v) Priya wants to change the spelling of a word in the entire document. Which option will she use? 1
A. Copy B. Align Left C. Find and Replace D. Paste
- vi) What is the correct sequence of steps required to create a bulleted list in Libre Office Writer? 1
A. Bulleted list> Format>Lists B. Format>Bulleted list>Lists
C. Format> Lists> Bulleted List D. Lists>Format> Bulleted List
- 2. Answer any 5 out of the given 7 questions: 1x5**
- i) RBI isn't expected to perform the role of: 1
A. Acting as a clearing house B. Working as a banker to the government
C. Managing Forex D. Accepting deposits from general public
- ii) **Suryoday Micro Finance Private Ltd**, Navi Mumbai is an example of _____ 1
A. Small Finance Bank B. Payment Bank
C. Commercial Bank D. Co-operative Bank
- iii) **Electronic Funds Transfer** is an initiative undertaken by Reserve Bank for the function which_. 1
A. Aimed at faster clearing of large value.
B. System settles all interbank payment and customer transactions above rupees one lakh.
C. Enables an account holder of a bank to electronically transfer funds to another account holder with any other participating bank.
D. These are being used as a medium for providing banking services

- iv) _____ is the Banker to the Government. 1
 A. Central Bank B. Commercial Bank
 C. Co-operative Bank D. Regional Rural Bank
- v) Three tier structures in the cooperative banking. 1
 a) State cooperative bank
 b) Primary cooperative bank
 c) Central cooperative bank
Arrange in correct sequence:
 A. b-c-a B. a-b-c C. a-c-b D. c-a-b
- vi) A bank is a financial intermediary because: 1
 A. It acts as the broker between depositor & borrower.
 B. It acts as the link between the savers & the borrowers.
 C. It is the finance industry.
 D. It is in the intermediary industry.
- vii) As per the initiative undertaken by RBI, _____ aims at faster clearing of value cheques from 1
 selected branches of banks for same day settlement.
 A. High Value Clearing (HVC)
 B. Cheque Transaction System (CTS)
 C. The Real Time Gross Settlement (RTGS)
 D. National Electronic Clearing Service (NECS)
- 3. Answer any 6 out of the given 7 questions: 1x6**
- i) Bank's services include _____ 1
 A. Net Banking B. Mobile Banking
 C. Phone Banking D. All of the above
- ii) Which of the following is not the function of Commercial Banks? 1
 A. Providing Project Finance Settling of payment on behalf of the customers.
 B. Deciding policy rates like CRR, SLR and Repo rate.
 C. Issuing credit / debit / ATM cards.
 D. Accepting deposit from customers
- iii) **Indian Overseas Bank** is an example of _____ 1
 A. Public Sector Banks B. Foreign Banks
 C. Private Sector Banks D. Regional Rural Banks
- iv) _____ holds the apex position in the field of agriculture & rural finance. 1
 A. Regional Rural Bank
 B. Co-operative Bank
 C. National Bank of Agriculture and Rural Development
 D. Small Finance Bank
- v) **Tech Mahindra** is an example of _____ 1
 A. Payment bank B. Small finance bank
 C. Cooperative banks D. Regional rural bank
- vi) Which of the following is a role typically not performed by the central bank? 1
 A. Setting the official short term interest rate B. Establish tax policies
 C. Controlling money supply D. Acting as banker to the government
- vii) _____ are NOT a part of the Scheduled banking structure in India. 1
 A. Money lenders B. Public sector banks
 C. Private sector banks D. Regional rural banks
- 4. Answer any 5 out of the given 6 questions: 1x5**
- i) Banking Services provided to a common man is known as _____ 1
 A. Retail Banking B. Wholesale Banking
 C. Mobile Banking D. Net Banking

- ii) CTS stands for _____. 1
 A. Cheque Truncation System B. Cash Transaction System
 C. Cheque Transaction System D. None of the above
- iii) Banking is defined in 1
 A. RBI ACT B. Banking Regulation Act C. Govt, of India Act
 D. Companies Act
- iv) _____ is the Lender of last resort for the Banks. 1
 A. Commercial Bank B. Central Bank C. Co-operative Bank
 D. Citi Bank
- v) When the customer pledges certain assets or securities with the bank in order to get a loan, 1
customer becomes the _____
 A. Pledger B. Pledgee
 C. Principal D. None of the above
- vi) Which Banking services are offered to government agencies, pension funds and other 1
 institutional customers and to corporations with strong balance sheets and sound income
 statements?
 A. Retail Banking B. Wholesale Banking
 C. Both Retail and Wholesale Banking D. None of the above
- 5. Answer any 5 out of the given 6 questions: 1x5**
- i) 'KYC' consists of 1
 A. Customer identification B. Customer due diligence
 C. Customer acceptance D. All of the above
- ii) Which one of the following is the most important relationship between banker & customer? 1
 A. Debtor & Creditor B. Bailee & Bailor
 C. Agency & Principal D. Trustee & Beneficiary
- iii) A company who accepts demand deposit is called _____ 1
 A. Joint stock Company B. Banking Company
 C. Manufacturing Company D. IT Company
- iv) A minor attains majority on completion of _____ years. 1
 A. 19 B. 17 C. 18 D. 20
- v) Partnership type of business is formed by the mutual agreement of partners. What kind of 1
 agreement is it?
 A. Oral agreement B. Written agreement
 C. Oral and written agreement D. None of them
- vi) What is the minimum number of partners required to commence a partnership business? 1
 A. 20 B. 10 C. 2 D. 4
- 6. Answer any 5 out of the given 6 questions: 1x5**
- i) Banks generally don't pay interest on money deposited in which of the following account? 1
 A. Savings account B. Current account C. Fixed deposit account
 D. None of the above
- ii) **Choose the correct answer:** 1
 Value Added service provided by Retail Banking Service is....
 A. Renting out lockers
 B. Banc assurance Products
 C. Auto Loan for purchase of new / used four and two wheelers
 D. None of the above
- iii) While opening a demat account bank becomes the _____ 1
 A. Custodian B. Guarantor
 C. Advisor D. Client
- iv) Penalty for breaking a fixed deposit is normally _____ 1
 A. 10% B. 2% C. 5% D. 1%

- v) In a partnership company, a person who simply invests the money is known as _____ 1
partner.
- A. Working partner B. Sleeping partner
C. Normal partner D. None of the above
- vi) A deposit where a fixed amount is deposited on monthly instalment is known as _____ 1
A. Recurring deposit B. Demand deposit C. Term deposit
D. Flexi deposit

SECTION B (SUBJECTIVE QUESTIONS)

Answer any 3 out of the given 5 questions on Employability skills.

2x3

7. Name the different communication styles. Which style do you think is the most effective?
8. A friend asks you to do his or her school assignment for him or her which you think is wrong. Explain the steps involved for saying 'NO' without being rude or upset the other person.
9. Mention any 4 points how to behave in a team.
10. Using the CONECT model of networking write the steps which help you to build good networking skill.
11. Identify the different short cut keys and write their function
A. Ctrl + Shift + E B. Ctrl+F12 C. Shift+F7 D. Ctrl +X

Answer any 3 out of the given 5 questions within 20-30 words each

2x3

12. Write a short note on cooperative banks
13. Explain any 2 instruments for monetary control
14. Name the first two organisations which got licence to do Banking business.
15. What is the content of Partnership Deed?
16. Mention the customer guideline issued by the RBI to prevent banking system being used for Money Laundering activities.

Answer any 2 out of the given 3 questions within 20-30 words each

3x2

17. Write a short note on Regional Rural Banks
18. What do you mean by **in-principal** license given by RBI and how is it important?
19. Define partnership.

Answer any 3 out of the given 5 questions within 50-80 words each

4x3

20. Write difference between Current A/C & Savings A/C
21. Give the full form of NABARD and what role does it play in the economy.
22. Write differences between Retail Banking & Wholesale Banking.
23. **State and explain** any 4 initiatives taken by RBI in improving the payment mechanism.
24. **Explain** any 4 functions of the Banker?

D.A.V INSTITUTIONS, WEST BENGAL ZONE

HALF YEARLY EXAMINATION

SESSION: 2024-2025

CLASS – XI

SUBJECT – BUSINESS STUDIES (054)

MAXIMUM MARKS - 80

TIME – 3 HOURS

GENERAL INSTRUCTIONS:

- (a) This question paper contains 34 questions and contains 6 printed pages.
- (b) Marks are indicated against each question.
- (c) Answers to the Question no 1 to 20 (SECTION – A) carrying 1 mark each.
- (d) Answers to the Question no 21 to 24 (SECTION -B) carrying 3 marks each may be from 50 to 75 words.
- (e) Answers to the Question no 25 to 30 (SECTION -C) carrying 4 marks each may be about 150 words.
- (f) Answers to the Question no 31 to 34 (SECTION -D) carrying 6 marks each may be about 200 words.
- (g) Attempt all parts of the question together.

SECTION -A

1. Application for approval of name of a company is to be made to: 1
 - (a) SEBI
 - (b) Registrar of Companies
 - (c) Government of India
 - (d) Government of the State in which company is to be registered
2. Which of the following is not covered under General Insurance? 1
 - (a) Fire Insurance
 - (b) Theft Insurance
 - (c) Marine Insurance
 - (d) Life Insurance
3. Harsh is presenting himself as a partner of Vedant Associates through his conduct or behaviour. Clients dealing with the firm accept him as a partner due to his self-acclaimed attitude of being a partner of the firm. Which type of partner Harsh is referred to in the above case? 1
 - (a) Active Partner
 - (b) Secret Partner
 - (c) Sleeping Partner
 - (d) Partner by Estoppel
4. Ajay Limited has prepared two main documents at the time of its formation. In the first document the objectives for which the company is formed are defined and in the second document rules of internal management of the company are explained. These rules indicate how the objectives of the company are to be achieved. 1

Name the second document

 - (a) Memorandum of Association
 - (b) Articles of Association
 - (c) Prospectus
 - (d) None of these
5. A Joint Hindu Family business run by Mr. Sachin Agarwal in Hyderabad, Telangana in a centralized management environment, he is operating and managing all business activities as the eldest member of the family. How Mr. Sachin should be designated or recognized in the family business? 1
 - (a) Elder Member
 - (b) Karta
 - (c) Coparcener
 - (d) Partner

6. This particular type of bank account is a combination of savings bank and current account with term or special term deposits accounts. 1
(a) Deposit Account
(b) Recurring Deposit Account
(c) Saving Bank Account
(d) Multiple Option Deposit Account
7. Assertion (A): In a partnership firm the liability of all the partners is unlimited. 1
Reason (R): The partners are individually as well as jointly responsible for paying off business debts.
(a) Both A and R are true, R is the correct explanation of A
(b) Both A and R are true, but R is not the correct explanation of A
(c) A is correct, but R is incorrect
(d) A is incorrect, but R is correct
8. Bharat Heavy Electricals Limited (BHEL), owned and founded by the Government of India, is an engineering and manufacturing company based in New Delhi, India. It was established in 1964. BHEL is India's largest power generation equipment manufacturer. It is managed by the board of directors nominated by the government. As government is the majority shareholder, it exercises control over the affairs of the company. How will you classify BHEL as a form of public sector enterprise? 1
(a) Departmental Undertaking
(b) Government Company
(c) Statutory Corporation
(d) Private Sector Enterprise
9. Assertion: There is more risk in the traditional business. 1
Reason: Parties have no personal interaction while buying and selling in the traditional business.
(a) Assertion is correct, reason is incorrect.
(b) Assertion is incorrect, reason is correct.
(c) Assertion and reason both are correct.
(d) Assertion and reason both are incorrect.
10. Which one of the following Public Sector Undertakings is established by passing a special law under Parliament? 1
(a) Partnership
(b) Sole Proprietorship
(c) Statutory Corporation
(d) Departmental Undertaking
11. Assertion (A): The Central Government of India has established a department that is considered as an extension of the ministry itself. 1
Reason (R): LIC is an example of such a department.
On the basis of the above Assertion and Reason choose the correct answer from the options given below.
(a) Both Assertion and Reason are correct and the Reason is a correct explanation of the Assertion.
(b) Both Assertion and Reason are correct but Reason is not a correct explanation of the Assertion.
(c) Assertion is correct but the Reason is incorrect.
(d) Both the Assertion and Reason are incorrect.
12. Sudhanshu is an active partner in a partnership firm, where, the liability of partners is unlimited. Partners are allowed to participate in the management of the firm business. All the partners are abiding by the rules framed in the partnership. Registration of a partnership firm is optional and the firm business may come to an end in the event of death, insolvency, and lunatic of any partner. Which type of partnership is referred to in the above case? 1
(a) General Partnership
(b) Partnership at will
(c) Limited Liability Partnership
(d) Particular Partnership

13. Which of the following is not a limitation of e-business? 1
- (a) Need for technology capability and competence
 - (b) People resistance
 - (c) Paperless society
 - (d) Low personal touch

14. Assertion (A): Earning Livelihood is the main aim of Economic activities. 1
Reason (R): It helps people in earning their bread and butter by performing several activities.
- (a) Both A and R are true, R is the correct explanation of A
 - (b) Both A and R are true, but R is not the correct explanation of A
 - (c) A is correct, but R is incorrect
 - (d) A is incorrect, but R is correct

15. Match the following: 1

1. C2C	(A) After-sales Service
2. B2C	(B) Collaborations
3. B2B	(C) Selling antique items

Choose the correct option:

- (a) 1-C, 2-A, 3-B
 - (b) 1-A, 2-B, 3-C
 - (c) 1-B, 2-C, 3-A
 - (d) 1-C, 2-B, 3-A
16. Assertion (A): Political interference is a demerit of a government company. 1
Reason (R): The operational policies of the government companies are formed according to the willingness of the ministers.
- (a) Both Assertion and Reason are correct and the Reason is a correct explanation of the Assertion.
 - (b) Both Assertion and Reason are correct but Reason is not a correct explanation of the Assertion.
 - (c) The Assertion is correct but Reason is incorrect.
 - (d) Both the Assertion and Reason are incorrect.
17. Sending quotations of supplying raw material by one businessman to another is called: 1
- (a) B2B
 - (b) B2C
 - (c) C2C
 - (d) Intra B
18. Statement 1: The payment mechanism typical to e-business is cash on delivery. 1
Statement 2 : One of the methods of payment in e-business can be cash on delivery.
- (a) Both statements are correct
 - (b) Both statements are incorrect
 - (c) Statement 1 is true and Statement 2 is false
 - (d) Statement 1 is false and Statement 2 is true
19. Name the two broad categories of business activities. 1
- (a) Trade and commerce
 - (b) Trade and industry
 - (c) Industry and commerce
 - (d) None of these

20. Mr. Kabir desires to have two benefits from his bank account, first to earn higher interest on balance and second to face minimum risk of dishonouring a cheque. Which type of account should be opened by him in Indus Bank? 1
- (a) Current Account
 - (b) Saving Account
 - (c) Multiple option deposit account
 - (d) Recurring Account

OR

Banker's Cheque is also known as _____.

- (a) Overdraft
- (b) Cash Credit
- (c) Pay Order
- (d) None of these

SECTION – B

21. Identify the different auxiliaries to trade highlighted in the following statements: 3
- (a) Jute bags produced in Kolkata are sold across India.
 - (b) Companies send all original documents related to sale or purchase transaction through courier or speed post.
 - (c) Manufactures or traders provide information about their product to the customer through radio.

OR

In today's competitive world, the service industries play a major role. Explain the Tertiary or Service Industry.

22. Soma visited a nearby village and found that the moneylender in the village was exploiting the farmers. The moneylender was charging a very high rate of interest on the money he had lent to the farmers, she decided to help the farmers. She met all the farmers and discussed with them to form an organisation to provide loan to the farmers at very low interest rate by collecting money from the members of the organisation as capital. 3
- (a) Identify the form of business organisation.
 - (b) What is the liability of its members?
 - (c) What is the minimum number of persons required to form it?
23. Identify the form of Public Sector Enterprises in the following cases: 3
- (a) It is under the Control of concerned Minister of the Department.
 - (b) These enterprises are set up under a Special Act of Parliament.
 - (c) It enjoys maximum autonomy in all management activities.
 - (d) Minimum 51% of the paid-up capital is held by the government.
 - (e) These enterprises are most suitable when national security is concerned.
 - (f) LIC and Air India are the examples of this form of enterprises.

24. Dhani Mani bank is a private sector bank offering various services to its customers. Rakesh, being a businessman has chosen the type of account in which the deposits are the most liquid and there is no limit to the number of transactions or the amount of transactions in a day. On the other hand, his mother has opened where she can conveniently deposit the money she saves. She has got cheque facility and lot of flexibility for deposits and withdrawal whereas Rakesh's sister Reema opened the account where she will deposit Rs. 2000/- per month for next two years. In the context of the above case, identify the various types of bank accounts used by Rakesh and his family. 3

SECTION -C

25. Indu bought a readymade dress for ₹ 5000. Her friend liked the design of dress very much, so Indu sold the same dress to her friend for ₹ 5500 and made a profit of ₹ 500. After completing her studies Indu opened a shop of selling readymade dresses for girls. 4
- (a) Can transaction between Indu and her friend be termed as business?
 - (b) State the features related to selling.
 - (c) Can the sale of dresses on her shop be called as business?
 - (d) State whether It is Economic or Non-Activity of Business.

26. Name the following types of partners: - 4
- (a) A person who contributes capital, shares profit and losses, assumes unlimited liability but does not take active part in the day – to – day activities of the business.
 - (b) A person whose name is not disclosed to the outside world but he works like other partners.
 - (c) A person who styles himself as a partner though he is not a partner in the business.
 - (d) A person whose name is used as a partner, though he is not a partner, by the partners in a firm and he does not object over their claim.

27. A, B, C and D are partners in a firm with unlimited liability. B and C decided that they did not want to bear unlimited risk. With the consent of all the partners, they made amendments in partnership deed and changed their liability clause, in which now the members are responsible for the losses only to the extent of the capital invested by them. 4
- (a) Identify the type of partnership formed?
 - (b) Explain the type of Partnership identified in part (a).

28. Write down about Bank Draft and Cash Crdit. 4
- OR

To overcome the difficulties faced by public in transport system, the government of India started the METRO project in which the government involved private sector participation to get the benefits of efficiency of private sector. The project was great success as lakhs of people are enjoying the metro services to move from one place to other.

- (a) State the type of enterprises mentioned in the above case.
 - (b) Name the 'PPP' providing metro service in Delhi.
 - (c) Give any two features of PPP (Public Private Partnership).
29. Explain any four benefits of e- Business towards business organisation. 4

OR

Difference between e- business and Traditional Business.

30. Mr. Rajiv took an insurance policy against his car and after three months he sold it to Mr. Kailash. The car was stolen from outside of Mr. Kailash's house. Mr. Rajiv made a claim to insurance company. His claim was rejected on the ground that Mr. Rajiv was no longer owner of the car, so he has no insurable interest and he has no financial loss of the car. 4
- (a) What does "Principle of Insurable Interest" state?
 - (b) Was Mr, Rajiv right in making claim?
 - (c) Who should get the compensation?

SECTION -D

31. Explain the following Principle of Insurance: 6
- (a) Principle of Utmost Good Faith
 - (b) Principle of Indemnity
 - (c) Principle of Causa Proxima

OR

What are the three most significant insurances in Marine Insurance?

32. Discuss the different types of cooperative societies. 6
- OR

After completing the graduation in, three close friends (Gopal, Shankar, Vimal) decided to start a partnership business of manufacturing mobile accessories. However, all three of them are confused about the type of partnership they should start.

*Gopal wants that the partnership should be such that it can be ended at the desire of any partner.

*Shankar wants to do the partnership business for a period of three years only.

*Vinod wants that his liability should be limited in the business.

Identify the Type of Partnership that the three friends are referring to?

33. Write down about any six main features of joint stock company. 6
34. Sony Ltd is a leader in electronics. It is registered in a company and has its business operations in many countries of world. It's headquartered is in Japan (Tokyo). 6
- To manage its branches and subsidiaries in different countries, the company employs trained and professional managers. They always make use of latest technology to remain leader in electronics.
- (a) Name the type of enterprise mentioned in the above para.
- (b) State where the headquarter of Sony Ltd. is located.
- (c) State any four features of Sony Ltd. mentioned in above para.

D.A.V INSTITUTIONS, WEST BENGAL ZONE
HALF YEARLY EXAMINATION
SESSION: 2024-25

CLASS: XI

MAXIMUM MARKS: 70

SUBJECT: CHEMISTRY

TIME: 3 Hours

General Instructions:

Read the following instructions carefully.

- (a) There are 33 questions in this question paper with internal choice and consist of 5 pages.
- (b) SECTION – A consists of 16 multiple-choice questions carrying 1 mark each.
- (c) SECTION – B consists of 5 short answer questions carrying 2 marks each.
- (d) SECTION – C consists of 7 short answer questions carrying 3 marks each.
- (e) SECTION – D consists of 2 case-based questions carrying 4 marks each.
- (f) SECTION – E consists of 3 long answer questions carrying 5 marks each.
- (g) All questions are compulsory.
- (h) Use of log tables and calculators is not allowed.

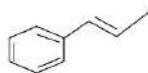
SECTION-A

The following questions are multiple-choice questions with one correct answer. Each question carries 1 mark. There is no internal choice in this section.

1. Rearrange the following (I to IV) in order of increasing masses: 1
(I) 0.5 moles of O_3 (II) 0.5g atom of oxygen
(III) 3.011×10^{23} molecules of O_2 (IV) 5.6 litres of CO_2 at 1 atm and 273K
(a) $II < IV < III < I$ (b) $III < IV < II < I$
(c) $II < I < IV < III$ (d) $I < II < III < IV$
2. The relative abundance of two isotopes of atomic masses 85 and 87 is 75% and 25% respectively. The average atomic mass of element is: 1
(a) 75.5 (b) 85.5
(c) 40.5 (d) 86.0
3. A jug contains 250 mL of milk. The volume of milk in m^3 is: 1
(a) 2.5×10^{-3} (b) 2.5×10^{-4}
(c) 2.5×10^{-5} (d) 2.5×10^{-7}
4. Which of the following sets of quantum numbers represents the highest energy of an atom? 1
(a) $n = 3, l = 1, m = 1, s = +\frac{1}{2}$
(b) $n = 3, l = 2, m = 1, s = +\frac{1}{2}$
(c) $n = 4, l = 0, m = 0, s = +\frac{1}{2}$
(d) $n = 3, l = 0, m = 0, s = +\frac{1}{2}$
5. If helium atom and hydrogen molecule are moving with the same velocity, the ratio of their wavelength will be: 1
(a) 4:1 (b) 1:2
(c) 2:1 (d) 1:4
6. The order of first ionisation energies of the elements Li, Be, B, Na is: 1
(a) $Li > Be > B > Na$ (b) $Be > B > Li > Na$
(c) $Na > Li > B > Be$ (d) $Be > Li > B > Na$
7. The increasing order of electron affinity values of O, S and Se is: 1
(a) $O < S < Se$ (b) $S < O < Se$
(c) $O < Se < S$ (d) $Se < O > S$

8. How many bonds are there in the organic compound given below?

1



- (a) $14\sigma, 8\pi$ (b) $19\sigma, 4\pi$
(c) $18\sigma, 8\pi$ (d) $14\sigma, 2\pi$

9. Which of the following are isoelectronic and isostructural?

1

NO_3^- , CO_3^{2-} , ClO_3^- , SO_3

- (a) NO_3^- , CO_3^{2-} (b) ClO_3^- , CO_3^{2-}
(c) SO_3 , NO_3^- (d) CO_3^{2-} , SO_3

10. Strongest hydrogen bonding is shown by:

1

- (a) H_2O (b) NH_3 (c) HF (d) H_2S

11. Which one is the correct order of acidity?

1

- (a) $\text{CH}_2=\text{CH}_2 > \text{CH}_3-\text{CH}=\text{CH}_2 > \text{CH}_3\text{C}\equiv\text{CH} > \text{CH}\equiv\text{CH}$
(b) $\text{CH}\equiv\text{CH} > \text{CH}_3\text{C}\equiv\text{CH} > \text{CH}_2=\text{CH}_2 > \text{CH}_3\text{CH}_3$
(c) $\text{CH}\equiv\text{CH} > \text{CH}_2=\text{CH}_2 > \text{CH}_3\text{C}\equiv\text{CH} > \text{CH}_3\text{CH}_3$
(d) $\text{CH}_3\text{CH}_3 > \text{CH}_2=\text{CH}_2 > \text{CH}_3\text{C}\equiv\text{CH} > \text{CH}\equiv\text{CH}$

12. Which of the following has the shortest C-Cl bond length?

1

- (a) $\text{Cl}-\text{CH}=\text{CH}-\text{NO}_2$
(b) $\text{Cl}-\text{CH}=\text{CH}_2$
(c) $\text{Cl}-\text{CH}=\text{CH}-\text{CH}_3$
(d) $\text{Cl}-\text{CH}=\text{CH}-\text{OCH}_3$

In the following questions (Q. No.13 to 16), a statement of Assertion (A) followed by a statement of Reason (R) is given. Choose the correct answer out of the following choices:

- (a) Both Assertion (A) and Reason (R) are true and Reason (R) is the correct explanation of the Assertion (A).
(b) Both Assertion (A) and Reason (R) are true, but Reason (R) is not the correct explanation of the Assertion (A).
(c) Assertion (A) is true, but Reason (R) is false.
(d) Assertion (A) is false, but Reason (R) is true.

13. **Assertion(A):** Molarity of a solution does not depend upon temperature whereas molality depends.

1

Reason(R): Molarity of the solution is related to the volume of the solution whereas molality is linked with mass of the solution.

14. **Assertion (A):** It is impossible to determine the exact position and exact momentum of an electron simultaneously.

1

Reason(R): The path of an electron in an atom is clearly defined.

15. **Assertion(A):** The element with electronic configuration $[\text{Xe}]^{54}4f^15d^16s^2$ is a f-block element.

1

Reason(R): The last electron enters the f-orbital.

16. **Assertion(A):** BF_3 molecule is planar while NF_3 is pyramidal.

1

Reason(R): N atom is smaller in size as compared to B atom.

SECTION-B

This section contains 5 questions with internal choice in one question. The following questions are very short type and carry 2 marks each.

17. Calculate the wave number for the longest wavelength transition in Balmer series of atomic hydrogen. 2
18. A compound of vanadium has magnetic moment of 1.73BM. What is the electronic configuration of vanadium ion in the compound? 2
- OR
- (a) Write down the total number of electrons in a molecule of H_3PO_4 .
- (b) Draw the structure of dx^2-y^2 orbital.
19. (a) Ne and Na^+ ions are isoelectronic species. Do they have same ionisation enthalpies also? 2
- (b) In terms of period and group where will you locate the element with $Z = 37$?
20. (a) What is the shape of the following molecules? 2
- (i) AsF_5 and (ii) PH_3
- (b) All the C-O bonds in CO_3^{2-} are equal in length. Explain.
21. (a) Out of HO^- and HS^- which one is a better nucleophile? 2
- (b) Draw the resonating structures of



SECTION – C

This section contains 7 questions with internal choice in one question. The following questions are short answer type and carry 3 marks each.

22. (a) How many significant figures are present in 10.3106 g? 3
- (b) Two elements X and Y form two compounds XY_2 and X_3Y_2 . 0.1 mole of XY_2 weighs 10 g and 0.05 mole of X_3Y_2 weighs 9 g. What are the atomic masses of X and Y?
23. If the density of methanol is 0.793 Kg L^{-1} , what is its volume needed for making 2.5L of its 0.25M solution? 3
- OR
- Silicon forms a compound with chlorine in which 5.6 g of silicon is combined with 21.3 g of chlorine. Calculate the empirical formula of the compound (At. mass of Si=28, Cl=35.5)
24. (a) State Heisenberg uncertainty principle. 3
- (b) If the position of the electron is measured within an accuracy of $\pm 0.002 \text{ nm}$, calculate the uncertainty in the momentum of the electron. Do you think there is a problem in identifying the value, if the momentum of the electron is $(h/4\pi) \times 0.05 \text{ nm}$? Justify your answer.
25. (a) The mass number of an element is twice its atomic number. If there are four electrons in 2p orbitals, write the electronic configuration of the element and name it. 3
- (b) What is the maximum number of emission lines when the excited electron of a hydrogen atom in $n=7$ drops to the ground state?
- (c) What is the number of radial and angular nodes in 4d orbitals?
26. Answer the following with reason: 3
- (a) Which is more basic: $\text{Mg}(\text{OH})_2$ or $\text{Al}(\text{OH})_3$?
- (b) Which is more stable: Sn^{2+} or Sn^{4+} ?
- (c) Which is more acidic: H_3PO_3 or HClO_4 ?
27. Explain the following statements. 3
- (a) H_2^+ and H_2^- ions have same bond order but H_2^+ ion is more stable.
- (b) Ammonia is soluble in water while phosphine is not.
- (c) Lithium iodide is more covalent than lithium fluoride.

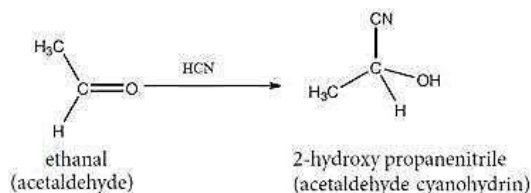
28. (a) Explain the acidic order of the following pairs:

3

(i) Benzoic acid and p-nitrobenzoic acid

(ii) ClCH_2COOH and CH_3COOH

(b) Identify the type of the following reaction.

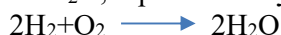


SECTION-D

The following questions are case-based questions. Each question has an internal choice and carries 4 (1+1+2) marks each.

29. Stoichiometry is a branch of chemistry that deals with the quantitative relationship between reactants and products in chemical reactions. It involves calculating the amounts of substances consumed and produced in a reaction based on the balanced chemical equation. One important concept in stoichiometry is the limiting reagent which is the reactant that is completely consumed first thereby limiting the amount of product that can be formed. Identifying the limiting reagent is crucial for determining the maximum amount of product that can be obtained in a reaction. To illustrate these concepts, consider the reaction between H_2 gas and O_2 gas to produce H_2O , represented by the balanced equation:

4



Answer the following questions:

(a) If 0.675g of an element contains 1.5×10^{22} number of atoms, find the atomic mass of the element.

(b) If 0.5 moles of BaCl_2 is mixed with 0.1 mole of Na_3PO_4 , what is the number of moles of $\text{Ba}_3(\text{PO}_4)_2$ formed?

(c) A gaseous mixture contains CO_2 and CO in the ratio of 4:7 by mass. What is the ratio of their number of molecules?

OR

(c) 1.44g titanium (at.wt = 48) reacted with excess of O_2 and produced x g of non-stoichiometric compound $\text{Ti}_{1.44}\text{O}$. What is the value of x?

30. In order to achieve stability, the atoms of most of the elements either lose or gain one or more electrons depending upon their requirement. For losing electrons, ionisation enthalpy ($\Delta_i H$) is required. In order to gain these, electron gain enthalpy ($\Delta_{eg} H$) is released. The cation and anion, thus formed take part in chemical combination resulting in various compounds. Electron gain enthalpy values may be negative or positive.

4

Answer the following questions:

(a) Arrange the following in increasing order of negative electron gain enthalpy. F, Cl, Br, I

(b) Among the elements B, Al, C, Si

(i) Which has the highest first ionisation enthalpy?

(ii) Which has the most negative electron gain enthalpy?

(c) Account for the following-

(i) Noble gases have positive electron gain enthalpy.

(ii) Out of F and Ne, Ne has greater $\Delta_i H_1$ value than F.

OR

(c) The first ionisation enthalpy ($\Delta_i H_1$) values for the third period elements Na, Mg and Si are respectively 496, 737 and 786 KJ mol^{-1} . Justify your answer.

SECTION-E

The following questions are long answer type and carry 5 marks each. All the questions have an internal choice.

31. (a) When a certain metal was irradiated with a light of frequency 1.6×10^{16} Hz, the photoelectrons emitted had twice the kinetic energy as photoelectrons emitted when the same metal was irradiated with light of frequency 1×10^{16} Hz. Calculate the threshold frequency for the metal. 5
(b) Draw the shape of $3d_{yz}$ orbital.

(c) Among the following sub shells, which is/are not possible and why?

2s, 2d, 2p, 3f

OR

- (a) Why is Pauli exclusion principle called exclusion principle?
(b) If the energy of an electron in the 2nd orbit of H atom is (-E), what is the energy of the electron in the Bohr's 1st orbit?
(c) The mass of an electron is 9.1×10^{-31} Kg. If its K.E is 3.0×10^{-25} J, calculate its wave length.
32. (a) On the basis of molecular orbital theory, what is the similarity between F_2 and O_2^{2-} ? 5
(b) State with proper reason.
(i) Which is more polar, CO_2 or N_2O ?
(ii) Which is more volatile, o- nitrophenol or p-nitrophenol?
(c) What is the hybridization of the central atoms in PCl_5 , SF_6 , XeF_4 and phosphorus in $POCl_3$?

OR

- (a) In both water and dimethyl ether (CH_3-O-CH_3), oxygen atom is central atom and has the same hybridization, yet they have different bond angles. Which one has greater bond angle and why?
(b) Compare the relative stability of the following species and indicate their magnetic properties.
 O_2 , O_2^+ , O_2^- , O_2^{2-}
- 33 (a) Amongst the following identify the electrophiles and nucleophiles- 5
 BF_3 , Me_3N^+ , Ph_3P , H_2O
(b) Draw the structure of-
3-Ethyl-2-hydroxy-4-methylhex-3-en-5-ynoic acid
(c) With proper justification arrange the following in order of increasing stability.
 $CH_3-CH_2^-$, $CH \equiv C^-$, CH_2-CH^-

OR

- (a)(i) What is the hybridization of carbon atoms in CH_3CHO ?
(ii) Which of the two: $O_2NCH_2CH_2O^-$ or $CH_3CH_2O^-$ is expected to be more stable and why?
(b) Answer the following questions.
(i) Why hyperconjugation is called no bond resonance?
(ii) Electromeric effect is called temporary effect- Justify.

9. Which of the following is the correct order of precedence in Python? 1
- Parenteses, Exponentiation, Multiplication, Addition
 - Parenteses, Multiplication, Exponentiation, Addition
 - Addition, Multiplication, Exponentiation, Parenteses
 - Multiplication, Addition, Exponentiation, Parenteses
10. What will be the output of the following code? 1
- ```
print("DAV", "School", sep = "-")
```
- DAV-School
  - DAV-School-
  - DAV, -, School
  - DAV – School
11. What is the outcome in the following code? 1
- ```
x = 10
y = "5"
print(x + int(y))
```
- Syntax Error
 - Type Error
 - Value Error
 - No Error
12. Which of the following is an example of a run time error? 1
- Misuse of indentation
 - Incorrect variable name
 - Using '=' instead of '=='
 - Both b) and c)
13. How many times will the loop run? 1
- ```
i=7
while(i>0):
 if i==5:
 continue
 i=i-1
```
- error
  - 3
  - 1
  - infinite
14. What is the purpose of the 'else' clause in a loop? 1
- It is executed before the loop starts.
  - It is executed after the loop ends, if the loop was not terminated by a 'break' statement.
  - It is executed only when a 'break' statement is encountered.
  - It is executed in parallel with the loop.
15. Which of the following function will return the last three characters of the string s? 1
- s[3:]
  - s[-3:]
  - s[:3]
  - s[-3::-1]
16. 'abdcadccd'.count('ab',6) will produce output 1
- 1
  - 2
  - 0
  - 3

**Q. 17 & Q. 18 are ASSERTION (A) and REASON (R) based questions. Mark the correct choice as:-**

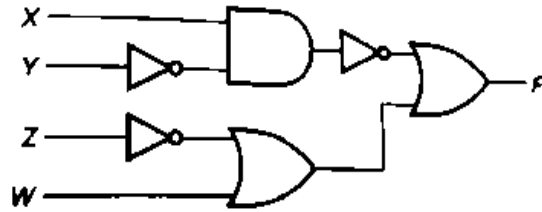
- Both A and R are True and R is the correct explanation for A
  - Both A and R are True and R is not the correct explanation for A
  - A is True but R is False
  - A is False but R is True
17. Assertion (A): While loop is a conditional loop of Python and stops when its condition results false. 1  
Reason (R): In a while loop, else block executes only after the execution of break present in while.
18. Assertion (A): The strip( ) method removes leading and trailing whitespace from a string. 1  
Reason (R): The strip( ) method also removes all spaces within the string.

### **Section : B**

19. Expand SLSI and the name of generation in which SLSI technology is used. 2
20. State DeMorgan's law of Boolean Algebra and verify any one of them using truth table. 2

21. Obtain the Boolean Expression for the logic circuit shown bellow –

2



**OR**

Design a logic circuit and draw its diagram for the Boolean expression:  $AB + BC(B + C)$

22. Differentiate between ASCII and ISCII

2

Or

Write two advantages of Unicode Encoding System.

23. Differentiate between 'sep' and 'end' parameter of print function with example.

2

**OR**

Differentiate between Mutable and Immutable Data Type with example.

24. Rewrite the following code after removing errors and underline each correction :

2

```
name =input('Enter Name :')
mrk = input('Enter Age: ')
s=Int(mrk)
if mrk >=90:
 print(name, 'has secured grade A')
else if s >=80:
 print(name, 'has secured grade B', separate="@")
```

25. Consider the following string 'word' and find the output of the following operations:

2

```
word = 'RESPONSIBILITY'
print(word[0 : 14 : 2])
print(word[2 : 5])
print(word[-7 : -3 : 1])
print(word[: 14])
```

**OR**

Consider the following string 'exam' and find the output of the following operations:

```
exam = 'half Yearly : TERM#2024'
print(exam.capitalize())
print(exam.partition('#'))
print(exam.count('a'))
print(exam.find('am'))
```

### **Section : C**

26. Convert the following: -

3

- $(514)_8 = (?)_{10}$
- $(4D9)_{16} = (?)_{10}$
- $(1010.0110)_2 = (?)_{10}$

27. Draw a flowchart to accept 100 different integers and display the sum of prime number only.

3

28. Differentiate between Explicit Type Conversion and Implicit Type Conversion with Example.

3

29. Write the output of-

3

- `print (10 + 6 * 2 ** 2 != 9//4 -3 and 29 >= 29/9)`
- `print (not 0 < 6 or not 10 == 6 and 10)`
- Express the equation in python language: -

$$x = \sqrt{(x2 - x1)^2 + (y2 + y1)^2}$$

30. Write a program to input a line of text and print out the longest word and its length (without using any string method). 3

Or

Write a program that reads a string and then prints a string that capitalizes every other letter in the string (without using any string method), for example computer science becomes cOmPuTeR ScIeNcE

### **Section : D**

- 31 Navami is developing a Python program to manage a simple inventory system for a small store. She needs to keep track of the item names, quantities, and prices. The program should be able to calculate the total value of the inventory by multiplying the quantity of each item by its price and summing up these values. 4

#### **Questions:**

- Identify the data types Navami should use for the following variables:  
Item names, Item quantities, Item prices, Total inventory value
  - Write an expression to calculate the total value of the inventory for a given item.
  - Explain the type conversion required when taking input from the user for item quantities and prices.
  - Suggest a method Navami can use to handle cases where the user inputs a negative value for item quantity or price.
32. You are given a dataset of students' names stored in a single string variable. stu\_names are separated by commas. Each name is in the format "FirstName LastName". 1+1+2

#### **Given String:**

stu\_names = "Archana Singh, Vikash Gupta, Navaya Singh, Rajen Mondal"

#### **Your task is to write a python code to perform the following operations without using list and tuple concept:**

- Extract the first name of the first student.
- Count the total number of students.
- Print all the names in upper case in separate line.

### **Section : E**

33. a) Differentiate break and continue with the help of example. 2+3  
b) Write a program to check if a given number is perfect number or not.  
Note: A perfect number is a positive integer, which equal to the sum of its divisors.
34. a) Write a Program in Python to generate following Pattern for n rows using nested loop. 5

```
 1
 2 1 2
3 2 1 2 3
4 3 2 1 2 3 4
5 4 3 2 1 2 3 4 5
```

OR

A telephone company charges for using telephone from their consumers according to the calls made (per month) as per the given tariff:

| Numbers of calls                      | Charge            |
|---------------------------------------|-------------------|
| Up to 50 calls                        | No charge (free)  |
| For next 100 calls exceeding 50 call  | Rs. 2 per call    |
| For next 200 calls exceeding 150 call | Rs. 1.50 per call |
| More than 350 calls                   | Rs. 1 per call    |



However, monthly rental charge is Rs.180/- per month for all the consumers for using Telephones. Write a program in Python to calculate and display the monthly telephone bill along with total numbers of calls and monthly rental.

35. a) Consider the following code

2+3

```
Str=input("Enter a String-")
```

```
while len(Str) <=4:
```

```
 if Str[-1] == 'z':
```

```
 Str=Str[0:3]+'c'
```

```
 elif 'a' in Str:
```

```
 Str=Str[0]+'bb'
```

```
 elif not int(Str[0]):
```

```
 Str='I'+Str[1:]+ 'z'
```

```
 else:
```

```
 Str=Str+'*'
```

```
print(Str)
```

What will be the output produced if the input is:

(i) 1bzz                      (ii) abce

b) Write a program to input an address containing a pincode and extract and print the pincode from the address. (Assumption: Pincode contains six digits)

Or

a) Write the output for the following code.

```
Text="Python@OOPs"
```

```
L=len(Text)
```

```
nText=""
```

```
for i in range (0,L):
```

```
 if Text[i].isupper():
```

```
 nText=nText+Text[i].lower()
```

```
 elif Text[i].isalpha():
```

```
 nText=nText+Text[i].upper()
```

```
 else:
```

```
 nText=nText+"bb"
```

```
print(nText)
```

b) Write a program to reads a line of text and count the total numbers of upper case letters, lower case letters, alphabets, number of digits and number of symbols present in it.

**Example:**      If the input String is : DAV Half Yearly Examination @ 2024

**Output:**        Upper case letters: 6

Lower case letters: 18

Alphabets: 24

Digits: 4

Symbols: 1

\*\*\*\*\*

**D.A.V. INSTITUTIONS, WEST BENGAL ZONE**  
**HALF YEARLY EXAMINATION**  
**SESSION: 2024 – 2025**

**CLASS : XI**  
**SUBJECT : COST ACCOUNTING (823)**

**MAXIMUM MARKS : 60**  
**TIME : 3 HOURS**

**General Instructions :**

1. Please read the instructions carefully.
2. This Question Paper consists of 24 questions in two sections – Section A & Section B.
3. Section A has Objective type questions whereas Section B contains Subjective type questions.
4. Out of the given (6 + 18=) 24 questions, a candidate has to answer (6 + 11=) 17 questions in the allotted (maximum) time of 3 hours.
5. All questions of a particular section must be attempted in the correct order.
6. **SECTION A - OBJECTIVE TYPE QUESTIONS (30 MARKS):**
  - i. This section has 06 questions.
  - ii. There is no negative marking.
  - iii. Do as per the instructions given.
  - iv. Marks allotted are mentioned against each question/part.
7. **SECTION B – SUBJECTIVE TYPE QUESTIONS (30 MARKS):**
  - i. This section contains 18 questions.
  - ii. A candidate has to do 11 questions.
  - iii. Do as per the instructions given.
  - iv. Marks allotted are mentioned against each question/part.

**SECTION A - OBJECTIVE TYPE QUESTIONS**

- |          |                                                                                                                                                                                                                                   |                                    |
|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|
| <b>1</b> | <b>Answer any 4 out of the given 6 questions</b>                                                                                                                                                                                  | <b><math>1 \times 4 = 4</math></b> |
| (i)      | Give any two ways of non - verbal communication.                                                                                                                                                                                  | 1                                  |
| (ii)     | Define Teamwork.                                                                                                                                                                                                                  | 1                                  |
| (iii)    | Dressing and grooming do not affect your overall impression on others. State whether the statement is <b>True or False</b> .                                                                                                      | 1                                  |
| (iv)     | When you need to go to a new place and you are unsure of correct direction, what do you do?                                                                                                                                       | 1                                  |
| (v)      | Which of these is not an appropriate non-verbal communication at work?<br>A. Putting arm around a coworker's shoulder<br>B. Shaking hands firmly<br>C. Looking at the speaker with a smile<br>D. Standing with an upright posture | 1                                  |
| (vi)     | Avoiding conflict and giving others control is an example of _____ communication style.                                                                                                                                           | 1                                  |
|          |                                                                                                                                                                                                                                   |                                    |
| <b>2</b> | <b>Answer any 5 out of the given 7 questions</b>                                                                                                                                                                                  | <b><math>1 \times 5 = 5</math></b> |
| (i)      | _____ refers to the original cost at the time of a transaction. The ascertainment of such cost can be done after it has been incurred. It is objective in nature and can be verified after actual operations take place.          | 1                                  |
| (ii)     | What do you mean by Step-up costs?                                                                                                                                                                                                | 1                                  |
| (iii)    | Stock of materials of a firm in one kind of:<br>A. liability                      B. Expense                      C. Income                      D. Asset                                                                         | 1                                  |

- (iv) Which of the following calculate the actual cost of product: 1  
 A. Cost estimation B. Costing  
 C. Both (A) and (B) D. None of these
- (v) How many types of materials are classified in cost accounting? 1  
 A. 7 B. 5 C. 3 D. None of these
- (vi) If the cost of sales is Rs. 5,30,000 and the manufacturer sells the product at a profit of 20% on sales. What is the amount of profit? 1  
 A. Rs. 1,32,500 B. Rs. 1,06,000 C. Rs. 88,333 D. None of These
- (vii) Define Profit Centre 1

**3 Answer any 6 out of the given 7 questions  $1 \times 6 = 6$**

- (i) Define Finished Material. 1
- (ii) \_\_\_\_\_ costing excludes fixed cost. 1  
 A. Standard costing B. Historical costing  
 C. Marginal costing D. Process costing
- (iii) What do you mean by Indirect Materials? 1
- (iv) Define Departmental Costing. 1
- (v) How is subjective classification useful in storage of materials? 1
- (vi) Under \_\_\_\_\_ the value and amount of inventory is found out only at the end of accounting period after having physical verification of units in hand. 1  
 A. Perpetual system B. Periodical system C. LIFO D. FIFO
- (vii) At EOQ, Total Ordering Cost = \_\_\_\_\_ and sum of the two costs is the \_\_\_\_\_ 1

**4 Answer any 5 out of the given 6 questions  $1 \times 5 = 5$**

- (i) Why management should decide the maximum and minimum quantity of materials to be stored at any point of time? 1
- (ii) Define cost unit. 1
- (iii) Works Salaries is an example of \_\_\_\_\_ overheads. 1
- (iv) Goodwill written off is an item excluded from cost sheet. (True/False) 1
- (v) Overhead is the aggregate of \_\_\_\_\_ costs. (Fill in the blank) 1
- (vi) The \_\_\_\_\_ level is the quantity balance of materials which must be maintained in hand at all times so that the assembly line may be not be stopped on account of non-availability of materials. 1

**5 Answer any 5 out of the given 6 questions  $1 \times 5 = 5$**

- (i) Larger the number of orders, lower will be the storage cost. (True/False) 1
- (ii) The discount allowed by the supplier to encourage the buyers to make cash payment is called: 1  
 A. Quantity discount B. Trade discount C. Cash discount D. Term discount
- (iii) Suppose the contribution is ₹70 and the fixed cost is ₹10 while the selling price is ₹100, then variable cost is: 1  
 A. ₹30 B. ₹40 C. ₹80 D. ₹90
- (iv) Stores ledger is maintained by the \_\_\_\_\_ in the costing department. 1
- (v) Which costing technique will you use in case of building construction? 1
- (vi) State any one difference between Bill of Material and Material Requisition. 1

**6**                      **Answer any 5 out of the given 6 questions**                       **$1 \times 5 = 5$**

- |       |                                                                                                                                                                  |   |
|-------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|
| (i)   | Cost accounting depends largely on financial statements (True/False)                                                                                             | 1 |
| (ii)  | LIFO stands for                                                                                                                                                  | 1 |
|       | A. Labour in First Out                                                                                                                                           |   |
|       | B. Last in First Out                                                                                                                                             |   |
|       | C. Lower in First Out                                                                                                                                            |   |
|       | D. Least in First Out                                                                                                                                            |   |
| (iii) | For which kind of firm is process costing appropriate?                                                                                                           | 1 |
|       | A. Bricklaying firms                                                                                                                                             |   |
|       | B. Transport firms                                                                                                                                               |   |
|       | C. Hospitals                                                                                                                                                     |   |
|       | D. Oil refining firms                                                                                                                                            |   |
| (iv)  | 14400 units of a material are required annually. The order cost is ₹4, and the holding cost is 0.5 times the purchase price of ₹16. Calculate Re-order quantity. | 1 |
| (v)   | Give another name for Multiple costing.                                                                                                                          | 1 |
| (vi)  | Give any one example of Abnormal gain.                                                                                                                           | 1 |

## SECTION B: SUBJECTIVE TYPE QUESTIONS

**Answer any 3 out of the given 5 questions in 20 – 30 words**

- |    |                                                     |   |
|----|-----------------------------------------------------|---|
| 7  | State any two factors affecting perspectives.       | 2 |
| 8  | Why is personal hygiene important?                  | 2 |
| 9  | How can you introduce someone to others?            | 2 |
| 10 | Give any two advantages of assertive communication. | 2 |
| 11 | Define goal setting.                                | 2 |

**Answer any 3 out of the given 5 questions in 20 – 30 words each (2 x 3 = 6)**

- |    |                                                                                                                                                                                                                                           |   |
|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|
| 12 | Calculate Raw Materials Consumed during the year from the following information:<br>Opening stock of raw materials ₹70,000<br>Closing stock of raw materials ₹80,000<br>Returns to suppliers ₹20,000<br>Raw materials purchased ₹1,30,000 | 2 |
| 13 | What is Safety Stock?                                                                                                                                                                                                                     | 2 |
| 14 | Give any two points of difference between Cost Allocation and Cost Apportionment.                                                                                                                                                         | 2 |
| 15 | Give one example each of pure financial charges and pure financial income.                                                                                                                                                                | 2 |
| 16 | Give any two assumptions in EOQ Model                                                                                                                                                                                                     | 2 |

**Answer any 2 out of the given 3 questions in 30– 50 words each : (3 x 2 = 6)**

- |    |                                                                                                                                                                                                                                                                                                                |   |
|----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|
| 17 | <p>Calculate Prime Cost from the following data:</p> <p>Opening stock of raw material = ₹2,50,000</p> <p>Purchased raw material = ₹15,00,000</p> <p>Expenses incurred on raw material = ₹1,00,000</p> <p>Closing stock of raw material = ₹4,50,000</p> <p>Wages ₹9,52,000</p> <p>Direct expenses ₹4,68,000</p> | 3 |
| 18 | <p>A pharmaceutical company is having annual demand of its medicine 40,000 units. For the production of units, company has to bear setting up and order processing cost of ₹100. Cost of manufacturing one unit is ₹8000. Cost of carrying is 10% per annum. Calculate Economic Order Quantity.</p>            | 3 |
| 19 | <p>State any three essentials of Sound Material Control System.</p>                                                                                                                                                                                                                                            | 3 |

**Answer any 3 out of the given 5 questions in 50– 80 words each: (4 x 3= 12)**

- 20 Differentiate between Cost Accounting and Financial Accounting on the basis of the given information. 4
- i. Meaning
  - ii. Types of costs
  - iii. Time Period of Recording
  - iv. Users
  - v. Objective
- 21 Briefly explain any 4 techniques of costing. 4
- 22 Classify the following costs into Factory Overheads, Office and Administrative overheads and Selling and Distribution overheads 4
- i. Carriage Outwards
  - ii. Director's Travel Expenses
  - iii. Depreciation of Plant and Machinery
  - iv. Audit Fees
  - v. Sales Manager's Salaries
  - vi. Works Stationery
  - vii. Depreciation on Office furniture
  - viii. Cost of Catalogue
- 23 Give two advantages and disadvantages of FIFO method of valuation of outgoing materials. 4
- 24 A producer has estimated annual requirements of a material as 72000 units. Cost of placing an order is estimated as ₹50/order and annual storage cost/unit of material is ₹5. Calculate the optimum order quantity or EOQ. Also show that at EOQ level, total ordering cost is equal to total storage cost. 4

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**D.A.V. INSTITUTIONS, WEST BENGAL ZONE**  
**HALF YEARLY EXAMINATION**  
**SESSION – 2024-2025**

**CLASS –XI**  
**SUBJECT – ECONOMICS**

**MAX. MARKS - 80**  
**TIME – 3 HOURS**

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**General Instructions:**

1. This question paper contains two parts: -

Part A - Statistics for Economics

Part B – Introductory Microeconomics

2. This paper contains 20 Multiple Choice Questions of 1 mark each.

3. This paper contains 4 Short Answer Questions of 3 marks each to be answered in 60 to 80 words.

4. This paper contains 6 Short Answer Questions of 4 marks each to be answered in 80 to 100 words.

5. This paper contains 4 Long Answer Questions of 6 marks each to be answered in 100 to 150 words.

**PART A -STATISTICS**

1. “Economics is the study of mankind in the ordinary business of life.” This definition was given by : 1  
(a) Alfred Marshall. (b) Robbins. (c) Samuelson. (d) Adam Smith.
2. Which of the following is not a function of statistics? 1  
(a) Statistics is a quantitative expression of economic problems.  
(b) Statistics works out cause and effect relationship.  
(c) Statistics facilitates planning and policy formulations.  
(d) Statistics complicates simple facts.
3. The sampling technique which gives every item of the universe an equal chance of being selected is \_\_\_\_\_. 1  
(a) Convenient sampling. (b) Random sampling.  
(c) Judgement sampling. (d) Non-random sampling.
4. The mid value of a class-interval is equal to: 1  
(a) The average of the upper class limit and the lower class limit.  
(b) The product of upper class limit and the lower class limit.  
(c) The ratio of the upper class limit and the lower class limit.  
(d) None of the above.
5. Classification of data on the basis of characteristics like nationality, religion, gender etc. is called- 1  
(a) Temporal classification. (b) Qualitative classification.  
(c) Spatial classification. (d) Quantitative classification.
6. There are two groups containing 30 and 20 observations. Arithmetic mean of the two groups is 50 and 60 respectively, then the combined arithmetic mean is: 1  
(a) 51. (b) 54. (c) 53. (d) 52.
7. The A.M. of 1, 3, 5, 6, x, 10 is 6. The value of x is: 1  
(a) 10. (b) 11. (c) 12. (d) None of these.
8. **Read the following statements -Assertion (A) and Reason (R).** 1  
**Assertion (A):** Age of an individual is a variable.  
**Reason (R):** Variable means the characteristic which changes.  
**Choose one of the correct alternatives given below:**  
(a) Both Assertion (A) and Reason (R) are true and Reason (R) is the correct explanation of Assertion (A).  
(b) Both Assertion (A) and Reason (R) are true and Reason (R) is not the correct explanation of Assertion (A).  
(c) Assertion (A) is true but Reason (R) is false.  
(d) Assertion (A) is false but Reason (R) is true.

9. Read the following statements carefully: 1
- Statement 1:** In inclusive class-intervals, values equal to lower and upper limits of a class are included in the same class.
- Statement 2:** A frequency distribution in which lower limit of the first class and upper limit of the last class missing is called close ended distribution.
- In the light of the given statements, choose the correct alternative from the following:**
- (a) Statement 1 is true and statement 2 is false.  
 (b) Statement 1 is false and statement 2 is true.  
 (c) Both statements 1 and 2 are true.  
 (d) Both statements 1 and 2 are false.
10. Read the following statements -Assertion (A) and Reason (R). 1
- Assertion (A):** Arithmetic mean is defined as sum of the value of all observations divided by the number of observations.
- Reason (R):** Sum of deviation of series from actual arithmetic mean is always zero.
- Choose one of the correct alternatives given below:**
- (a) Both Assertion (A) and Reason (R) are true and Reason (R) is the correct explanation of Assertion (A).  
 (b) Both Assertion (A) and Reason (R) are true and Reason (R) is not the correct explanation of Assertion (A).  
 (c) Assertion (A) is true but Reason (R) is false.  
 (d) Assertion (A) is false but Reason (R) is true.
11. Explain with two examples how the Government and policy makers use statistical data to formulate suitable policies of economic development. 3
12. The mean wage of 100 workers is ₹ 324. The mean wage of 60 workers is ₹ 340. Find the mean wage of the remaining 40 workers. 3
- OR**
- The mean marks of 100 students was 40. Later it was discovered that a score of 53 was misread as 83. Find the corrected mean corresponding to corrected score.
13. Explain any two characteristics of Statistics in plural sense. 4
14. Describe any four desired qualities of an ideal questionnaire. 4
15. The marks of 30 students in Economics is given below. 4

|    |    |    |    |    |    |    |    |    |    |
|----|----|----|----|----|----|----|----|----|----|
| 12 | 36 | 40 | 16 | 10 | 10 | 19 | 20 | 28 | 30 |
| 19 | 27 | 15 | 21 | 33 | 45 | 7  | 19 | 20 | 26 |
| 26 | 37 | 6  | 5  | 20 | 30 | 37 | 17 | 21 | 20 |

Construct an inclusive frequency distribution table taking class intervals of 10 each.

**OR**

Prepare a blank table to exhibit the following information regarding number of students in a college:

- i) Faculty wise: Arts, Commerce, Science
- ii) Gender wise: Boys and Girls
- iii) Class wise: XI, XII

16. (a) Construct a multiple bar diagram to represent the monthly expenditure of different families on different items: 3+3

|          | Education | Clothing | Food |
|----------|-----------|----------|------|
| FAMILY A | 1500      | 1000     | 1250 |
| FAMILY B | 1700      | 850      | 1200 |

(b) Present the following data on sales of different brands of Television in the form of a pie diagram :

| Brand name | Samsung | Akai | Onida | Sony |
|------------|---------|------|-------|------|
| Sales%     | 40      | 30   | 20    | 10   |

- 17 (a) The Arithmetic Mean of 5 items 1,2,3,4,5 is 3. Show how the arithmetic mean will be affected if all the items are increased by 2. 2+4

(b) If the arithmetic mean of the data given below is 28, find the missing frequency.

| Profit per retail shop (in ₹) | 0-10 | 10-20 | 20-30 | 30-40 | 40-50 | 50-60 |
|-------------------------------|------|-------|-------|-------|-------|-------|
| Number of retail shops        | 12   | 18    | 27    | —     | 17    | 6     |

(a +b) OR ( i+ii)

(i) State 2 merits of Arithmetic Mean as a measure of central tendency.

(ii) Following information pertains to the daily income of 150 families. Calculate the arithmetic mean.

| Income (in ₹) | Number of families |
|---------------|--------------------|
| More than 75  | 150                |
| More than 85  | 140                |
| More than 95  | 115                |
| More than 105 | 95                 |
| More than 115 | 70                 |
| More than 125 | 60                 |
| More than 135 | 40                 |
| More than 145 | 25                 |

### PART B -MICROECONOMICS

18. When there is an improvement in technology, holding everything else constant: 1  
 (a) the production possibility frontier shifts inward.  
 (b) the production possibility frontier shifts upward.  
 (c) the production possibility frontier remains the same.  
 (d) the production possibility frontier shifts downwards.
19. According to law of diminishing marginal utility, while eating cake the satisfaction derived from the second slice of it consumed is: 1  
 (a) greater than the consumption of first slice.  
 (b) less than the consumption of first slice.  
 (c) not comparable to that from the first.  
 (d) equal to that from the first.
20. Given the fact that Marginal Rate of Substitution between Goods X and Y is diminishing, Indifference Curve is- 1  
 (a) Concave to the origin (b) Convex to the origin  
 (c) Parallel to the X-axis (d) downward sloping straight line.
21. How will the demand of sugar change if price of tea rises? 1  
 (a) Decrease because both the goods are complementary.  
 (b) Increase because both the goods are substitutes.  
 (c) No change unless the price of sugar changes.  
 (d) None of the above.



22. A rise in income of the consumer X leads to a fall in the demand for the good A by him. What is the good A called? 1  
 (a) Complementary good.  
 (b) Substitute good.  
 (c) Inferior good.  
 (d) Normal good.
23. What is the value of elasticity of demand on rectangular hyperbola demand curve? 1  
 (a) infinity.  
 (b) unity.  
 (c) zero.  
 (d)  $e_d > 1$ .
24. Whenever MP falls and is positive, TP changes at what rate? 1  
 (a) TP rises at increasing rate.  
 (b) TP rises at diminishing rate.  
 (c) TP decreases after reaching its maximum.  
 (d) None of the above.
25. **Read the following statements carefully:** 1  
**Statement 1:** An economy always produces on but not inside the PPF curve.  
**Statement 2:** Massive unemployment shifts the PPF curve to the left.

**In the light of the given statements, choose the correct alternative from the following:**

- (a) Statement 1 is true and statement 2 is false.  
 (b) Statement 1 is false and statement 2 is true.  
 (c) Both statements 1 and 2 are true.  
 (d) Both statements 1 and 2 are false.
26. **Read the following statements -Assertion (A) and Reason (R).** 1  
**Assertion (A):** Total utility increases as long as Marginal Utility is positive.  
**Reason (R):** Marginal utility is the slope of Total utility.  
**Choose one of the correct alternatives given below:**  
 (a) Both Assertion (A) and Reason (R) are true and Reason (R) is the correct explanation of Assertion (A).  
 (b) Both Assertion (A) and Reason (R) are true and Reason (R) is not the correct explanation of Assertion (A).  
 (c) Assertion (A) is true but Reason (R) is false.  
 (d) Assertion (A) is false but Reason (R) is true.
27. **Read the following statements- Assertion (A) and Reason (R).** 1  
**Assertion (A):** Law of increasing returns to a factor implies that marginal product is increasing.  
**Reason (R):** Over utilisation of fixed factors leads to increasing returns.  
**Choose one of the correct alternatives given below:**  
 (a) Both Assertion (A) and Reason (R) are true and Reason (R) is the correct explanation of Assertion (A).  
 (b) Both Assertion (A) and Reason (R) are true and Reason (R) is not the correct explanation of Assertion (A).  
 (c) Assertion (A) is true but Reason (R) is false.  
 (d) Assertion (A) is false but Reason (R) is true.

28. Complete the following table:

3

| Units of Labour<br>(Units) | Average Product<br>(Units) | Marginal Product<br>(Units) |
|----------------------------|----------------------------|-----------------------------|
| 1                          | 8                          | -                           |
| 2                          | 10                         | -                           |
| 3                          | -                          | 10                          |
| 4                          | 9                          | -                           |
| 5                          | -                          | 4                           |
| 6                          | 7                          | -                           |

**OR**

Find the Marginal Product schedule and identify the three phases of the Law of Variable Proportions from the following.

| Units of Variable Inputs | Total Physical Product (Units) |
|--------------------------|--------------------------------|
| 1                        | 10                             |
| 2                        | 22                             |
| 3                        | 30                             |
| 4                        | 35                             |
| 5                        | 30                             |

29. Briefly explain the reasons behind the first phase of Law of Variable Proportions.

3

30. (a) What is meant by production possibility curve?  
(b) With the help of a numerical example explain the concept of Marginal Opportunity Cost.

1+3=4

**OR**

2+2=4

Explain the central problem of – (a) What to produce?  
(b) How to produce?

31. A consumer wants to consume two goods: Good X & Good Y. Price of good X is Rs 2 and that of good Y is Rs. 4 per unit. The income of the consumer is fixed at Rs.20. On the basis of this information answer the following questions:  
i) Write down the equation of budget line.  
ii) How many units of good X can be purchased if the entire income is spent on good X?  
iii) Mention any 4 bundles which can be represented on the budget line.  
iv) Determine the slope of the budget line.

1×4=4

32. (a) A new steel plant comes up in Jharkhand. Many people who were previously unemployed in the area are now employed. How will this affect demand curve for feature phone and smart phone?  
(b) Because of a fall in price of a commodity, the quantity demanded rises by 10%. The price elasticity of demand is given as (-0.5). What is the percentage fall in price of the commodity?

2+2=4

33. (a) Diagrammatically depict consumer's equilibrium using Indifference Curve Analysis. Explain the equilibrium conditions.  
(b) When the Price Ratio is higher than the marginal rate of substitution, what will be the reaction of the consumer to arrive at equilibrium.

4+2=6

**OR**

(i) Explain the conditions of consumer's equilibrium if the consumer decides to spend his/her income on two commodities.  
(ii) How is the equilibrium of consumers consuming one commodity affected when  $MU_M$  happens to rise and  $P_X$  is constant?

3+3=6

34. Read the following passage carefully & answer the questions based on the same:

2+4=6

Salt has no close substitute and moreover, a household has to share a negligible part of his entire budget. Therefore, in spite of increase in the price of salt, its demand will not be affected.

However, demand for a particular brand of toothpaste is comparatively more elastic as there are many brands of toothpaste available in the market, so the consumers can switch over to any other brand in case of hike in the price of a particular brand of toothpaste.

- a) Diagrammatically represent the impact of rise in price of Pepsodent on the demand for Colgate
- b) i) "Demand for salt is inelastic & that of toothpaste is elastic in nature". Justify.  
ii) How does share in total expenditure affect the price elasticity of demand?

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**D.A.V. INSTITUTIONS, WEST BENGAL ZONE**  
**HALF YEARLY EXAMINATION**  
**SESSION 2024-2025**

**CLASS: XI**  
**SUBJECT: ENGLISH CORE**

**MAXIMUM MARKS: 80**  
**TIME: 3HRS**

*General Instructions:*

- 1. The paper is divided into three sections Section-A: Reading Skills, Section-B: Grammar and Creative Writing Skills and Section-C: Literature. All the sections are compulsory.*
- 2. Do not exceed the prescribed word limit while answering the questions. S*
- 3. Please write down the serial number of the question in the answer script correctly before attempting it.*
- 4. Separate instructions are given with each question, wherever necessary. Read them carefully.*

**SECTION: A (Reading Skills)**

26 Marks

10

**1. Read the passage carefully.**

1. In our world, it has become more important than ever that we learn to read critically. The events of September 11, 2001, and their aftermath have shown us – with new urgency – the dangers of misunderstanding and inadequate education. It has become more important than ever that we understand the various voices crying from afar in other languages, and it is just as urgent that we understand the bewildering multitude of voices in our own culture. In order to make sense of our own present, we need to understand our own past. We need to look critically at the various documents, cultural, political, and religious, which furnish our identity, which tell us who we are, who we should be, and what we might become. As a black American scholar has recently said, “the challenge of mutual understanding among the world’s multifarious cultures will be the single greatest task that we face, after the failure of the world to feed itself.”

2. It has become indisputably clear that the study of the humanities in general is no longer a luxury but a necessity, vital to our very survival as an enlightened civilization. We cannot form an articulate vision of our own moral, educational, and political values without some knowledge of where those values come from, the struggles in which they were forged, and the historical contexts which generated those struggles. To study the Bible, Plato, Greek tragedy, Shakespeare, or Roman Law, to study Jewish or African-American history, to examine the Qur’an and the long history of the Western world’s fraught engagement with Islam, is to study the sources of the conflicts and cultural tendencies which form our present world. We cannot be good citizens – either of a particular country or of the world – by succumbing to the endless forces operating worldwide that encourage us to remain ignorant, to follow blindly, whether in the form of blind nationalism, blind religiosity, or blind chauvinism in all its manifold guises.

3. One of the keys to counteracting those forces which would keep us in darkness lies in education, and in particular in the process which forms the core of education: the individual and institutional practice of reading, of close, careful, critical reading. Such reading entails a great deal more than merely close attention to the words on the page, or the text as it immediately confronts us. We need to know why a text was written, for whom it was written, what religious or moral or political purposes motivated it, as well as its historical and cultural circumstances.

**1. Based on your understanding of the passage, answer the questions given below:**

10x1

- (i) In the context of the passage, which sentence best explains the meaning of "multifarious"? (paragraph 1)  
A. The optimal approach involves offering short yet repetitive and successful play sessions.

B. The university offers a curriculum that includes sciences, humanities, arts, and sports, reflecting its varied academic programs.

C. The simplistic headlines of the press can be very misleading.

D. Introducing homogeneous, high-yielding plant varieties leads growers to abandon native crops.

- (ii) Assertion (A): The study of the humanities is now considered a luxury.

Reason (R): The humanities provide insights into the sources of contemporary conflicts and cultural tendencies.

A. Both A and R are true, and R is the correct explanation of A.

B. Both A and R are true, but R is not the correct explanation of A.

C. A is true, but R is false.

D. A is false, but R is true.

- (iii) How does the author view the role of education in society?

A. As a means to secure employment.

B. As a way to maintain societal status quo.

C. As a critical tool for fostering enlightenment and understanding.

D. As a luxury that only a few can afford.

- (iv) "In order to make sense of our own present, we need to understand our own past."

Which of the following examples DOES NOT explain the meaning of the quoted line from the passage?

A. A community commemorates a significant historical event to strengthen its collective identity.

B. A biologist ignores previous studies on a species and conducts research solely based on current observations.

C. A teacher uses historical examples to illustrate current scientific principles.

D. An architect studies ancient structures to inspire modern building designs.

- (v) Select the option that has the same literary device as used in "blind nationalism". (paragraph 2)

A. The sweet sound of victory. B. The relentless march of time.

C. The stars shine in the sky. D. A world is full of energetic people

- (vi) "It has become indisputably clear that the study of the humanities in general is no longer a luxury but a necessity...." In the context of the passage, which sentence best explains the opposite meaning of "indisputably"?

A. It is widely accepted that the study of the humanities is essential.

B. The study of the humanities is undeniably important in today's world.

C. Everyone agrees that the humanities are crucial for a well-rounded education.

D. It is somewhat debatable whether the study of the humanities is necessary.

- (vii) According to the passage, when can we be good citizens?

A. When we follow nationalism without question.

B. When we remain ignorant of global forces.

C. When we resist the forces that encourage blind following and ignorance.

D. When we embrace blind religiosity and chauvinism.

- (viii) Which of the following genres does the passage best fit?

A. Fiction B. Persuasive essay C. Personal narrative D. Descriptive essay

- (ix) Mention any two sources mentioned in the passage that can help man to understand the reasons behind conflicts and cultural tendencies.

- (x) According to the passage, what are the two aspects that critical reading involves beyond close attention to the words on the page?

2. **Read the passage carefully.**

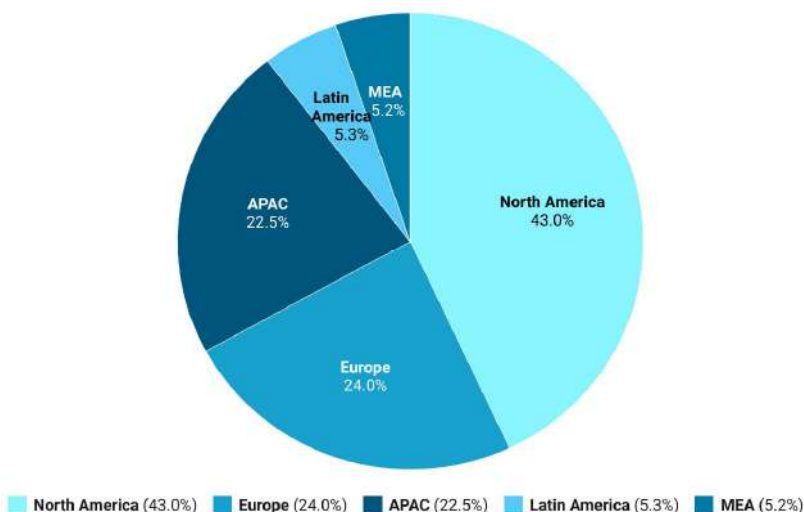
1. Online recruitment, also referred to as e-recruitment or internet-based hiring, entails sourcing, enticing, scrutinizing, and ultimately picking candidates via digital platforms. Vacancies are publicized on websites, social media, and professional networks to widen the

pool of potential applicants. Applicant Tracking Systems (ATS) streamline the hiring process by efficiently handling candidate data. Tools such as assessments and video interviews aid in assessing candidates. The emphasis lies on constructing employer branding online to allure top-tier talent. Mobile-friendly interfaces and data analytics tools enhance recruitment efficiency while ensuring adherence to regulations and fostering inclusivity. Remote hiring is increasingly prevalent and is facilitated by virtual interviews and onboarding methods. Regular adjustments to tactics are vital for maintaining competitiveness in recruitment endeavours.

2. The global online recruitment market revenue is projected to reach \$58.0 billion in 2032. In the global online recruitment market, North America dominates with a significant market share of 43.0%, reflecting its advanced digital infrastructure and mature economy. In 2021, Recruit Holdings from Japan led the global online job portal market with a substantial market capitalization of \$79.8 billion. Topping the most visited jobs and employment websites list is indeed.com, with an impressive average of 8.65 pages visited per user and a relatively low bounce rate of 34.87%. Collegerecruiter.com emerged as the fastest-growing platform, boasting an impressive traffic growth of 63.71% from January 2021 to March 2023.

### Global Online Recruitment Market Share - By Region

Market Share in Percentage



(Market Share in %)  
Source: Market.us Scoop

*MEA- Middle East & Asia, APAC- Asia-Pacific*

3. Online recruitment is now a crucial component of modern hiring strategies, offering benefits for both employers and job seekers. Despite challenges like identifying qualified candidates and addressing skill shortages, it provides opportunities to reach a wider talent pool and streamline hiring processes. The demand for skilled IT professionals remains high, with recruiters facing the ongoing challenge of aligning candidates' skills with organizational needs. However, advancements in online recruitment tools facilitate faster and more efficient candidate sourcing and screening. Overall, online recruitment enhances employer branding and provides valuable insights for optimizing recruitment strategies, ensuring organizations remain competitive in the evolving digital economy.

2. **Based on your understanding of the passage, answer the questions given below:**
- (i) According to the passage, there are some vital activities involved in online recruitment. Choose the right combination of activities from the list.
1. training, 2. sourcing, 3. developing, 4. retaining, 5. attracting, 6. evaluating, 7. onboarding, 8. selecting
- A. 1,2,3,8                      B. 3,4, 5,8                      C. 4,5,6,7                      D. 2,5,6,8

8x1

- (ii) Which of the given situations best explains the quoted line from the passage?  
*"The emphasis lies on constructing employer branding online to allure top-tier talent."*  
 A. A restaurant owner invests in a social media campaign to attract food enthusiasts to their new menu.  
 B. A student spends hours studying without any breaks to prepare for an important exam.  
 C. A homeowner renovates their house to increase its market value before selling it.  
 D. A coach implements a rigorous training schedule for athletes to improve their performance.
- (iii) Which of the following examples DOES NOT explain the meaning of the quoted line from the passage?  
*"Regular adjustments to tactics are vital for maintaining competitiveness in recruitment endeavours."*  
 A. A car manufacturing company frequently revises its recruitment strategies to attract top talent in a dynamic job market.  
 B. A steel manufacturing company consistently uses the same hiring process it established five years ago without any modifications.  
 C. A mobile phone manufacturing company analyses industry trends and modifies its recruitment approach to stay ahead of competitors.  
 D. A garment-producing unit incorporates feedback from new hires to improve its recruitment process continuously.
- (iv) Remote hiring facilitated by virtual interviews is like \_\_\_\_\_ in \_\_\_\_\_.  
 A. Libraries in education                      B. Museums in culture  
 C. Farms in agriculture                      D. Telemedicine in healthcare
- (v) Which title best summarizes the passage?  
 A. "The Future of Physical Job Fairs"  
 B. "Enhancing Office Space for Recruitment"  
 C. "Online Recruitment: Trends, Tools, and Strategies"  
 D. "Traditional Recruitment vs. Modern Methods"
- (vi) What does the term "bounce rate" refer to in the context of the passage?  
 A. The percentage of users who do not complete a purchase on a website.  
 B. The percentage of users who leave a website after viewing only one page.  
 C. The average number of pages visited after a long break per user.  
 D. The decline rate of website traffic over a period.
- (vii) What is the difference in the percentage of online recruitment market share between the countries of Latin America and North America?
- (viii) Say whether the statement is True or False:  
 The online recruitment system of the Middle East & Asia stands encouraging in terms of online recruitment market share.

3. **Read the passage carefully.**

Conversation, exchange of knowledge, and business have all been transformed by the Internet. It began when efforts to develop a decentralised communication network were supported by the US Department of Defence in the 1960s. Today's Internet was inspired by the early network known as ARPANET. The Internet became a worldwide sensation by the late 1980s and early 1990s due to technological improvements and the launch of the World Wide Web.

Through social media, instant chat, and emails, the Internet allows for immediate contact. The time and expense involved with traditional mail and phone calls have been significantly decreased. In addition, the Internet is a huge information resource that offers news, entertainment, and instructional materials. Knowledge has been democratised via online resources like YouTube, Khan Academy, and Wikipedia, which are available to anybody with an Internet connection.

E-commerce has also flourished, with businesses like Amazon and Alibaba revolutionizing how people shop. The convenience of online shopping, coupled with secure payment

gateways, has made it a preferred choice for many. Additionally, the Internet has fostered innovation and entrepreneurship, allowing small businesses and startups to reach a global audience.

The Internet does provide certain difficulties, though. Digital inequality, privacy issues, and cybersecurity hazards are still present. For legislators as well as engineers, ensuring fair and secure access to the Internet is still a top priority. Notwithstanding these difficulties, the Internet is nevertheless a potent instrument for fostering human connections, information exchange, and economic expansion.

- 3A Based on your reading of the above passage make notes on it, using recognizable abbreviations wherever necessary. Suggest a suitable title for the passage. 5
- 3B Write a summary of the above passage in about 50 words. 3

#### SECTION-B (Grammar & Creative Writing Skills)

23 Marks  
4x1

4. **Fill in the blanks with the correct form of word given in the bracket. (Attempt any four):**  
The fear of examinations has been a persistent issue among students, both in the past and present. In the past, the anxiety (a)\_\_\_\_\_ (stem) from the intense pressure to excel academically, often (b) \_\_\_\_\_ (impose) by strict teachers and parents who (c)\_\_\_\_\_ (see) high grades as the only path to success. Students had limited resources and relied heavily on textbooks and classroom lectures, making the preparation process daunting and stressful. Today, while technology (d)\_\_\_\_\_ (provide) students with diverse learning resources and tools, the fear of examinations (e)\_\_\_\_\_ (remain).

5. **Reorder the following sentences to form a meaningful paragraph:** 3x1  
(A) However, his luck changed when he discovered a hidden talent for painting.  
(B) Initially, he struggled to find his calling and faced numerous failures.  
(C) John was always passionate about the arts.

6. **Attempt Any ONE out of two, in about 50 words.** 3  
A. Draft a classified advertisement to be published in the local newspaper's "Situation Wanted" column. You recently received your degree in computer science and are seeking employment in Bangalore as a software developer. Add your credentials, abilities, and contact information.

OR

- B. You are planning to sell your old laptop and some textbooks that you no longer need. Write a classified advertisement for the "For Sale" section. Include the following details:  
Description of laptop, books, price and other necessary details.

7. **Attempt Any ONE out of two, in about 50 words.** 3  
A. As the head of your school's Eco Club, you have been asked to create a poster to raise awareness about protecting the environment on the occasion of Van Mahotsav. Design it by including all necessary details.

OR

- B. An organisation called WASTE TO BEST is running a campaign on the management of e-waste. As a member of the organisation, you have been asked to prepare a poster to raise awareness about the proper disposal and recycling of electronic waste. Create a visually appealing and informative poster.

8. **Attempt Any ONE out of two, in about 120 -150 words.** 5

- A. You are the head of the Music Club in your school and have been asked to deliver a speech on the topic "Impact of Music in Our Life" during the morning assembly. Prepare a speech with the help of the following hints:  
Introduction to music as a universal language - Emotional and psychological benefits - Role of music in education and learning -Social and cultural impact - Personal experiences or anecdotes

OR

- B. You have been asked to deliver a speech in your school's morning assembly on the topic "The Importance of Mental Health Awareness in Today's Society." Write a speech using the following points:



What is mental health and its importance - Common mental health issues - Stigma and misconceptions about mental health - Ways to promote mental health awareness and support.

5

9. **Attempt Any ONE out of two, in about 120 -150 words.**

A. Your school is organizing a debate competition, and you have been assigned the topic "Freedom of the Press is an Absolute Necessity" Prepare a debate either in favour of or against the motion. The following points may help you in writing the debate.

*Press freedom is crucial to democracies - Possible risks associated with uncontrolled media - Instances where press freedom has both beneficial and detrimental effects - Press freedom's function in maintaining accountability and openness -the media's ethical obligations and factors.*

OR

B. Your school is hosting a debate on the topic "Is War Ever Justifiable?" Prepare a debate either in favour of or against the motion. Consider the following points:

*Instances in history that war was considered essential or appropriate - Moral issues and the effects of war on society and human life - The significance of diplomacy and other approaches to disputes - the long-term effects of conflict on national security and international relations - the legal and moral structures that control the justification of war.*

10. **SECTION-C (LITERATURE)**

31Marks

A. **Read the given extract carefully and answer the questions that follow:**

3x1

*Till the goldfinch comes, with a twitching chirrup*

*A suddenness, a startlement, at a branch end.*

*Then sleek as a lizard, and alert, and abrupt,*

*She enters the thickness, and a machine starts up*

(i) What impact does the appearance of the goldfinch have on the poem's general mood?

- A. It creates a sense of tranquillity and peace.
- B. It introduces an element of surprise and liveliness.
- C. It generates feelings of fear and suspense.
- D. It establishes a tone of sadness and melancholy.

(ii) Select the option that has the same literary device as in "Till the goldfinch comes, with a twitching chirrup."

- A. The gentle breeze rustled through the trees.
- B. The sun was a blazing fire in the sky.
- C. The waves danced gracefully on the shore.
- D. The wind howled like a wolf in the night.

(iii) What symbolic implications on the relationship between the goldfinch and the tree may the term "a machine starts up" have?

OR

B. *Eternal I rise impalpable out of the land and the bottomless sea,*

*Upward to heaven, whence, vaguely form'd, altogether changed, and yet the same,*

*I descend to lave the droughts, atomies, dust-layers of the globe,*

*And all that in them without me were seeds only, latent, unborn;*

(i) What larger issues of life are reflected in the journey of the rain?

- A. destruction and decay.                      B. transformation and renewal.
- C. change is negative.                      D. life is static and unchanging.

(ii) Which of the statements best explains the meaning of 'latent' as used in the extract?

- A. The effort of the workers is very much visible as they are active most of the time.
- B. Those old and decayed coins are of no use these days.
- C. The damaged and broken property of the grandfather has been dumped.
- D. His abilities in the field are yet to be tested as most of them have not been exposed.

- (iii) What is the significance of the phrase "I descend to lave the droughts, atomies, dust-layers of the globe" in the context of the poem?

11. **Read the given extract carefully and answer the questions that follow:**

3x1

- A. The first indication of impending disaster came at about 6 p.m., with an ominous silence. The wind dropped, and the sky immediately grew dark. Then came a growing roar, and an enormous cloud towered aft of the ship. With horror, I realised that it was not a cloud, but a wave like no other I had ever seen. It appeared perfectly vertical and almost twice the height of the other waves, with a frightful breaking crest.
- (i) How does the imagery of the "breaking crest" contribute to the overall mood of the passage?
- A. It creates an eerie feeling.  
B. It suggests a moment of reflection.  
C. It introduces a sense of enormity.  
D. It enhances the feeling of dread and impending disaster.
- (ii) In the context of the passage, which of the sentences is not true?
- A. The wave appeared almost twice the height of the other waves.  
B. The sky grew dark after the wind dropped.  
C. The narrator felt a sense of horror upon realizing the true nature of the cloud.  
D. The first indication of catastrophe was the growing roar.
- (iii) How does the author build a sense of impending doom in the extract?

OR

- B. Zahi Hawass smiled, visibly relieved that nothing had gone seriously wrong. "I didn't sleep last night, not for a second," he said. "I was so worried. But now I think I will go and sleep." By the time we left the trailer, descending metal stairs to the sandy ground, the wind had stopped. The winter air lay cold and still, like death itself, in this valley of the departed. Just above the entrance to Tut's tomb stood Orion — the constellation that the ancient Egyptians knew as the soul of Osiris, the god of the afterlife — watching over the boy king.
- (i) Pick the right pair of words from the list to complete the analogy of  
TOMB: DEATH :: \_\_\_\_\_ : \_\_\_\_\_  
1. CRADLE, 2 FAMILY, 3. HOUSE, 4. BIRTH, 5. EDUCATION  
A. 1:2    B. 3:5    C. 1:4    D. 2:5
- (ii) What is the significance of Orion being positioned above the entrance to Tut's tomb?
- A. It signifies the knowledge of Egyptians about the constellation of stars.  
B. It symbolizes the ancient Egyptians' belief in the afterlife.  
C. It indicates that the boy king was the worshipper of Orion.  
D. It marks the exact location of the tomb.
- (iii) How does the extract convey the tension and relief experienced by Zahi Hawass?

12. **Read the given extract carefully and answer the questions that follow:**

4x1

- A. Consequently, even though I could see the horse, so magnificent; even though I could smell it, so lovely; even though I could hear it breathing, so exciting; I couldn't believe the horse had anything to do with my cousin Mourad or with me or with any of the other members of our family, asleep or awake, because I knew my cousin Mourad couldn't have bought the horse, and if he couldn't have bought it he must have stolen it, and I refused to believe he had stolen it
- (i) What does the narrator's internal conflict about the horse reveal about his relationship with Mourad?
- A. The narrator distrusts Mourad completely.  
B. The narrator believes Mourad is capable of anything.  
C. The narrator is struggling to reconcile Mourad's behaviour with their own values.  
D. The narrator is unaware of Mourad's true nature.
- (ii) What is the effect of the author using sensory details to describe the horse in the passage?
- A. It makes the horse seem extraordinary and unremarkable.  
B. It makes the reader aware of the narrator's unwanted desires and feelings.  
C. It emphasizes the horse's physical beauty and the narrator's craving for the horse.

- D. It establishes the fact that horses were very rarely available for use.
- (iii) Based on the lines of the extract, what can be inferred about the narrator's feelings towards the horse?
- (iv) *Not in dream nor in reality the narrator could believe that any member of his family could own a horse.*

Which expression in the extract can replace the underlined expression of the remark?

OR

- B. Perhaps I was mistaken, I thought, perhaps it isn't her. I had seen her only once, fleetingly, and that was years ago. It was most probable that I had rung the wrong bell. The woman let go of the door and stepped to the side. She was wearing my mother's green knitted cardigan. The wooden buttons were rather pale from washing. She saw that I was looking at the cardigan and half hid herself again behind the door. But I knew now that I was right.
- (i) What initially makes the narrator unsure about the woman's identity?
- A. She had never seen her before.
- B. She had only seen her fleetingly years ago.
- C. The woman was wearing a different cardigan.
- D. She was certain he had rung the wrong bell.
- (ii) Assertion (A): The woman hid behind the door after seeing the narrator look at the cardigan. Reason (R): The cardigan had pale wooden buttons from frequent washing.
- A. Both A and R are true, but R is not the correct explanation of A.
- B. Both A and R are true, and R is the correct explanation of A.
- C. A is true, but R is false.
- D. A is false, but R is true.
- (iii) The narrator's closeness to her mother is very much evident in the extract. Pick up the lines from the extract to prove that.
- (iv) *The wooden buttons were rather pale from washing.*
- What does the line suggest about the user of the cardigan?

13. **Answer the following questions in about 40-50 words.**

3x2

- A. What does the poet mean by the phrase "the sea holiday was her past, mine is her laughter"?

OR

Describe the connection made by the poem between the rain cycle and the literary creative process.

- B. What does the narrator's grandmother symbolize in the story?

OR

How did modern technology contribute to the investigation of Tutankhamun's death?

14. **Answer ANY ONE of the following questions in about 40-50 words.**

3x1

- A. When the narrator first gets to Mrs. Dorling's residence, how does she feel, and why?

OR

- B. Do you believe that Mourad's behaviour is acceptable in spite of his family's morals?

15. **Answer ANY ONE of the following questions in about 120-150 words.**

6x1

- A. The story 'The Portrait of a Lady' captures the essence of a transitional society, where the old and the new intersect, often leading to conflicts and compromises. Elucidate with reference to your reading of the story.

OR

- B. Leadership and teamwork are central themes in the lesson "We're Not Afraid to Die... if We Can All Be Together". Evaluate.

16. **Answer ANY ONE of the following questions in about 120-150 words.**

6x1

- A. Discuss the theme of family honour and its significance in "The Summer of the Beautiful White Horse."

OR

- B. 'The Address' reflects the broader themes of displacement and loss. Explain the statement.

# D.A.V. INSTITUTIONS, WEST BENGAL ZONE

## HALF-YEARLY EXAMINATION

SESSION 2024-2025

CLASS: XI

MAXIMUM MARKS: 70

SUBJECT: ENTREPRENEURSHIP (066)

TIME: 3 Hours

**General Instructions:**

1. This question paper contains 34 questions.
2. The question paper contains 4 sections- A, B, C and D
  - 2.1 Section A contains multiple choice questions
  - 2.2 Section B – 2 marks; Answers to these questions may be from 30-40 words.
  - 2.3 Section C – 3 marks; Answers to these questions may be from 50-75 words.
  - 2.4 Section D – 5 marks; Answers to these questions may be from 120-150 words.
3. Internal choice is given in the paper, there is no overall choice.

**SECTION A**

- 1 The word 'entreprendre' means: 1  
A. To initiate      B. To undertake      C. To create      D. To build
- 2 Unsatisfied Need → Tension → X 1  
What is X in the above process of Motivation?  
A. Reduction in Tension      B. Drives  
C. Satisfaction of need      D. Search behaviour
- 3 'For a manufacturer of computer, while entering a new market would definitely need a 1  
comprehensive business plan but for an entrepreneur who is about to open a stationary  
shop would not require a detailed business plan'.  
Do all business units need to prepare a business plan and will the plan vary depending on  
the size of the unit?  
A. Yes      B. No  
C. Not necessarily      D. None of the above
- 4 "An individual, who undertakes the formation of an organization for commercial purposes 1  
by recognizing the potential demand for goods and services, and there by acts as an  
economic agent and transforms demand into supply".  
The above statement describing the identity of an entrepreneur is actually quoted by  
A. Richard Cantillon      B. Joseph Schumpeter  
C. Adam Smith      D. Peter F. Drucker

**Based on information below answer question no. 4 and 5**

The year was 1964 when Prime Minister Mr. Lal Bahadur Shastri was invited at Anand in Gujarat to inaugurate the new cattle-feed plant of Amul. He was supposed to return back by end of the day but after reaching Anand he insisted to stay there to learn about the success of the co-operatives. He visited almost all the co-operatives with Dr. Kurien and was impressed with the process with which Amul was sourcing the milk from farmers and at the same time helping them to improve their economic condition.

Later, he returned to Delhi and asked Dr. Kurien to replicate the Amul pattern across the country. The combined effort resulted in creation of the National Dairy Development Board (NDDB) in the year 1965. Dr. Kurien took charge of NDDB and began the herculean task of replicating the overall pattern of the working at Anand to other parts of the country.

- 5 This story of AMUL puts it in which category of entrepreneurs: 1  
A. Corporate entrepreneur      B. Social entrepreneurs  
C. Industrial entrepreneur      D. Trading entrepreneurs
- 6 Also identify which specific characteristic of social entrepreneurs is exhibited here in this 1  
story when success of AMUL prompted Prime Minister Mr. Lal Bahadur Shastri to ask Dr.  
Kurien to replicate the Amul pattern across the country  
A. Opportunity-seeking      B. Social Catalyst  
C. Socially aware      D. Profit seeking

- 7 \_\_\_\_\_ means cross thinking by seeing new angles connections and approaches. 1
- A. Environment Scanning  
B. Creative and Creative Problem Solving  
C. Brainstorming  
D. Focus Groups
- 8 This function of an entrepreneur enables the entrepreneur to get his/her company's policies implemented and take corrective action if performance is not according to the predetermined standards. 1
- A. Co-ordination B. Directing  
C. Planning D. Controlling
- 9 Given below are the few details of a proposed Business Plan and the headings under which they need to be covered. 1
- Match them appropriately.
- | Column I                                                         | Column II              |
|------------------------------------------------------------------|------------------------|
| i. Products to be offered and scale of operation                 | a. Production Plan     |
| ii. Identification of business, associated partners/members etc. | b. Human Resource Plan |
| iii. Logistics for distribution                                  | c. Marketing Plan      |
| iv. Categories of staff required                                 | d. Organizational Plan |
- A. i-b, ii-d, iii- c, iv-a B. i-c, ii-d, iii- a, iv-b  
C. i-a, ii-d, iii- c, iv-b D. i-d, ii-c ,iii- a ,iv-b
- 10 **Assertion (A):** Some entrepreneurs may be termed as laggards. 1
- Reason (R):** They are not ready to make changes in their existing production methods even if they suffer losses.
- A. Both Assertion (A) and Reason (R) are true and Reason (R) is the correct explanation of Assertion (A)  
B. Both Assertion (A) and Reason (R) are true and Reason (R) is not the correct explanation of Assertion (A)  
C. Assertion (A) is true but Reason (R) is false.  
D. Assertion (A) is false but Reason (R) is true.
- 11 Which one of the following is not a type of Feasibility Study? 1
- A. Market Feasibility B. Technical Feasibility  
C. Financial Feasibility D. Ownership Feasibility
- 12 "The entrepreneur will estimate the total demand for goods and then will think about arranging finances for the venture along with the availability of power, labour, raw materials and machinery". 1
- Which of the following promotional function of an entrepreneur is highlighted in Quoted lines?
- A. Detailed Investigation B. Discovery of an Idea  
C. Assembling the requirements D. Financing the proposition
- 13 Which of the following type of Entrepreneurs are also known as pure entrepreneurs because of their desire for self-fulfillment? 1
- A. Spontaneous Entrepreneurs B. Professional Entrepreneurs  
C. Business Entrepreneurs D. Technical Entrepreneurs
- 14 Google, Facebook and Twitter help the businesses to understand better what their customers need. This highlights the importance of: 1
- A. Business intelligence B. Cloud computing  
C. Artificial intelligence D. social media
- 15 The experience a person had after using a cell phone might form a positive or negative attitude towards the manufacturing company of that phone. 1
- Similarly, the experience a person had with the waiter in a restaurant might form a positive or negative attitude about the restaurant itself.
- The statement made above reflects which of the following feature of Attitude:
- A. Attitudes affect behavior B Attitudes are acquired  
C. Attitudes are pervasive D. Attitudes are invisible

- 16 **Assertion (A):** Social entrepreneur's final objective is wealth creation. 1  
**Reason (R):** Social entrepreneur uses the profits generated to create valuable social programs.  
 A. Both Assertion (A) and Reason (R) are true and Reason (R) is the correct explanation of Assertion (A)  
 B. Both Assertion (A) and Reason (R) are true and Reason (R) is not the correct explanation of Assertion (A)  
 C. Assertion (A) is true but Reason (R) is false  
 D. Assertion (A) is false but Reason (R) is true
- 17 **Assertion (A):** Idea evaluation is an important step in researching the venture's feasibility. 1  
**Reason (R):** However, if one takes time to evaluate one's entrepreneurial ideas, he/she will miss the largest payback (return).  
 A. Both Assertion (A) and Reason (R) are true and Reason (R) is the correct explanation of Assertion (A)  
 B. Both Assertion (A) and Reason (R) are true and Reason (R) is not the correct explanation of Assertion (A)  
 C. Assertion (A) is true but Reason (R) is false  
 D. Assertion (A) is false but Reason (R) is true

18

1



The creator of this theme park may belong to which specific category of entrepreneur:

- A. Imitative B. Innovative  
 C. Drone D. Fabian

### SECTION B

- 19 State one crucial feature of Fabian Entrepreneurs? 2  
 20 Why is there a growing need for Social Entrepreneurs? 2  
 21 In Underdeveloped countries, local mobile phone companies use the same technology used by big companies to manufacture their product. Identify the entrepreneurs highlighted above and define it. 2

**OR**

What can be the probable consequences of not encouraging intrapreneurship.

- 22 Give the contributions of the following Social Entrepreneurs: 2  
 i. Harish Hande  
 ii. Nand Kishore Chaudhary

**OR**

What is Cloud Computing?

- 23 Idea evaluation is an important step in researching the venture's feasibility. Do you agree? Give reasons in support of your answer. 2  
 24 Failure of a business plan impacts an organization in many ways. State any two of them. 2

**OR**

What role does 'intuition' play in generating ideas.

### SECTION C

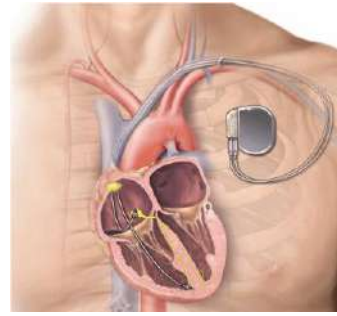
- 25 After conducting preliminary investigations, detailed analysis, and market research, Mehak has decided to establish a textile unit near Gurgaon. State any three commercial functions she will need to plan and execute to successfully launch and operate this venture? 3  
 26 Briefly explain any three misconceptions about a great idea? 3

- 27 See the image below and write about these innovations that led to successful entrepreneurial ventures. 3

i.



ii



- 28 Explain the types of entrepreneurs on the basis of use of technology. 3
- 29 State any three core values that are generally possessed by dynamic entrepreneurs. 3

**OR**

According to McClelland, the presence of the motives or drives in an individual indicates a predisposition to behave in certain ways. What are they?

### SECTION D

- 30 Karan, a rural boy, identifies the potential of Organic Farming in the village. He meets the zonal agricultural officer, who, looking at the determination of this 20 years old, helps him arrange and procure multiple resources required for his farm land. Then Karan takes a loan of Rs. 50,000/- from SBI as his seed money of Rs. 10,000/- is not enough to cater the requirement. Karan ties up with a nearby city's vegetable shop owner to sell his yield. His hard work pays and the organic vegetables are a hit. This organic vegetable producer exhibits to be a good entrepreneur with good entrepreneurial skills. Do you agree? Justify giving reasons for your answers. 5
- 31 Identify the Maslow's hierarchy need highlighted in the following statements: 5
- Autonomy status and prestige in the society help to satisfy this need.
  - This need satisfies the need for love and social interaction
  - It refers to the drive to become what one is capable of becoming
  - This need provides security and protection from physical harm
  - This need include need for food, shelter, clothing and other basic necessities of life
- 32 "Although there is no singular process to manage the execution of a business plan, there are basic processes and fundamentals to be followed" Discuss them. 5

**OR**

What is a feasibility study? Explain different types of feasibility study.

- 33 "As a matter of fact, entrepreneurship involves a lot of risk taking. Yet, it can pay off very well" 5

In the light of the above statement state the advantages of entrepreneurship.

**OR**

"Entrepreneur is an agent of progress in the society". Justify the statement by identifying the needs for entrepreneurship.

- 34 Vardaan Shah is planning to start a new business by opening a jewellery store in an upscale mall. A proper business plan will help him in providing a blueprint of the operations to be performed by him while opening the jewellery shop. On the basis of your understanding, help him in drafting its business plan under the following heads: 5
- Business Venture
  - Organizational Plan
  - Production plan
  - Human Resource Plan
  - Financial Plan

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**D.A.V. INSTITUTIONS, WEST BENGAL ZONE**  
**HALF YEARLY EXAMINATION**  
**SESSION: 2024-2025**

**CLASS: XI**  
**SUBJECT: GEOGRAPHY**

**MAXIMUM MARKS: 70**  
**TIME: 3 HOURS**

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**General Instructions:-**

1. This question paper contains 30 questions. All questions are compulsory.
2. This question paper is divided into five sections. Sections-A, B, C, D and E.
3. Section A - Question number 1 to 17 are Multiple Choice type questions carrying 1 mark each.
4. Section B- Question number 18 and 19 are Source based questions carrying 3 marks each.
5. Section C- Question number 20 to 23 are Short Answer type questions carrying 3 marks each. Answer to these questions shall be written in 80 to 100 words.
6. Section D Question number 24 to 28 are Long Answer type questions carrying 5 marks each. Answer to these questions shall be written in 120 to 150 words.
7. Section E Question number 29 and 30 are Map based questions

**SECTION A**

1. Which one of the following disciplines attempts spatial synthesis? 1  
(A) History  
(B) Geography  
(C) Zoology  
(D) Physiology
2. Read the following statements regarding Geography as a discipline. 1  
I. Geography is focused on understanding the relationship between man and nature.  
II. The word Geography was first used by the Greek scholar Eratosthenis in the 3<sup>rd</sup> century BC.  
III. The focus of Geography is on the earth surface as world of man.  
**Choose the correct answer using codes given below:**  
(A) I and II are correct  
(B) II and III are correct  
(C) I and III are correct  
(D) I, II and III are correct
3. Who among the following propounded the Nebular Hypothesis? 1  
(A) Laplace  
(B) Otto Schmidt  
(C) Carl Weizascar  
(D) Immanuel Kant
4. Two statements are given below. They are Assertion (A) and Reason (R). Read both the statements carefully and choose the correct option: 1  
**Assertion:** The outer core of the earth's interior is in molten state while the inner core is in solid state.  
**Reason:** The P-seismic waves disappear in outer core while S-waves penetrate up to the inner core.  
**Options:**  
(A) Both (A) and (R) are the true and (R) is a correct explanation of (A).  
(B) Both (A) and (R) are the true but (R) is not a correct explanation of (A).  
(C) (A) is true and (R) is false.  
(D) (A) is false and (R) is true.



5. Match column I with column II and choose the correct option:

1

| COLUMN I                    | COLUMN II                    |
|-----------------------------|------------------------------|
| (a) Gutenberg discontinuity | (i) Sial - Sima              |
| (b) Conrad discontinuity    | (ii) Inner core – Outer core |
| (c) Lehman discontinuity    | (iii) Crust - Mantle         |
| (d) Moho discontinuity      | (iv) Mantle – Core           |

**Options:**

- (A) a-i, b-ii, c-iii, d-iv
- (B) a-iii, b-iv, c-ii, d-i
- (C) a-iv, b-i, c-ii, d-iii
- (D) a-ii, b-i, c-iv, d-iii

6. Which one of the following is the type of plate boundary of the Indian plate along the Himalayan Mountains?

1

- (A) Ocean - Continents convergence
- (B) Divergent boundary
- (C) Transform boundary
- (D) Continent convergence

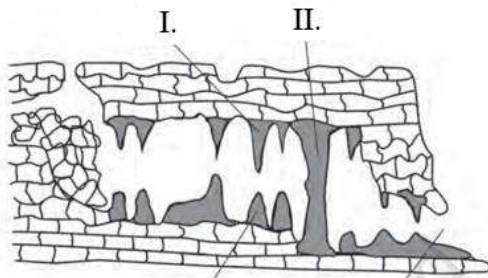
7. An active soil forming factor is -

1

- (A) Parent Material
- (B) Topography
- (C) Climate
- (D) Time

8. Identify the landform features depicted in the picture.

1



- A. I – Stalactite, II – Stalagmite
- B. I – Stalagmite, II – Stalactite
- C. I – Stalactite, II – Pillar
- D. I – Stalactite, II – Cave

9. Arrange the following landforms produced by river Ganga from Gaumukh to Bay of Bengal and choose the correct option:

1

- I. Alluvial fan
- II. Delta
- III. V shaped valley
- IV. Meander

**Options:**

- (A) II > I > III > IV
- (B) III > I > IV > II
- (C) I > II > IV > III
- (D) IV > III > II > I

10. Which of the following pair is not matched correctly?

1

- (A) Kashmir Himalaya - Pir Panjal
- (B) Himachal Himalaya - Dhoula Dhar
- (C) Darjeeling Himalaya - Singalila
- (D) Arunachal Himalaya - Nanda Devi

**11. Match column I with column II and choose the correct option:**

**1**

| COLUMN I     | COLUMN II                    |
|--------------|------------------------------|
| (a) Sankosh  | (i) Dakshin Ganga            |
| (b) Godavari | (ii) Brahmaputra             |
| (c) Chambal  | (iii) Sardar Sarovar Project |
| (d) Narmada  | (iv) Sawai Madhopur          |

**Options:**

- (A) a-i, b-ii, c-iii, d-iv
- (B) a-iii, b-iv, c-ii, d-i
- (C) a-iv, b-iii, c-i, d-ii
- (D) a-ii, b-i, c-iv, d-iii

**12. The term 'Mango Shower' is associated with**

**1**

- (A) Tamil Nadu
- (B) Telengana
- (C) Karnataka
- (D) Andhra Pradesh

**Read the given passage carefully and answer the questions that follow:**

**1+1+1**

The cold weather season begins from mid November in northern India and stays till February. December and January are the coldest months in the northern part of India. The temperature decreases from south to the north. The average temperature of Chennai on the eastern coast is between 24° C-25° Celsius, while in the northern plains, it ranges between 10°C and 15° Celsius. Days are warm and nights are cold. Frost is common in the north and the higher slopes of the Himalayas experience snowfall. During this season, northeast trade winds prevail over the country. They blow from land to sea and hence, for most part of the country, it is a dry season. Some amount of rainfall occurs on the Tamil Nadu coast from these winds as; here they blow from sea to land. In the northern part of the country, a feeble high pressure region develops, with light winds moving outwards from this area. Influenced by the relief, these winds blow through the Ganga valley from the west and the northwest. The weather is normally marked by clear sky, low temperatures and low humidity and feeble, variable winds. A characteristic feature of the cold weather season over the northern plains is the inflow of cyclonic disturbances from the west and the northwest. These low-pressure systems originate over the Mediterranean Sea and western Asia and move into India, along with the westerly flow. They cause these locally known as 'mahawat' is small; they are of immense importance for the cultivation of 'rabi' crops.

**Answer the following MCQs by choosing the most appropriate option.**

**13. In cold weather season of winter, the temperature decreases from:**

- (A) South to the North
- (B) East to the West
- (C) South to the East
- (D) North to the West

**14. Which one of the following characterizes the cold weather season in India?**

- (A) Warm days and warm nights
- (B) Warm days and cold nights
- (C) Cold days and cold nights
- (D) Cold days and warm nights

**15. Some amount of rainfall occurs on the \_\_\_\_\_ coast from these winds, as they blow sea to land.**

- (A) Coromandel
- (B) Malabar
- (C) Kerala
- (D) Karnataka

**16. Two statements are given below. They are Assertion (A) and Reason (R). Read both the statements carefully and choose the correct option:**

**1**

**Assertion:** Margins of Pacific ocean makes a unique pattern of volcanoes and earthquakes.

**Reason:** The rocks equidistant on either sides of the crest of the mid oceanic ridges show remarkable similarities.

**Options:**

- (A) Both (A) and (R) are the true and (R) is a correct explanation of (A).
- (B) Both (A) and (R) are the true but (R) is not a correct explanation of (A).
- (C) (A) is true and (R) is false.
- (D) (A) is false and (R) is true.

17. **Two statements are given below. They are Assertion (A) and Reason (R). Read both the statements carefully and choose the correct option:** 1

**Assertion:** The exogenic geomorphic process doesn't vary from region to region.

**Reason:** There are different climatic regions owing to thermal gradients.

**Options:**

- (A) Both (A) and (R) are the true and (R) is a correct explanation of (A).
- (B) Both (A) and (R) are the true but (R) is not a correct explanation of (A).
- (C) (A) is true and (R) is false.
- (D) (A) is false and (R) is true.

## SECTION B

**Question number 18 and 19 are Source based questions**

18. **Read the given passage carefully and answer the questions that follow:** 1+2=3

The present composition of earth's atmosphere is chiefly contributed by nitrogen and oxygen.

There are three stages in the evolution of the present atmosphere. The first stage is marked by the loss of primordial atmosphere. In the second stage, the hot interior of the earth contributed to the evolution of the atmosphere. Finally, the composition of the atmosphere was modified by the living world through the process of photosynthesis.

The early atmosphere, with hydrogen and helium, is supposed to have been stripped off as a result of the solar winds. This happened not only in case of the earth, but also in all the terrestrial planets, which were supposed to have lost their primordial atmosphere through the impact of solar winds.

During the cooling of the earth, gases and water vapour were released from the interior solid earth. This started the evolution of the present atmosphere. The early atmosphere largely contained water vapour, nitrogen, carbon dioxide, methane, ammonia and very little of free oxygen. The process through which the gases were outpoured from the interior is called degassing. Continuous volcanic eruptions contributed water vapour and gases to the atmosphere. As the earth cooled, the water vapour released started getting condensed. The carbon dioxide in the atmosphere got dissolved in rainwater and the temperature further decreased causing more condensation and more rains. The rainwater falling onto the surface got collected in the depressions to give rise to oceans. The earth's oceans were formed within 500 million years from the formation of the earth. This tells us that the oceans are as old as 4,000 million years. Sometime around 3,800 million years ago, life began to evolve. However, around 2,500-3,000 million years before the present, the process of photosynthesis got evolved. Life was confined to the oceans for a long time. Oceans began to have the contribution of oxygen through the process of photosynthesis. Eventually, oceans were saturated with oxygen, and 2,000 million years ago, oxygen began to flood the atmosphere.

**A. How the first four planets from sun changed their form from gaseous to terrestrial?**

**B. How does oceans risen up in earth?**

19. **Read the given passage carefully and answer the questions that follow:** 2+1=3

The size of India has endowed her with great physical diversity. Thus, you may appreciate the presence of lofty mountains in the north; large rivers such as Ganga, Brahmaputra, Mahanadi, Krishna, Godavari and Kaveri; green forested hills in northeast and south India; and the vast sandy expanse of Marusthali. You may further appreciate that bounded by the Himalayas in the north, Hindukush and Sulaiman ranges in the northwest, Purvachal hills in the north-east and by the large expanse of the Indian ocean in the south, it forms a great geographic entity known as the Indian subcontinent. It includes the countries — Pakistan,

Nepal, Bhutan, Bangladesh and India. The Himalayas, together with other ranges, have acted as a formidable physical barrier in the past. Except for a few mountain passes such as the Khyber, the Bolan, the Shipkila, the Nathula, the Bomdila, etc. it was difficult to cross it. It has contributed towards the evolving of a unique regional identity of the Indian subcontinent. By referring to the physical map of India you can now describe the physical variations which you would come across while travelling from Kashmir to Kanniyakumari and from Jaisalmer in Rajasthan to Imphal in Manipur. Peninsular part of India extends towards the Indian Ocean. This has provided the country with a coastline of 6,100 km in the mainland and 7,517 km in the entire geographical coast of the mainland plus the island groups Andaman and Nicobar located in the Bay of Bengal and the Lakshadweep in the Arabian Sea. Thus India, as a country, is a physically diverse land providing occurrence of varied resources.

**A. The physiological diversity of India makes the country a miniature of the world. – Explain.**

**B. Mention the location of Nathula Pass.**

### SECTION C

**Question number 20 to 23 are Short Answer type questions**

- |     |                                                                                                                                                                                                           |   |
|-----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|
| 20. | “The lava that cools within the crustal portions assumes different forms.” Explain any three such forms with clear diagrams.                                                                              | 3 |
| 21. | Laurasia and Gondwanaland continued to break into various smaller continents that exist today. A variety of evidence was offered in support of the continental drift – Shortly explain any three of them. | 3 |

OR

Divide the Ocean floor based on the depth as well as the forms of relief and discuss them briefly.

- |     |                                                                                  |   |
|-----|----------------------------------------------------------------------------------|---|
| 22. | Make a comparative study between Andaman Nicobar Islands and Lakshadweep Island. | 3 |
| 23. | Discuss about different Drainage patterns.                                       | 3 |

OR

Suppose you are navigating through River Ganga from Hrishikesh to Farakka. Which states you have to come across? Name major cities from each of those states situated beside the river.

### SECTION D

**Question number 24 to 28 are Long Answer type questions**

- |     |                                                                                                                                   |   |
|-----|-----------------------------------------------------------------------------------------------------------------------------------|---|
| 24. | Classify and discuss about different types of weathering.                                                                         | 5 |
| OR  |                                                                                                                                   |   |
|     | Explain the factors affecting soil formation.                                                                                     |   |
| 25. | With proper labelling discuss about two erosional and two depositional landforms by fluvial action.                               | 5 |
| OR  |                                                                                                                                   |   |
|     | With proper labelling discuss about two erosional and two depositional landforms by glacier action.                               |   |
| 26. | If you are starting journey from Kolkata to Kedarnath, you can experience a variety of landforms. Mention and explain about them. | 5 |
| 27. | Differentiate Himalayan and Peninsular and rivers.                                                                                | 5 |
| 28. | Discuss about the factors influencing the climatic variations in India.                                                           | 5 |

OR

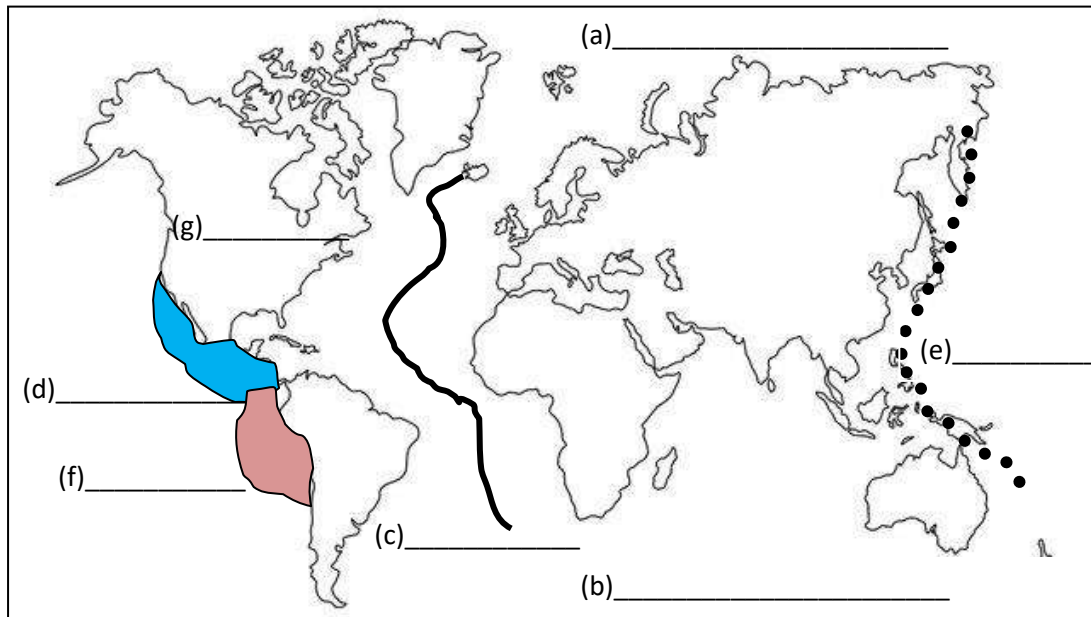
Discuss how Monsoon is connected with economic life of India?

## SECTION E

### Question number 29 and 30 are Map based questions

- 29.** On the given outline map of the world, the following seven features are have been marked as a, b, c, d, e, f, g Identify any **five** with the help of the following information and write their correct names on the lines drawn near them. **1×5=5**
- (a) An ocean in northern hemisphere
  - (b) An ocean in southern hemisphere
  - (c) A ridge
  - (d) A minor plate
  - (e) A volcanic zone in Pacific ocean
  - (f) A minor plate
  - (g) A continent
- 30.** On the given outline map of India, locate and label any **five** of the following with appropriate symbols: **1×5=5**
- (a) Standard Meridian of India
  - (b) Malabar coast
  - (c) Palk Strait
  - (d) Chilika lake
  - (e) Area with highest rainfall
  - (f) Shipkila Pass
  - (g) Kanchenjunga Peak

29.



30.



**D.A.V. INSTITUTIONS, WEST BENGAL ZONE**  
**HALF YEARLY EXAMINATION**  
**SESSION 2024-25**

**CLASS: XI**  
**SUBJECT: HEALTH CARE**

**MAXIMUM MARKS: 60**  
**TIME: 3 HOURS**

**General Instructions:**

1. Please read the instructions carefully.
2. This Question Paper consists of **24 questions** in two sections–Section A & Section B.
3. Section A has Objective type questions whereas Section B contains Subjective type questions.
4. **Out of the given (6+18=)24 questions ,a candidate has to answer(6+11=)17 questions in the allotted(maximum) time of 3 hours.**
5. All questions of a particular section must be attempted in the correct order.
6. **SECTION A- OBJECTIVE TYPE QUESTIONS (30MARKS):**
  - i. This section has 06 questions.
  - ii. There is no negative marking.
  - iii. Do as per the instructions given.
  - iv. Marks allotted are mentioned against each question/part.
7. **SECTION B –SUBJECTIVE TYPE QUESTIONS (30MARKS):**
  - i. This section contains 18 questions.
  - ii. A candidate has to do 11 questions.
  - iii. Do as per the instructions given
  - iv. Marks allotted are mentioned against each question/part.

**SECTION A: OBJECTIVE TYPE QUESTIONS**

**Q1. Answer any 4 out of the given 6 questions on Employability Skills (1 x4=4 marks)**

- i. Priya wants to change the spelling of a word in the entire document. Which option will she use? **1**  
(a) Copy                      (b) Align Left                      (c) Find & Replace                      (d) Paste
- ii. How tracking your time helps you? **1**  
(a) We can stay focused.  
(b) We can show everyone how hard we are working.  
(c) We can understand where we are spending our time and manage our time better if needed.  
(d) None of the above
- iii. Which of these sentences has both indirect and direct objects? **1**  
(a) I am watching TV.                      (b) She bought a blue pen.  
(c) The girls played cricket.                      (d) He wrote his sister a letter
- iv. \_\_\_\_\_ means something that is real and is applicable in our lives.(depict from the symbol below) **1**  
(a) Time bound                      b) Measurable  
(c) Realistic                      d) Specific



- v. Select the wrong statement for finding out your weakness. **1**  
(a) Point out the areas where you struggle and what you find difficult to do  
(b) Look at the feedback you receive about yourself from others  
(c) Be open to feedback and accept your weaknesses without feeling bad about it. Look at it as an area of improvement.  
(d) Think of what others appreciate about you.
- vi. Which shortcut key will you use to start the Spell Checker? **1**  
(a) F5                      (b) F1                      (c) F7                      (d) F9

**Q2. Answer any 5 out of the given 7 questions (1x5= 5 marks)**

- i. A person having \_\_\_\_\_requires a Red tag in triage and treatment. **1**  
(a) Multiple fracture                      (b) Spinal injury  
(c) Food Poisoning                      (d) Cardiac arrest

- ii. How frequently should a GDA take rounds in order to reduce the frequency of call lights? **1**  
 (a) 6 hourly (b) 4 hourly (c) 2 hourly (d) Hourly
- iii. Measures that need to be adopted while assisting a patient during toileting includes \_\_\_\_\_. **1**  
 (a) watch out for accidents (b) report incontinence  
 (c) provide grab rails and toilet seats (d) All of the above
- iv. \_\_\_\_\_ are the microorganisms, which are said to be the most common cause of food contamination. **1**  
 (a) Bacteria (b) Virus (c) Fungus (d) Algae
- v. ORS stand for **1**  
 (a) Oral dehydration solution (b) Oral dehydration salt  
 (c) Oral rehydration solution (d) Oral rehydration salt
- vi. \_\_\_\_\_ is orthopaedic mechanical device used to restrain and protect a part of the body in case of a fracture (such as a broken leg or hand). **1**  
 (a) Splint (b) Split (c) Sling (d) Slit
- vii. \_\_\_\_\_ is caused due to problems in ligaments and muscles of spine. **1**  
 (a) Spine injury (b) Back pain (c) Arthritis (d) Joint pain

**Q3. Answer any 6 out of the given 7 questions (1x6= 6 marks)**

- i. Match column A with column B and choose the correct option. **1**

| Column A                         | Column B                               |
|----------------------------------|----------------------------------------|
| A. Telephone no. of fire station | i. 108                                 |
| B. Telephone no. of ambulance    | ii. severe burns and spinal injury     |
| C. White tag                     | iii. minor bleeding and minor fracture |
| D. Green tag                     | iv. 101                                |

- (a) A-iv, B-i, C-iii, D-ii (b) A-ii, B-iv, C-iii, D-i  
 (c) A-iv, B-iii, C-i, D-ii (d) A-i, B-iv, C-ii, D-iii

- ii. Arrange the following in the correct order of service priority that the first aider needs to follow in an emergency situation. **1**  
 i. call emergency services  
 ii. check for head, neck and spinal injury  
 iii. check for bleeding  
 iv. determine responsiveness  
 (a) i, ii, iii, iv (b) iii, ii, iv i (c) ii, i, iv, iii (d) iv, iii, i, ii
- iii. For how many hours can a dead body remain in a mortuary? **1**  
 (a) 24 hours (b) 48 hours (c) 52 hours (d) 72 hours
- iv. In case, a specimen is infectious in nature, then what precaution must be taken? **1**  
 (a) Label saying 'Danger of Infection' must be affixed to the specimen package  
 (b) The packaging must be certified and carry the certification number  
 (c) Instruction saying 'Not to be opened if found' must be affixed to the specimen package  
 (d) option 'a' and 'c' both
- v. Control of communicable diseases is \_\_\_\_\_ function. **1**  
 (a) restorative (b) preventive (c) training (d) creation
- vi. Measures that need to be adopted while assisting a patient during toileting includes \_\_\_\_\_. **1**  
 (a) watch out for accidents (b) report incontinence  
 (c) provide grab rails and toilet seats (d) All of the above
- vii. \_\_\_\_\_ is a term used in health care to refer to daily self-care activities. **1**  
 (a) Activities of Daily Living (b) Activities on Dietary Living  
 (c) Activities of Daily Life (d) Actions of Daily Living

**Q4. Answer any 5 out of the given 6 questions (1x5= 5 marks)**

- i. Blood is a viscous fluid composed of \_\_\_\_\_. **1**  
 (a) Plasma and cells (b) Plasma and serum  
 (c) RBC and WBC (d) Plasma and platelets
- ii. The ISO specified symbol for First Aid is a \_\_\_\_\_ on a green background. **1**  
 (a) Red cross (b) Blue cross (c) Black cross (d) White cross



- iii. Hazards can be of different types. Select the wrong option. 1  
 (a) Biological , chemical, physical, psychological  
 (b) Biological , radiation, physical, psychological  
 (c) Biological , chemical, physical, economic  
 (d) Biological , chemical, physical, ergonomic
- iv. Death can be confirmed when there is cessation of \_\_\_\_\_. 1  
 (a) brain function only (b) heart and lung function only  
 (c) kidney function only (d) all body functions
- v. What is the role of a General Duty Assistant in transporting a specimen? 1  
 (i) Collecting the specimen  
 (ii) Packaging the specimen  
 (iii) Labelling the specimen  
 (a) Only (i) (b) Only (ii) (c) Both (i) and (ii) (d) All of them
- vi. Identify the type of bed shown in the diagram. 1

- (a) Open and feet raised bed  
 (b) Closed and knee raised bed  
 (c) Closed bed and feet raised  
 (d) Closed and amputation bed



**Q5. Answer any 5 out of the given 6 questions (1x5= 5 marks)**

- i. \_\_\_\_\_ is a set of practices performed for the preservation of health. 1  
 (a) Hygiene (b) Health (c) Environment (d) Habits
- ii. Personal grooming is also called \_\_\_\_\_. 1  
 (a) Titivating or preening (b) Appearance (c) Personality (d) Presentable
- iii. Health education can \_\_\_\_\_. 1  
 (a) improve community hygiene (b) prevent illness  
 (c) inculcate positive health attitude (d) All of the above
- iv. During the spine examination the fingers are moved over the spine to detect 'spina bifida' which is \_\_\_\_\_. 1  
 (a) Birth defect in which a baby's spinal cord fails to develop properly in a newborn.  
 (b) Defect after birth due to improper sleeping posture.  
 (c) Genetic disorder that cannot be cured  
 (d) Defect in vertebral column due to improper handling of the baby.
- v. Identify the type of stretcher shown in the picture below. 1  
 (a) trolley stretcher  
 (b) Para guard stretcher  
 (c) Scoop stretcher  
 (d) Utile stretcher



- vi. Professional, legal or ethical issues are followed and governed by \_\_\_\_\_. 1  
 (a) Health Act (b) Personal Privacy Act  
 (c) Health Information Patient Privacy Act (d) None of the above

**Q6. Answer any 5 out of the given 6 questions (1 x 5 = 5 marks)**

- i. According to the World Health Organization (WHO), "A health system consists of all \_\_\_\_\_, \_\_\_\_\_ and \_\_\_\_\_, whose primary intent is to promote, restore or maintain health. 1  
 (a) organizations, people and actions (b) GDA, doctors and patients  
 (c) GDA, management and patients (d) organizations, patients and GDA
- ii. Equipment maintenance and supply check \_\_\_\_\_. 1  
 (a) General Duty Assistant rules (b) policy-based procedures  
 (c) patient's decisions (d) None of the above
- iii. \_\_\_\_\_ enhances interpersonal skills. 1  
 (a) Positive communication (b) Negative interpersonal skill  
 (c) Unclear speech (d) All of the above

- iv. In India, health care services is a \_\_\_\_\_ issue. 1  
 (a) State (b) National (c) Community (d) Parliament
- v. The bed strength of a Community Health Centre is \_\_\_\_\_. 1  
 (a) 30-50 (b) 30-60 (c) 50-100 (d) 150-200
- vi. A sanitary attendant should be allotted a work area of \_\_\_\_\_ sq ft, keeping in view the policies of a hospital. 1  
 (a) 1300-1500 (b) 1500-2000 (c) 1200-1500 (d) 1000-1200

### **SECTION B: SUBJECTIVE TYPE QUESTIONS**

**Answer any 3 out of the given 5 questions on Employability Skills (2 x 3 = 6 marks) Answer each question in 20–30 words.**

**Q7.** Write the direction shown by the symbols given below. 2



- Q8.** Differentiate between habit and routine with an example. 2
- Q9.** Suppose you are given a task to perform. Will you choose to work alone or in a team? Give any two reasons justifying your answer. 2
- Q10.** Speaking in front of a large group makes most people nervous. How can you prepare yourself for this? 2
- Q11.** Write any four steps to build your networking skills using CONNECT model. 2

**Answer any 3 out of the given 5 questions in 20–30 words each (2 x 3 = 6 marks)**

- Q12.** Write the drugs used for the given Ailments: 2  
 i. Allergies ii. Headache iii. Constipation iv. Sprains and strains
- Q13.** Mention the various restorative functions of a hospital. 2
- Q14.** Why bed making is an important part in patient care? 2
- Q15.** If a patient is suffering from dehydration, what supplement will you provide to prevent it. Also mention the steps to prepare that supplement. 2
- Q16.** Write any four qualities of a hospital receptionist. 2

**Answer any 2 out of the given 3 questions in 30–50 words each (3x2=6 marks)**

- Q17.** Back pain is acute pain in the back of the body. The pain, generally, persists for a short duration. It indicates that the body is under stress. Write its 3  
 i. cause ii. Triggering factors iii. First aid required
- Q18.** 'A', 'B' and 'C' are the basic lifesaving steps. Explain. 3
- Q19.** A dead patient is brought to the hospital. What signs of clinical death will you check before declaring the patient as dead? 3

**Answer any 3 out of the given 5 questions in 50–80 words each (4x3=12 marks)**

- Q20.** To reduce the call light frequency, specific actions are to be taken by a duty assistant, whether s/he is a nurse, certified nursing assistant, nurse's aide or nursing technician. Write any four such actions? 4
- Q21.** What are the principles of First Aid? 4
- Q22.** Give reason: 4  
 i. It is necessary to measure the vital signs of a patient.  
 ii. Hand hygiene is important in health care.
- Q23.** Explain the medical ethics a GDA must follow as per the Indian Medical Standards. 4
- Q24.** Think yourself to be a GDA. You have to feed an old patient who is unable to chew. What basic care you will provided to such a patient while feeding her/ him? 4

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**D.A.V. INSTITUTIONS, WEST BENGAL ZONE**  
**HALF YEARLY EXAMINATION**  
**SESSION 2024-2025**

**CLASS: XI**

**MAXIMUM MARKS: 80**

**SUBJECT: HISTORY**

**TIME: 3 HOURS**

General Instructions:

1. Question paper comprises five Sections – A, B, C, D and E. There are 34 questions in the question paper. All questions are compulsory.
2. Section A – Question 1 to 21 are MCQs of 1 mark each.
3. Section B – Question no. 22 to 27 are Short Answer Type Questions, carrying 3 marks each. Answer to each question should not exceed 60-80 words.
4. Section C - Question no 28 to 30 are Long Answer Type Questions, carrying 8 marks each. Answer to each question should not exceed 300-350 words
5. Section D – Question no.31 to 33 are Source based questions with three sub questions and are of 4 marks each
6. Section-E - Question no. 34 is Map based, carrying 5 marks that includes the identification and location of significant test items. Attach the map with the answer book.
7. There is no overall choice in the question paper. However, an internal choice has been provided in few questions. Only one of the choices in such questions have to be attempted.
8. In addition to this, separate instructions are given with each section and question, wherever necessary.

**SECTION – A**  
**OBJECTIVE TYPE QUESTIONS**

**1 x 21**

1. In the north of the Mesopotamia, there is a stretch of upland called a \_\_\_\_\_, where animal herding offers people a better livelihood than agriculture. After the winter rains, sheep and goats feed on the grasses and low shrubs that grow here.  
A. Craps  
B. Steppe  
C. Water land  
D. Lead Land

1

2. Match the terms on the left with their corresponding descriptions on the right.

1

| TERMS                          | DESCRIPTION                                           |
|--------------------------------|-------------------------------------------------------|
| 1. Sumerians                   | a. Script used for writing in Mesopotamia             |
| 2. Cuneiform Script            | b. Royal capital that prospered on trade              |
| 3. Mari                        | c. Mathematical tables found on Mesopotamian tablets. |
| 4. Multiplication and Division | d. The earliest known language of Mesopotamia         |

OPTIONS-

- A. 1-c, 2-b, 3-d, 4-a
  - B. 1-d, 2-a, 3-b, 4-c
  - C. 1-b, 2-d, 3-c, 4-a
  - D. 1-a, 2-c, 3-b, 4-d
3. The technological landmark witnessed by the urban economy of the city of Uruk was  
A. bronze tools  
B. construction of brick columns  
C. potter's wheel  
D. oil pressing technique

1

4. Identify the name of the site from the information given below: 1
- I. It was one of the earliest temple towns, in which depictions of armed heroes and their victims were found.
  - II. The site was continuously occupied from about 4200 BCE to about 400 CE
  - III. The site came to have a defensive wall at a very early date.
  - IV. By about 2800 BCE it had expanded to 400 hectares.
- A. Mari
  - B. Uruk
  - C. Babylon
  - A. Assyrian
5. There are two statements marked as Assertion (A) and Reason (R). Read the statement and choose the correct option. 1
- Assertion (A): The Senate hated and feared the Roman army.  
Reason (R): The empire in the first two centuries was already so vast that further expansion was felt to be unnecessary.
- Options -
- A. (A) is Correct, (R) is Incorrect
  - B. (A) is Incorrect, (R) is Correct
  - C. Both (A) and (R) are Correct but (R) is not the correct explanation of (A)
  - D. Both (A) and (R) are Correct and (R) is the correct explanation of (A)
6. **Match the column:-** 1
- | <b>Column-I</b>                      | <b>Column-II</b>           |
|--------------------------------------|----------------------------|
| a) The heart of the Roman Empire     | i) Late Antiquity          |
| b) The common people of the Roman    | ii) Pompeii                |
| c) Transformation of the Roman world | iii) The Mediterranean Sea |
| d) A wine merchant's dining room.    | iv) Plebeians              |
- Options:-**
- A. (a) – (iv), (b) – (iii), (c) – (i), (d) – (ii)
  - B. (a) – (iii), (b) – (iv), (c) – (i), (d) – (ii)
  - C. (a) – (ii), (b) – (iii), (c) – (iv), (d) – (i)
  - D. (a) – (i), (b) – (iv), (c) – (ii), (d) – (iii)
7. Identify the emperor based on following statements. 1
- a. He was 2<sup>nd</sup> emperor of Roman Empire.
  - b. He was adopted by Augustus to ensure smooth transition.
  - c. He ruled in between 14-37 CE.
- Options-
- A. Tiberius
  - B. Diocletian
  - C. Constantine
  - D. Anastasius
8. The \_\_\_\_\_ System of the Roman Empire was the system of government in which the real power vested in the Senate. 1
- A. Democrat
  - B. Republican
  - C. Maoist
  - D. Marxist
9. Saint Augustine was bishop of the North African city of 1
- A. Annaba
  - B. Algeria
  - C. Hippo
  - D. Numidia

10. The famous book Feudal Society, which dealt with the French society, was written by: 1  
 A. James Cunnigham  
 B. Alexander Cunnigham  
 C. James Bloch  
 D. Marc Bloch
11. Identify the given picture:- 1



- A. St. Michael's Benedictine Abbey.  
 B. Hever Castle.  
 C. Salisbury Cathedral  
 D. The Duomo of Florence.
12. Find out the correct statement (s) 1
- i) Vast water land was known as Feud.  
 ii) A guild was an association of craft and industry.  
 iii) Monks who moved from one place to another, preaching to the people and living on charity. These monks were known as Plowmen. Options:
- A. Only (i) correct  
 B. Only (ii) correct  
 C. Only (i) and (ii) are correct  
 D. All (i), (ii) & (iii) are correct.
13. Noble could raise troops known as \_\_\_\_\_. 1
- A. Manor  
 B. Vassalage  
 C. Peasant  
 D. Feudal levies
14. The Guild Hall in medieval society was often considered part of which order? 1
- A. First Order  
 B. Second Order  
 C. Third Order  
 D. Fourth Order
15. Arrange in sequence. 1
- (i) Peasants revolts.  
 (ii) Black Death.  
 (iii) Hundred years of war between England and France.
- Options-
- A. i, ii, iii  
 B. ii, iii, i  
 C. iii, i, ii  
 D. ii, i, iii
16. Given below are two statements, one labelled as Assertion (A) and the other labelled as Reason (R). 1
- Assertion (A):** The Yasa was in all probability a compilation of the customary traditions of the Mongol tribes.  
**Reason(R):** The Mongols could protect their identity and distinctiveness though Yasa.

**Option:**

- A. Both (A) and (R) are correct and (R) is the correct explanation of (A).  
 B. Both (A) and (R) are correct but (R) is not the correct explanation of (A).  
 C. (A) is correct, but (R) is not correct.  
 D. (R) is correct, but (A) is not correct.

17. Genghis Khan commanded to plunder and destroy Nishapur because 1

- A. A Mongol prince was killed.  
 B. Nishapur refused to export agricultural produce.  
 C. They were developing industries  
 D. None of the above

18. Match the following. 1

| List I      | List II                                 |
|-------------|-----------------------------------------|
| a. Jochi    | i. Received Transoxianian steppe        |
| b. Chaghtai | ii. Received Russian steppe             |
| c. Ogodei   | iii. Received near Karakorum            |
| d. Toluy    | iv. Received ancestral land of Mongolia |

Options:-

- A.(a) – (iv), (b) – (iii), (c) – (i), (d) – (ii)  
 B. (a) – (iii), (b) – (iv), (c) – (i), (d) – (ii)  
 C.(a) – (ii), (b) – (iii), (c) – (iv), (d) – (i)  
 D.(a) – (ii), (b) – (i), (c) – (iii), (d) – (iv)

19. **Consider the following statements and choose the correct option:** 1

- I. Genghis Khan was born around 1262 CE.  
 II. Hsi Hsia people were of Tibetan origin in South-West provinces.  
 III. Some Mongols were Pastoralists while others were hunter-gatherers  
 IV. The hunting skills of Mongols and Turks provide speed and mobility to the army.  
 A. only I  
 B. only III  
 C. Both II and III  
 D. Both III and IV

20. The Mongol Khans belonged to which of the following faith? 1

- A. Shaman, Buddhist  
 B. Christian and Islam.  
 C. Both (a) and (b)  
 D. Only (b)

21. The famous Mongol military leader, who was the founder of the Yuan Dynasty in China and the grandson of Genghis Khan, was: 1

- A. Tamerlane  
 B. Timur  
 C. Qublai Khan  
 D. Hulegu

**SECTION B****3 x 6 =18****SHORT ANSWER TYPE QUESTIONS**

22. Write a note on animal herders of Mari. 3  
 23. 'Writing in Mesopotamia was a skilled craft and intellectual achievement' – justify the statements.. 3  
 24. Point out some basic features of Roman society and economy which you think make it look quite modern. 3  
 25. Write a short note on the courier system developed by the Mongols. 3  
 26. Discuss the new design and features of cathedrals in medieval period in Europe. 3  
 27. Illustrate the various ways that helped Europeans in the condition of agriculture due to the changes in the environment. 3

## SECTION C

3 x 8 = 24

### LONG ANSWER TYPE QUESTIONS

28. What is meant by late antiquity? Describe the main political and economic development of the period. 8

Or

Discuss the social structure of Roman society with a focus on gender roles, family dynamics, and legal rights.

29. Discuss the communication and trade system under Mongols. 8

Or

Elaborate social, political and military organisation under Mongols.

30. Illustrate the technical changes that affected agriculture during the 11<sup>th</sup> century. 8

Or

Examine the political changes in Europe during the 15<sup>th</sup> and 16<sup>th</sup> centuries.

## SECTION D

3 x 4 = 12

### SOURCE BASED QUESTIONS

31. Read the following excerpt carefully and answer the following three questions : 2+1+1=4

#### **The Palace at Mari of King Zimrilim (1810-1760 BCE)**

The great palace of Mari was the residence of the royal family, the hub of administration, and a place of production, especially of precious metal ornaments. It was so famous in its time that a minor king came from north Syria just to see it, carrying with him a letter of introduction from a royal friend of the king of Mari, Zimrilim. Daily lists reveal that huge quantities of food were presented each day for the king's table: flour, bread, meat, fish, fruit, beer and wine. He probably ate in the company of many others, in or around courtyard, paved white.

You will notice from the plan that the palace had only one entrance, in the North. The large, open courtyards were beautifully paved. The King would have received foreign dignitaries and his own people in Audience hall, a room with wall paintings that would have awed the visitors. The palace was a sprawling structure, with 260 rooms and covered an area of 2.4 hectares.

- (i) Write the significance of the great palace of Mari.
- (ii) Specify the various production in great palace of Mari.
- (iii) Mention the varieties of food that king had each day.

32. Read the following excerpt carefully and answer the following three questions : 2+1+1=4  
**Estimated Extent of Mongol Destruction**

All reports of Genghis Khan's campaigns agree at the vast number of people killed following the capture of cities that defied his authority. The numbers are staggering: at the capture of Nishapur in 1220 - 1,747,000 people were massacred while the toll at Herat in 1222 was 1,600,000 people and at Baghdad in 1258-800,000. Smaller towns suffered proportionately: Nasa, 70,000 dead; Baihaq district, 70,000; and at Tun in the Kuhistan province, 12,000 individuals were executed.

How did medieval chroniclers arrive at such figure? Juwaini, the Persian chronicler of the Ilkhans stated that 1,300,000 people were killed in Merv. He reached the figure because it took thirteen days to count the dead and each day they counted 100,000 corpses.

- (i) Discuss the destructive nature of Genghis Khan.
- (ii) Name two smaller towns which saw the wrath of Genghis Khan.
- (iv) Name the most important source to know the history of nomadic empire



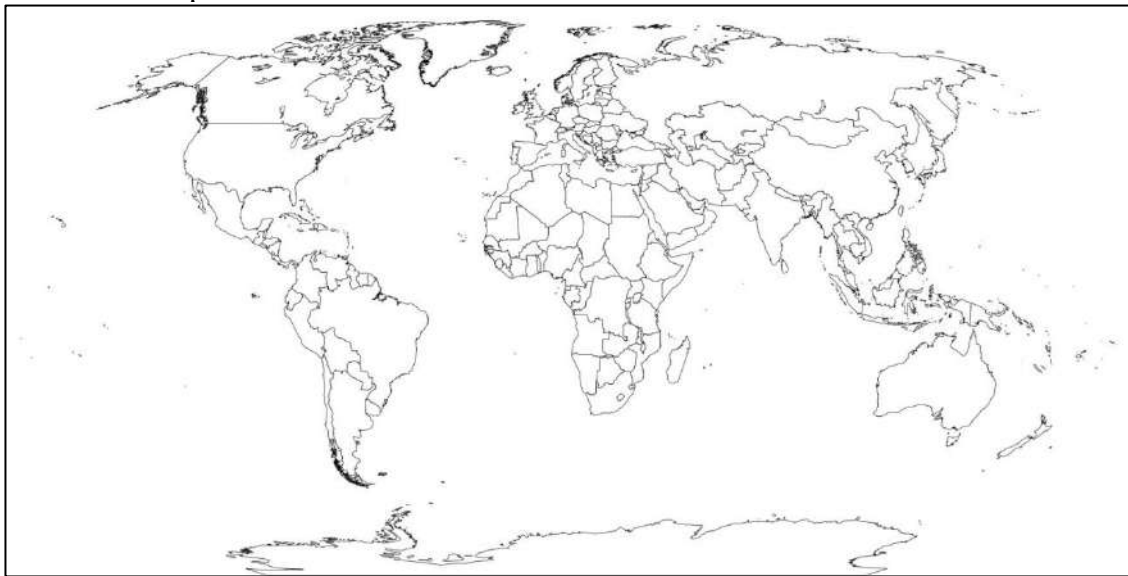
33. **Read the following excerpt carefully and answer the following three questions :**  
 In the 12th century, Abbess Hildegard of Bingen wrote: 'Who would think of herding his entire cattle in one stable - cows, donkeys, sheep, goats, without difference? Therefore it is necessary to establish difference among human beings, so that they do not destroy each other... God makes distinctions among his flock, in heaven as on earth. All are loved by him, yet there is no equality among them.'  
 (i) Identify the author of the passage? What is the author trying to convey through the passage?  
 (ii) Mention the necessities to establish difference among the human being.  
 (iii) What analogy did author used to justify inequality?

2+1+1=4

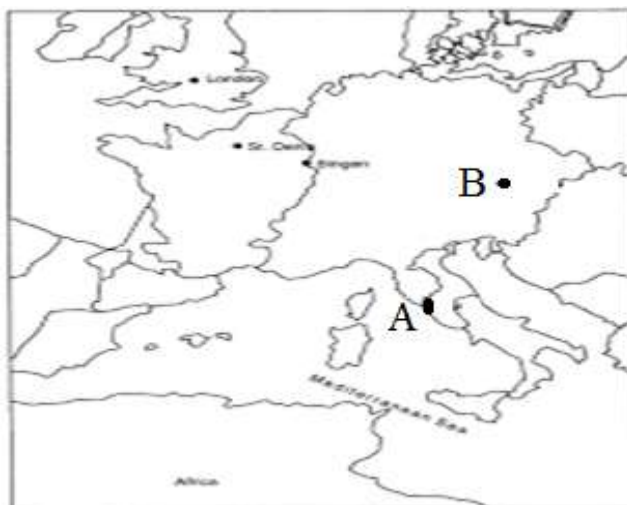
**SECTION E**  
**MAP BASED QUESTION**

34. 34.1 On the given political map of the World, locate and label the following with appropriate symbols:  
 1. Mari  
 2. Nishapur  
 3. Constantinople

**5**  
 3+2



- 34.2. On the same outline map, two places have been marked as A and B, which are the centres of Feudal Society. Identify them and write their correct names on the lines drawn near them.



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**D.A.V. INSTITUTIONS, WEST BENGAL ZONE**  
**HALF YEARLY EXAMINATION**  
**SESSION 2024-2025**

**CLASS: XI**  
**SUBJECT: LIBRARY AND INFORMATION SCIENCE**

**MAXIMUM MARKS: 60**  
**TIME: 3 HOURS**

**SECTION – A1 MCQ& ONE WORD ANSWERS (EMPLOYABILITY SKILLS)**

**[ATTEMPT ANY 6]**

**1×6 =6**

- 1 What does 'M' denote in the acronym SMART model for goal setting?  
(A)Measurable (B)Motivational (C)Materialistic (D)Methodical
- 2 Exchanging information through images is known as:  
(A) Oral Communication (B) Visual Communication  
(C)Paralanguage (D) Sign Language
- 3 Judging people or situations by how they look, can be said for –  
(A)Personal Factors (B) Past experience  
(C) Prejudice (D) Visual Perception
- 4 The teacher is too angry and is not willing to accept any reason from a student who is late for an examination. It is an example of -  
(A)Language barrier (B) Past experience  
(C) Emotional barrier (D) Cultural barrier
- 5 Define entrepreneurship.
- 6 Differentiate between interests and ability.
- 7 Discuss the importance of personal hygiene.

**SECTION – A2 SHORT QUESTIONS (EMPLOYABILITY SKILLS)**

**[ATTEMPT ANY 2]**

**2×2 =4**

- 8 Explain the difference between close-ended and open-ended questions with examples.
- 9 What do you mean by trading business?
- 10 Explain the six steps for building networking skills using CONECT model.

**SECTION – B MCQ (SUBJECT SPECIFIC SKILLS) [ATTEMPT ANY 13]**

**1×13 =13**

- 11 What is the third phase of society known as?  
(A) Agrarian society (B) Information society  
(C) Industrial society (D) Knowledge society
- 12 Which among these is/are functions of national library as set by UNESCO's general conference?  
(A) Compile Union catalogue (B)Produce National Bibliography  
(C) Act as a National Bibliographic Center (D) All of the above
- 13 Who categorized knowledge into Tacit & Explicit?  
(A) Michael Polayani (B) Melville Louis Kossuth Dewey  
(C) S.R. Ranganathan (D) Charles Ami Cutter
- 14 \_\_\_\_\_ is a type education in which a person gets educated without the help of teacher or classes.  
(A) formal (B) Informal (C) Non-formal (D) None of the above
- 15 When was National Library of India opened for public?  
(A) 1986 (B)1948 (C) 1953 (D) 1954
- 16 According to S.R. Ranganathan, \_\_\_\_\_ generate material happiness, mental jobs & spiritual delight.  
(A) National library (B) Public Library  
(C) Special Library (D) Academic library

- 17 IFLA stands for-  
 (A) International Federation of Library Associations and Institutes  
 (B) Indian Federation of Library Associations and Institutes  
 (C) Institutional Federation of Library Associations  
 (D) International Federation of Library Assemblies and Institutes
- 18 Which edition of DDC was primarily meant for use in schools and small public libraries?  
 (A) 15<sup>th</sup> (B) 19<sup>th</sup> (C) 17<sup>th</sup> (D) 23<sup>rd</sup>
- 19 Maps, atlas & globes are known as:  
 (A) Graphic Materials (B) Reference Materials  
 (C) Cartographic Materials (D) Archaeological Material
- 20 In DDC, the number 700 represents which main class?  
 (A) Religion (B) Fine Arts  
 (C) Technology (D) Literature
- 21 The principle of relative location was formulated by-  
 (A) N.C. Berwick Sayers (B) Dr. Richardson  
 (C) S.R. Ranganathan (D) Melvil Dewey
- 22 Which edition of DDC was published in 2011?  
 (A) 20th (B) 19th  
 (C) 22nd (D) 23rd
- 23 The symbol Δ represents which main class in Colon Classification?  
 (A) Humanities and Social Science (B) Universe of Knowledge  
 (C) Spiritual Experience and Mysticism (D) Linguistics
- 24 What is the standard size of a catalogue card?  
 (A) 12.5X6.5cm (B) 13.5X6.5cm  
 (C) 12.5X7.5cm (D) 12.5X8.5cm

#### SECTION – C

##### (SUBJECT SPECIFIC SKILLS) [ATTEMPT ANY 8]

2×8 =16

- 25 State the concept of Tacit & Explicit knowledge.  
 26 Differentiate between agrarian society and industrial society.  
 27 Write a note on Special libraries with examples.  
 28 Discuss the role of library in promotion and development of culture.  
 29 Write any 4 functions of a school library.  
 30 Write a short note on UNESCO Public Library Manifesto.  
 31 Explain the concept of main class in DDC.  
 32 What are the items of information required for cataloguing a book material?  
 33 What is OPAC? state any 4 search points in OPAC.

#### SECTION – D (SUBJECT SPECIFIC SKILLS) [ATTEMPT ANY 3]

3×3 =9

- 34 Discuss the characteristics of a digital library with examples.  
 35 What are the challenges faced by the hybrid libraries?  
 36 Explain the functions of a college library.  
 37 Explain the concept of trinity.

#### SECTION – E

##### (SUBJECT SPECIFIC SKILLS) [ATTEMPT ANY 3]

4×3 =12

- 38 Explain the concept of 5 fundamental categories with examples.  
 39 Write about the different physical forms of a catalogue.  
 40 What is APUPA pattern? Who formulated the concept of APUPA?  
 41 Explain Funding, Legislation and Network in the light of UNESCO Public Library Manifesto.

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**D.A.V INSTITUTIONS, WEST BENGAL ZONE**  
**HALF YEARLY EXAMINATION**  
**SESSION: 2024-25**

**CLASS: XI**  
**SUBJECT: MATHEMATICS**

**MAXIMUM MARKS: 80**  
**TIME: 3 HOURS**

**General Instructions:**

1. This Question paper contains - five sections A, B, C, D and E and 4 pages with 38 questions. Each section is compulsory. However, there are internal choices in some questions.
2. Section A has 18 **MCQ's** and **02 Assertion-Reason** based questions of 1 mark each.
3. Section B has 5 **Very Short Answer (VSA)-type** questions of 2 marks each.
4. Section C has 6 **Short Answer (SA)-type** questions of 3 marks each.
5. Section D has 4 **Long Answer (LA)-type** questions of 5 marks each.
6. Section E has 3 **source based/case based/passage based/integrated units** of assessments of 4 marks each with sub-parts.

**SECTION – A**

1. If  $x \in \mathbf{N}$  and  $-5 < 2x - 7 \leq 1$ , then the values of  $x$  is 1  
 (a)  $2 \leq x \leq 4$  (b)  $2 \leq x < 4$  (c)  $2 < x \leq 4$  (d) 2,3 and 4
2. If  $|x + 2| \leq 9$ , then 1  
 a)  $x \in (-7, 11)$  b)  $x \in [-11, 7]$   
 c)  $x \in (-\infty, -7) \cup (11, \infty)$  d)  $x \in (-\infty, -7) \cup [11, \infty)$
3. If  $f(x) = x \sin x$ , then  $f'(\pi/2)$  is equal to 1  
 (a) 0 (b) 1 (c) -1 (d) 1/2
4. If  $x$  is an integer, then the solution set of the in equation  $(-x^2) + 7x - 6 > 0$  is 1  
 (a) {2,4} (b) {3,5} (c) {2,3,4,5} (d) {4,5}
5. The value of  $\lim_{x \rightarrow 0} \frac{3^{2x} - 1}{2^{3x} - 1}$  is 1  
 (a)  $\frac{\log 9}{\log 8}$  (b)  $\frac{\log 8}{\log 9}$  (c)  $\frac{\log 3}{\log 2}$  (d) 0
6. If  $f(x) = x^{100} + x^{99} + \dots + x + 1$ , then  $f'(1)$  is equal to 1  
 (a) 5050 (b) 5049 (c) 5051 (d) 50051
7. If  $A = \{x : x \text{ is a multiple of } 3\}$  and  $B = \{x : x \text{ is a multiple of } 5\}$ , then 1  
 $A - B$  is  
 (a)  $A \cap B$  (b)  $A \cap B'$  (c)  $A' \cap B'$  (d)  $(A \cap B)'$
8. For any two sets  $A$  and  $B$ ,  $A \cap (A \cup B)'$  is equal to 1  
 (a)  $A$  (b)  $B$  (c)  $\Phi$  (d)  $A \cap B$
9. Which of the following statement is false 1  
 (a)  $A - B = A \cap B'$  (b)  $A - B = A - (A \cap B)$   
 (c)  $A - B = A - B'$  (d)  $A - B = (A \cup B) - B$
10.  $\lim_{x \rightarrow 0} \frac{1 - \cos 2x}{x}$  is 1  
 (a) 0 (b) 1 (c) 2 (d) 4
11.  $\frac{\cos 10^\circ + \sin 10^\circ}{\cos 10^\circ - \sin 10^\circ}$  is equal to 1  
 a)  $\tan 55^\circ$  b)  $\cot 55^\circ$  c)  $-\tan 35^\circ$  d)  $-\cot 35^\circ$
12. The radius of the circle whose arc of length  $15\pi$  cm makes an angle of  $3\pi/4$  radian at the 1  
 centre is  
 (a) 10 cm (b) 20 cm (c) 11.25 cm (d) 22.5 cm

- 13 The value of  $\sec (105)^{\circ}$  is 1
- (a)  $\frac{2\sqrt{2}}{1-\sqrt{3}}$  (b)  $\frac{2\sqrt{3}}{1-\sqrt{3}}$  (c)  $\frac{2\sqrt{2}}{1+\sqrt{3}}$  (d)  $\frac{3\sqrt{2}}{1-\sqrt{3}}$
- 14 The value of  $\tan x \sin\left(\frac{\pi}{2} + x\right) \cos\left(\frac{\pi}{2} - x\right)$  is 1
- a) 1 b) -1 c)  $\frac{1}{2} \sin 2x$  d)  $\sin^2 x$
- 15 The radian measure  $5^{\circ}37'30''$  is 1
- (a)  $\pi/32$  radian (b)  $3\pi/32$  radian (c)  $5\pi/32$  radian (d)  $7\pi/32$  radian
- 16 The domain of the function  $f(x) = \frac{x}{x^2+3x+2}$  is 1
- (a)  $[-2, -1]$  (b)  $\mathbb{R} - \{1, 2\}$  (c)  $\mathbb{R} - \{-1, -2\}$  (d)  $\mathbb{R} - \{2\}$
- 17 If  $f(x) = x^2 + 2$ ,  $x \in \mathbb{R}$ , then the range of  $f(x)$  is 1
- (a)  $[2, \infty)$  (b)  $(-\infty, 2]$  (c)  $(2, \infty)$  (d)  $(-\infty, 2) \cup (2, \infty)$
- 18 If  $R$  is a relation from a finite set  $A$  having  $m$  elements to a finite set  $B$  having  $n$  elements, then the number of relations from  $A$  to  $B$  is- 1
- a)  $2^{mn}$  b)  $2^{mn}-1$  c)  $2mn$  d)  $m^n$

In each of the following questions Q. No. 19 & Q. No. 20, a statement of **assertion (A)** is followed by a statement of **reason (R)**. While answering these questions, choose the correct one and mark it as

- (a) If both **assertion (A)** and **reason (R)** are true and **reason(R)** is the correct explanation of the **assertion (A)**.
- (b) If both **assertion (A)** and **reason (R)** are true but **reason(R)** is not the correct explanation of the **assertion (A)**.
- (c) If **assertion (A)** is true and **reason (R)** is false.
- (d) If **assertion (A)** is false and **reason (R)** is true.
- 19 Assertion (A): If  $n(A) = 4$  and  $n(B) = 3$ , then  $n(A \times B) = 4$  1
- Reason (R):  $n(A \times B) = n(A) \times n(B)$
- 20 Assertion: The function  $y = \sin x$  is periodic with a period of  $2\pi$ . 1
- Reason : The sine function repeats its value after the least gap of  $2\pi$  radians.

### Section –B

[This section comprises of very short answer type questions (VSA) of 2 marks each]

- 21 Solve:  $10 \leq 3x - 4 \leq x + 2$ ,  $x \in \mathbb{R}$  2
- 22 Differentiate  $\tan\sqrt{x} \sec\sqrt{x}$  w.r.t.  $\sqrt{x}$  2
- OR
- If  $y = \frac{x-4}{2\sqrt{x}}$ , then find  $\frac{dy}{dx}$  at  $x=1$
- 23 Find the domain of function 2
- $f(x) = \frac{x^2+2x+3}{x^2-5x+6}$

OR

Let  $A = \{1, 2, 3, 4, 5, 6\}$ . Define a relation on set  $A$  by

$$R = \{(x, y): y = x + 1\}$$

- i. Depict this relation using arrow diagram
- ii. Write down the domain and range of  $R$ .
- 24 If  $A$  and  $B$  are two sets such that  $A \subset B$ , then write  $B' - A'$  in terms of  $A$  and  $B$ . 2
- 25 Prove that  $\tan 70^{\circ} = \tan 20^{\circ} + 2 \tan 50^{\circ}$  2

### Section – C

[This section comprises of short answer type questions (SA) of 3 marks each]

- 26 If  $A = \{(x, y): y = \frac{1}{x}, 0 \neq x \in \mathbb{R}\}$  and  $B = \{(x, y): y = -x, x \in \mathbb{R}\}$ , then write  $A \cap B$ . 3
- 27 Evaluate:  $\lim_{x \rightarrow a} \frac{\sqrt{a+2x}-\sqrt{3x}}{\sqrt{3a+x}-2\sqrt{x}}$  3
- 28  $\lim_{x \rightarrow 1} f(x) = \lim_{x \rightarrow 1} \frac{x^4-1}{x-1} = \lim_{x \rightarrow k} \frac{x^3-k^3}{x^2-k^2}$ , then find the value of  $k$ . 3

OR

Evaluate:  $\lim_{x \rightarrow 1} \frac{(\sqrt{3+x} - \sqrt{5-x})}{x^2 - 1}$

- 29 Solve the following in equation in **R** and represents the solutions set in the real number line. 3

$$\left| \frac{3}{x-3} \right| > 4, x \neq 3$$

**OR**

Find all pairs of consecutive odd positive integers both of which are smaller than 10 such that their sum is more than 11.

- 30 Prove that  $\tan 4x = \frac{4 \tan x (1 - \tan^2 x)}{1 - 6 \tan^2 x + \tan^4 x}$  3

- 31 Prove that  $\cos 6^\circ \cos 42^\circ \cos 66^\circ \cos 78^\circ = \frac{1}{16}$  3

**OR**

Prove that  $\cos 6x = 32 \cos^6 x - 48 \cos^4 x + 18 \cos^2 x - 1$

### Section--D

[This section comprises of long answer type questions (LA) of 5 marks each]

- 32 If  $f(x) = \begin{cases} a + bx, & x < 1 \\ 4, & x = 1 \\ b - ax, & x > 1 \end{cases}$  for what values of  $a$  and  $b$   $\lim_{x \rightarrow 1} f(x) = f(1)$ . 5

- 33 Differentiate  $xe^x$  using 1<sup>st</sup> principle of derivative. 5

**OR**

Differentiate  $\cos(ax + b)$  using 1<sup>st</sup> principle of derivative.

- 34 Find the domain and range of the real function  $f(x) = \frac{x^2}{x^2 + 1}$  5

- 35 Prove that  $\cos x \cos 2x \cos 4x \cos 8x = \frac{\sin 16x}{16 \sin x}$  5

**OR**

Prove that  $\sin x + \sin 3x + \sin 5x + \sin 7x = 4 \sin 4x \cos 2x \cos x$

### SECTION-E

[This section comprises of 3 case- study/passage-based questions of 4 marks each with sub parts. The first two case study questions have three sub parts (i), (ii), (iii) of marks 1,1, 2 respectively. The third case study question has two sub parts of 2 marks each.]

- 36 A manufacturer has 1125 liters of 45% acid solution. He wants to dilute it by adding water. Based on the above information, answer the following questions: 4 (1+1+2)
- What is the minimum volume of water that should be added so that resulting mixture will contain less than 30% acid content?
  - How much water should be added so that resulting mixture will contain more than 25% but less than 30% acid content?
  - How many liters of 35% acid solution should be added so that resulting mixture will contain at least 42.5% acid content?

**Or**

How many liters of 40% acid solution should be added so that the resulting mixture will contain at most 44.5% acid content?

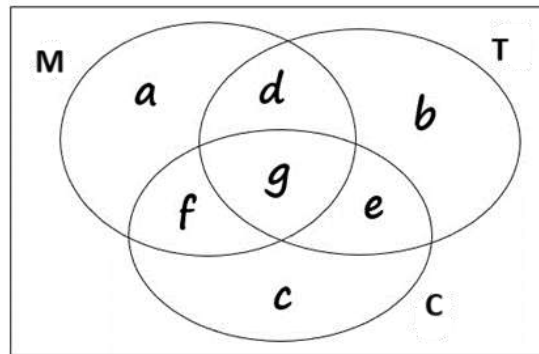
- 37 The school organised a farewell party for 100 students and school management decided three types of drinks will be distributed, milk(M), Coffee(C) and tea(T). Organiser reported that 10 students had all the three drinks M.C.T; 20 students had M and C; 30 students had C and T; 25 students had M and T; 12 students had M only; 5 students had C only; 8 students had T only. 4 (1+1+2)

Based on the above information answer following questions:

- (a) Find the number of students who did take any drink.  
 (b) Find the number of students who prefer milk.  
 (c) Find the number of students who prefer milk and coffee but not tea.

OR

Find the number of students who prefer only one drink.



the  
not

- 38 A company sells two types of smartphones, Model X and Model Y. The company conducted a survey to understand the relationship between the number of Model X smartphones sold ( $x$ ) and the number of Model Y smartphones sold ( $y$ ). The survey results indicate that the relationship can be approximated by the equation  $(x^2 + y^2 = 100)$ . 4(2+2)

- (a). Define a relation between ( $x$ ) and ( $y$ ) based on the given equation.

Find at least two possible pairs of values ( $x$ ,  $y$ ) that satisfy this equation.

Interpret their meaning in terms of sales.

- (b). Determine whether this relation represents a function. Justify your answer.

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# D.A.V. INSTITUTIONS, WEST BENGAL ZONE

## HALF YEARLY EXAMINATION

SESSION: 2024-2025

CLASS: XI

MAXIMUM MARKS: 30

SUBJECT: PAINTING

TIME: 2 HOURS

### General Instructions

- Section- A: Attempt all Questions (Each Question will carry 1 mark)
- Section-B: Attempt all Questions (Each Question will carry 2 Marks)
- Section-C: Attempt any two Questions (Each Question will carry 6 Marks)

### SECTION: A

1. Which of the following is an example of the lost-wax technique? 1  
A. Mother Goddess (Harappa) B. Bull (Mohenjo-daro)  
C. Dancing Girl (Mohenjo-daro) D. Male Toso (Harappa)
2. A large silhouetted animal of Bhimbetka belongs to which period? 1  
A. Mesolithic B. Upper Palaeolithic  
C. Chalcolithic D. Early Historic
3. The techniques of mural painting executed upon freshly laid lime plaster is known as \_\_\_\_\_. 1  
A. Tempera B. Fresco  
C. Gouache D. Relief
4. Famous Didar Ganj 'Yakshi' housed in Patna Museum belongs to which period? 1  
A. Sunga Period B. Gupta Period  
C. Kushan Period D. Mauryan Period
5. In which museum the image of Jain Tirthankara (Gupta period) is housed? 1  
A. National Museum, New Delhi B. State Museum, Lucknow, UP  
C. Indian Museum, Kolkata D. Patna Museum
6. Which of the following is depicted by Ajanta paintings? 1  
A. Jatakas B. Panchatantra  
C. Mahabharata D. Ramayana
7. Assertion(A): Buddhism reached its peak during Satavahana rule. 1  
Reason(R): Satavahana paintings are found in Ajanta caves.  
**Codes:-**  
A. Both (A) and (R) are true and R is the correct explanation of A.  
B. Both (A) and (R) are true and R is not the correct explanation of A.  
C. (A) is true but (R) is false.  
D. (A) is false but (R) is true.
8. Assertion(A): Gandhara School of Art is also known as the Indo-Greek school. 1  
Reason(R): Gandhara school was highly influenced by Greek, Roman tradition.  
**Codes:-**  
A. Both (A) and (R) are true and R is the correct explanation of A.  
B. Both (A) and (R) are true and R is not the correct explanation of A.  
C. (A) is true but (R) is false.  
D. (A) is false but (R) is true.

## **SECTION B**

- |                                                                   |   |
|-------------------------------------------------------------------|---|
| 9. Write a brief description on “A Roaring Animals” of Bhimbetka. | 2 |
| 10. Write a short note on ‘Dancing girl’.                         | 2 |
| 11. Express your views on Jain Tirthankara.                       | 2 |
| 12. Write a short note on Chauri Bearer (Didar Ganj)              | 2 |
| 13. Short note on Mother goddess.                                 | 2 |

OR

Highlight the aesthetic value of Bull.

## **SECTION C (Attempt any two Questions)**

- |                                                                                                                        |   |
|------------------------------------------------------------------------------------------------------------------------|---|
| 14. Write a brief description on pre historic rock painting. Compositional arrangement of wizard’s Dance of Bhimbetka. | 6 |
| 15. What is Greco-Roman Art. Write an essay on “Lion Capital” of Ashoka.                                               | 6 |
| 16. Describe the techniques, colours & features of the Ajanta Mural Painting.                                          | 6 |

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**D.A.V INSTITUTIONS, WEST BENGAL ZONE**  
**HALF YEARLY EXAMINATION**  
**SESSION 2024-2025**

**CLASS: XI**  
**SUBJECT: PHYSICAL EDUCATION (048)**

**MAXIMUM MARKS : 70**  
**TIME: 3 HOURS**

**General Instructions:**

1. The question paper comprises five sections A, B, C, D and E. There are 34 questions. All questions are compulsory.
2. Section A consists of question numbers 1 to 18 carrying 1 mark each.
3. Section B consists of question numbers 19 to 23 carrying 2 marks each.
4. Section C consists of question numbers 24 to 28 carrying 3 marks each.
5. Section D consists of question number 29 to 31 carrying 4 marks.
6. Section E Consists of question number 32 to 34 carrying 5 marks.
7. There is no overall choice in the question paper. However, internal choices have been provided in some questions. A student has to attempt only one of the alternatives in such questions.

**SECTION- A**

- Q1 Physical Education uses the body as a means to exhibit our feelings which develop the quality of 1  
A. Expression    B. Creativity    C. Emotional stability    D. Intellectuality.
- Q2 Which technology is used in the following picture? 1



- A. VAR                      B. GATE                      C. Senso-meter                      D. GPS
- Q3 “Playing beyond the rules of the game” is violation of which of the following educational value? 1  
A. Pursuit of Excellence                      B. Balance Between Body, Will and Mind  
C. Joy of Effort                      D. Fair Play
- Q4 Soucha means – 1  
A. Neti kryia                      B. Purity                      C. Non stealing                      D. Basti Kryia.
- Q5 A child falls into the severe intellectual disability category if the IQ is between..... 1  
A. 35 and 55                      B. 20 and 40                      C. 10 and 20                      D. 55 and 75
- Q6 Central Government Physical Education Committees was set up in 1948, which is also known as? 1  
A. Tara Chand Committee                      B. Rajkumari Amrit Kaur Committee  
C. Simon Committee                      D. NIS committee
- Q7 Which of the following is not due to vitamin deficiency? 1  
A. Night Blindness                      B. Falaria  
C. Osteomalacia                      D. Functional disability

- Q8 **Assertion (A):** The International Olympic Committee (IOC) is responsible for the overall management and coordination of the Olympic Movement. 1  
**Reason (R):** National Olympic Committees (NOCs) and International Federations (IFs) operate independently without any oversight from the IOC.  
**Options**  
A. Both Assertion (A) and Reason (R) are true, and Reason (R) is the correct explanation of Assertion (A).  
B. Both Assertion (A) and Reason (R) are true, but Reason (R) is not the correct explanation of Assertion (A).  
C. Assertion (A) is true, but Reason (R) is false.  
D. Assertion (A) is false, but Reason (R) is true.
- Q9 Which of the following is not a part of Yama? 1  
A. Satya                      B. Aparigraha                      C. Asteya                      D. Santosh
- Q10 The first Olympic torch was lit in- 1  
A. 1896, Athens, Greece                      B. 1920, Antwerp, Belgium  
C. 1924, Paris, France                      D. 1928, Amsterdam, Netherlands
- Q11 Which one of the following is not a component of Physical Fitness? 1  
A. Speed                      B. Flexibility  
C. Strength                      D. Cardiovascular endurance.
- Q12 What are the colours of Olympic rings situated at the top of the Olympic Symbol? 1  
A. Blue, Black, Red                      B. Black, Green, Red,  
C. Yellow, Black, Green                      D. Blue, Red, Black
- Q13 Assertion and Reason-Based Question: 1  
**Assertion (A):** The primary aim of Adaptive Physical Education is to provide equal opportunities for physical activity to individuals with disabilities.  
**Reason (R):** Adaptive Physical Education focuses on modifying activities, equipment, and environments to meet the unique needs of each individual, ensuring they can participate in physical education safely and effectively.  
**Options:**  
A. Both A and R are true, and R is the correct explanation of A.  
B. Both A and R are true, but R is not the correct explanation of A.  
C. A is true, but R is false.  
D. A is false, but R is true.
- Q14 Match the Yogic Kriya (Shat Karma) with its primary purpose: 1  
1. Dhauti      a. Cleansing the eyes and improving concentration  
2. Nauli      b. Purifying the large intestines  
3. Basti      c. Abdominal massage  
4. Trataka      d. Purifying the digestive track  
A. 1-d, 2-c, 3-b, 4-a                      B. 1-c, 2-b, 3-a, 4-d  
C. 1-b, 2-c, 3-d, 4-a                      D. 1-d, 2-c, 3-a, 4-b
- Q15 Which type of Strength is also known as Isometric Strength? 1  
A. Maximum Strength                      B. Static Strength  
C. Explosive Strength                      D. Strength Endurance
- Q16 The word “Altius” in the Olympic Motto means 1  
A. Faster                      B. Higher                      C. Heavier                      D. Stronger
- Q17 Which game is the origin of Ludo? 1  
A. Chaupar                      B. Gilli Danda                      C. Kalarippay                      D. Shatranj
- Q18 R.I.C.E. treatment refers to 1  
A. Rest, Ice, Crutches, Elevation                      B. Rest, Ice, Compression, Elevation  
C. Rest, Ibuprofen, Crutches, Exercise                      D. Recovery, Ice, Compression, Exercise

### **SECTION – B**

- Q19 What is the vision and mission of Khelo India Programme? 2
- Q20 Describe the design of the Olympic flag and explain its symbolism. 2
- Q21 Mention any four importance of Yoga. 2
- Q22 Write any two objectives of adaptive Physical Education. 2
- Q23 What is the meaning of Physical Fitness? 2

Or

Write any of the four Components of Wellness.

### **SECTION – C**

- Q24 How have advancements in Playing Surfaces impacted the performance and safety of athletes in modern sports? 3
- Q25 Describe the three core Olympic Values. 3
- Q26 Elucidate the procedure and benefits of Jalneti. 3
- Q27 Disability Etiquettes has a big role to give a sense of acceptance to person with Disability. Explain how? 3

Or

Define Disability. What are the types of Disability? Explain briefly.

- Q28 Write the importance of Traditional and Regional games. 3

### **SECTION – D**

- Q29 **Case Study** 4



The path of yoga is a flight of eight steps. Efficiency in yoga is attained through step-by-step process. These are also known as the eight elements of yoga. They are for the individual to think about and ponder over with a rational mind, because yoga is not about mindlessly accepting externally imposed rules- it is about finding the truth for oneself and connecting with it. On the basis of your knowledge of elements of yoga answer the following questions: -

- a) Which is the first Element of Yoga?
- b) Which is the last Element of Yoga?
- c) The last three limbs of Ashtanga Yoga are the essential stages of meditation, name them.
- d) Name the five Yamas or code of conduct towards the outside world?
- Q30 In a class of 50 students, a teacher was taking a lesson on Components of Wellness. The students were later assessed on what they had learned. 4
- On the basis of the case given, answer the following question:
- A. What will happen if a person does not pay attention to social wellness?
- B. How can financial wellness be achieved?
- C. If a person responds intelligently to circumstances and is receptive to new ideas and challenges, then, ..... component of wellness justifies her/ his qualities.
- D. Physical wellness highlights the.....aspect of wellness.

Q31 Identify the following Occupations:

4



A. \_\_\_\_\_



B. \_\_\_\_\_



C. \_\_\_\_\_



D. \_\_\_\_\_

### **SECTION – E**

Q32 Explain how Yoga can help in an active Lifestyle and Stress Management.  
Or

5

What are the eight types of Pranayama? Discuss.

Q33 Describe the rules of 'Competition & Awards' in Ancient Olympic Games

5

Q34 Explain the objectives of Physical Education?

5

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# D.A.V. INSTITUTIONS, WEST BENGAL ZONE

## HALF YEARLY EXAMINATION

SESSION: 2024-2025

CLASS: XI

MAXIMUM MARKS: 70

SUBJECT: PHYSICS

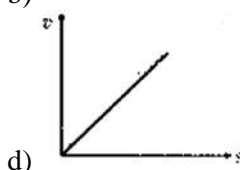
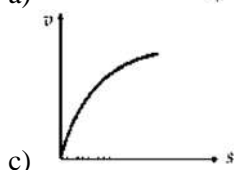
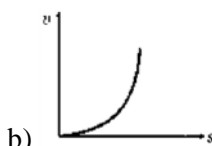
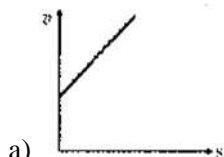
TIME: 3 HOURS

### General Instructions:

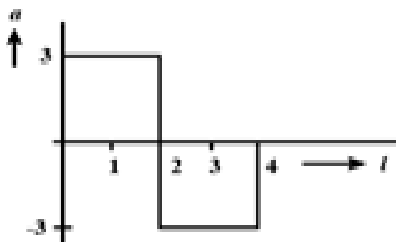
- (i) All questions are compulsory. There are 33 questions in all.
- (ii) This question paper contains 8 printed pages.
- (iii) This question paper comprises five sections: A, B, C, D and E.
- (iv) **Section A**- Questions no. 1 to 16 are of 1 mark each.
- (v) **Section B** – Questions no. 17 to 21 are of 2 marks each.
- (vi) **Section C**- Questions no. 22 to 28 are of 3 marks each.
- (vii) **Section D** – Questions no. 29 and 30 are Case Study –Based questions and are of 4 marks.
- (viii) **Section E** – Questions no. 31 to 33 are of 5 marks each.
- (ix) There is no overall choice in the question paper. However, internal choice has been provided in some of the questions. Attempt any one of the alternatives in such questions.

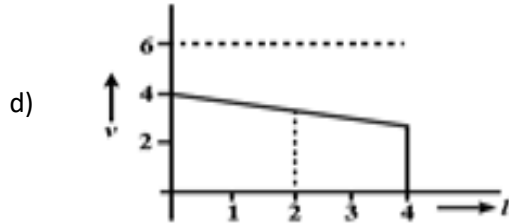
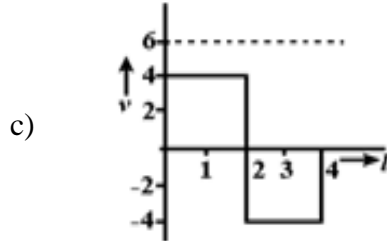
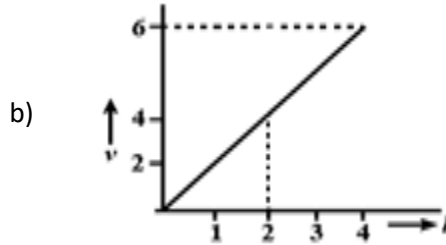
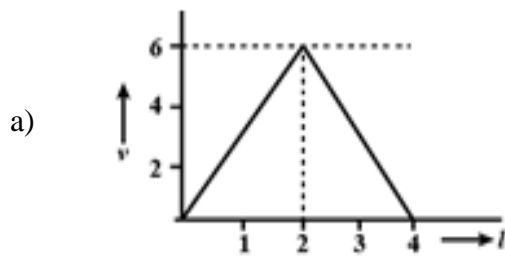
### SECTION: A

1. If force (F), velocity (V) and time (T) are taken as fundamental units, then the dimensions of mass are-  
a)  $[FVT^{-1}]$                       b)  $[FVT^{-2}]$                       c)  $[FV^{-1}T^{-1}]$                       d)  $[FV^{-1}T]$                       1
2. Suppose a quantity y can be dimensionally represented in terms of M, L and T as  
 $[y] = [M^a L^b T^c]$ , then, M                      1  
a) can always be dimensionally represented in terms of L, T and y  
b) may be represented in terms of L, T and y if  $a = 0$   
c) may be represented in terms of L, T and y if  $a \neq 0$   
d) can never be dimensionally represented in terms of L, T and y
3. For motion on a straight-line path with constant acceleration (magnitude of displacement /distance covered):                      1  
a)  $> 1$                       b)  $= 1$                       c)  $< 1$                       d)  $\geq 1$
4. A body starting from rest moves along a straight line with constant acceleration. The variation of speed v with distance s is:                      1

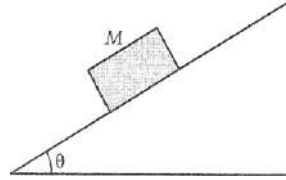


5. A particle starts from rest at  $t=0$  and undergoes an acceleration  $a$  in  $m/s^2$  with time  $t$  in seconds which is as shown. Which one of the following plot represents velocity  $v$  in  $m/s$  versus time  $t$  in seconds?                      1





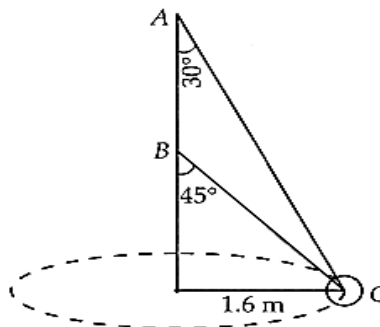
6. A particle starting from the origin  $(0, 0)$  moves in a straight line in the  $(x, y)$  plane. Its coordinates at a later time are  $(\sqrt{3}, 3)$ . The path of the particle makes with the  $x$  - axis an angle of 1
- a)  $30^\circ$                       b)  $45^\circ$                       c)  $60^\circ$                       d)  $0^\circ$
7. If a unit vector is represented by,  $(0.5\hat{i} - 0.8\hat{j} + c\hat{k})$ , then value of  $c$  is 1
- a)  $\sqrt{0.01}$                       b)  $\sqrt{0.11}$                       c) 1                      d)  $\sqrt{0.39}$
8. The momentum of a body is: 1
- a) a vector equal in magnitude to the product of mass and instantaneous velocity and direction being that of instantaneous velocity
- b) a scalar equal in magnitude to the product of mass and velocity
- c) a vector equal in magnitude to the product of mass and average speed and direction being that of velocity
- d) a vector equal in magnitude to the product of mass and acceleration and direction being that of velocity
9. 1



A mass  $M$  is placed on a very smooth wedge resting on a surface without friction. Once the mass is released, the acceleration to be given to the wedge so that  $M$  remains at rest is  $a$ , where -

- a)  $a$  is applied to the right and  $a = g \tan \theta$                       b)  $a$  is applied to the left and  $a = g \cos \theta$
- c)  $a$  is applied to the left and  $a = g \sin \theta$                       d)  $a$  is applied to the left and  $a = g \tan \theta$

10. 1



Two wires  $AC$  and  $BC$  are tied to a small sphere  $C$  of mass  $5 \text{ kg}$ , which revolves at a constant speed  $v$  in the horizontal circle of radius  $1.6 \text{ m}$ . The maximum value of  $v$  is

- a)  $3.01 \text{ ms}^{-1}$                       b)  $3.96 \text{ ms}^{-1}$                       c)  $4.01 \text{ ms}^{-1}$                       d)  $8.2 \text{ ms}^{-1}$
11. A body, constrained to move in  $y$  - direction, is subjected to a force given by 1
- $\vec{F} = (-2\hat{i} + 15\hat{j} + 6\hat{k}) \text{ N}$ . The work done by this force in moving the body through a distance of  $10 \hat{j}$  m along  $y$  - axis, is
- a)  $160 \text{ J}$                       b)  $20 \text{ J}$                       c)  $190 \text{ J}$                       d)  $150 \text{ J}$

12. A 50.0 kg marathon runner runs up the stairs to the top of a 443m tall Tower. To lift herself to the top in 15.0 minutes, what must be her average power output? 1

a) 261 W                      b) 221 W                      c) 201 W                      d) 241 W

For question numbers 13,14,15 & 16, two statements are given - one labelled as **Assertion (A)** and the other labelled as **Reason (R)**. Select the correct answer to these questions from the options (a), (b), (c) and (d) as given below, if,

- a) Both A and R are true and R is the correct explanation of A.  
b) Both A and R are true but R is not the correct explanation of A.  
c) A is true but R is false.  
d) A is false and R is false.

13. **Assertion (A):** The slope of the displacement - time graph of a body moving with high velocity is steeper than the slope of the displacement - time graph of a body with low velocity. 1

**Reason (R):** Slope of displacement - time graph = Velocity of the body.

14. **Assertion (A):** A projectile is thrown with an initial velocity of  $\vec{u} = u_x\hat{i} + u_y\hat{j}$ . If horizontal (X - direction) range is maximum then  $u_x = u_y$ . 1

**Reason (R):** For maximum horizontal range angle of projection must be  $45^\circ$ .

15. **Assertion (A):** Improper banking of roads causes wear and tear of tyres. 1

**Reason (R):** The necessary centripetal force is provided by the force of friction between the tyres and the road.

16. **Assertion:** Power delivered by all forces acting on a particle moving in a uniform circular motion is always zero. 1

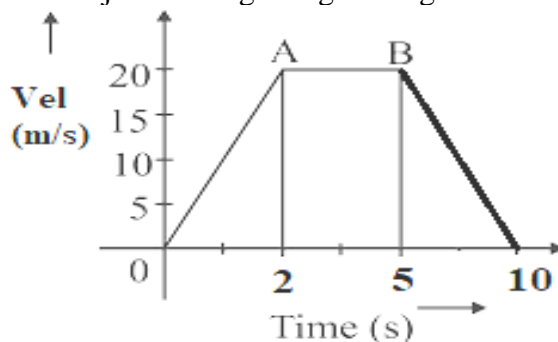
**Reason:** Work done by all forces acting on a particle moving in a uniform circular motion is zero.

### SECTION: B

17. A planet moves around the sun in a circular orbit. Assuming that the period of revolution T of the planet depends upon the radius R of its orbit, the mass M of the planet and the Universal gravitational constant G. 2

Prove that,  $T = k\sqrt{\frac{R^3}{GM}}$  dimensionally.

18. The velocity-time graph of an object moving along a straight line is as shown below: - 2



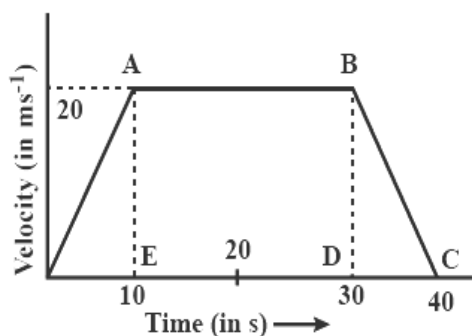
Calculate the distance covered by the object between

(i)  $t=0$  to  $t=5$  sec

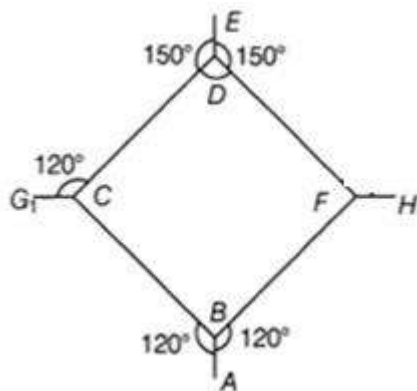
(ii)  $t=0$  to  $t=10$  sec.

**OR**

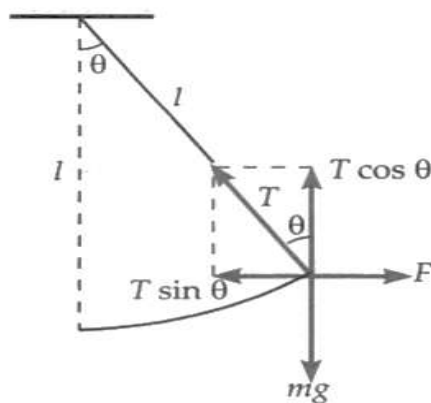
The velocity-Time graph of a body is shown in fig. Plot the corresponding acceleration – time graph for this body.



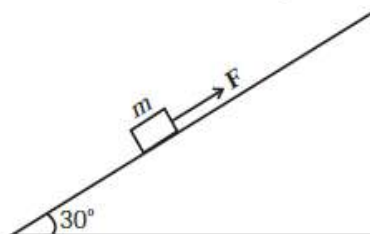
19. The figure given below is the part of a horizontal stretched net. Section AB is stretched with a force of 10 N, then determine the forces in the sections BC and BF. 2



20. A small object of weight  $mg$  hangs from a string of length  $l$ , as shown in Fig. A variable force  $F$ , which starts at zero and gradually increases is used to pull the object very slowly (so that equilibrium exists at all the times) until the string makes an angle  $\theta$  with the vertical. Calculate the work done by force  $F$ . 2



21. 2



A wooden block of mass 1 kg is pushed up a surface inclined to horizontal at an angle of  $30^\circ$  by a force of 10 N parallel to the inclined surface [see figure]. The coefficient of friction between the block and the incline is 0.1. If the block is pushed up by 10 m along the incline. Calculate

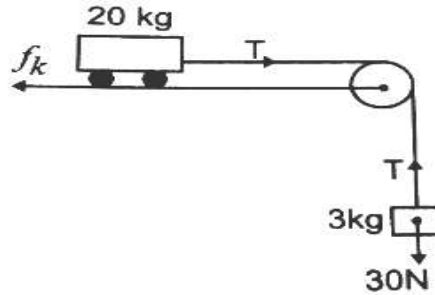
- Work done against gravity.
- Work done against force of friction.

### SECTION:C

22. A gas bubble, from an explosion under water, oscillates with a period  $T$  proportional to  $p^a d^b E^c$ , where  $p$  is the static pressure,  $d$  is the density of water and  $E$  is the total energy of the explosion. Find the values of  $a$ ,  $b$  and  $c$ . 3
23. A particle starts from rest and moves a distance  $S_1$  with constant acceleration in time  $t$ . If this particle travels distance  $S_2$  in next time  $t$ , then show that  $S_2 = 3 S_1$ . 3
24. A balloon was moving upwards with a uniform velocity of 10m/s. An object of finite mass is dropped from the balloon when it was at a height of 75m from the ground. Find the height of the balloon from the ground when the object strikes the ground. (Take,  $g = 10\text{m/s}^2$ ) 3
25. Find a vector whose magnitude is 7 and which is perpendicular to each of the vectors  $\vec{A} = 2\hat{i} - 3\hat{j} + 6\hat{k}$  and  $\vec{B} = \hat{i} + \hat{j} - \hat{k}$ . 3

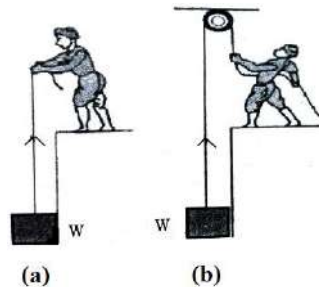


26. What will be the acceleration of the block and trolley system as shown in figure given below, If the coefficient of kinetic friction between the trolley and surface is 0.04? What is the tension in the string? ( $g=10 \text{ m/s}^2$ . Neglect the mass of the string. 3

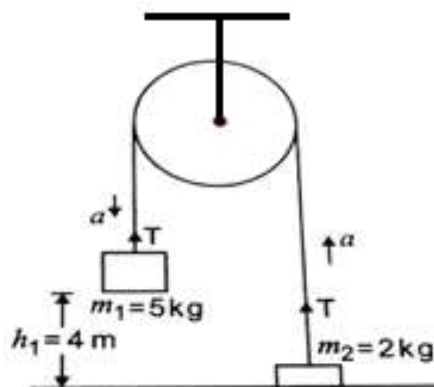


OR

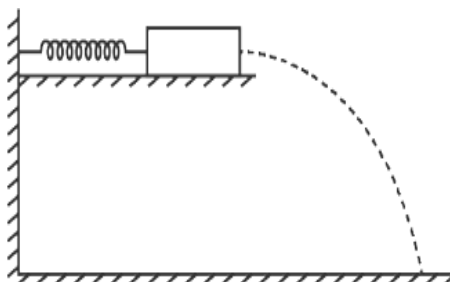
- Name the physical quantity that increased in value as a result of the use of the simple pulley.
- Write the relation between this physical quantity and the force acting with the velocity of the object.
- Write expression for the action on the floor by the person having weight  $W$  in the two figures above.



27. Two masses as shown in figure are released from their positions. Calculate the velocity with which the mass of 5 kg touches the surface if its initial height from the surface is 4 m. Also show that gain in kinetic energy of the system is equal to the loss in its potential energy. ( $g=10 \text{ m/s}^2$ ). 3



28. A small block of mass 100g is pressed against a horizontal spring fixed at one end to compress the spring through 5cm as shown in figure. The spring constant is  $100 \text{ Nm}^{-1}$ . When released, the block moves horizontally till it leaves the spring. Where will it hit the ground 2m below the spring? 3



### SECTION:D (Case Study Based Questions)

**Read the following paragraph and answer the questions that follow.**

29. The physical quantities which have both magnitude as well as direction are known as vector quantities. The vectors may be equal, negative, collinear, coplanar, unit vector or orthogonal vectors. The vectors which act in different directions can be added either by triangle or parallelogram or by polygon law of vectors. Whereas the product of vectors can be dot product or the cross product. The resultant vector in scalar product of two vectors is always scalar, on the other hand vector product of two vectors is always vector quantity. The resultant vector when two vectors act in different direction is given by

$R = \sqrt{A^2 + B^2 + 2AB\cos\theta}$ . Here A and B are two vectors and  $\theta$  is angle between vectors.

The scalar product of two vectors A and B is  $\vec{A} \cdot \vec{B} = AB \cos \theta$  and vector product of two vectors A and B is  $\vec{A} \times \vec{B} = AB \sin \theta \hat{n}$

Answer the following questions:

- (i) Angle between negative vectors is
  - a)  $0^\circ$
  - b)  $180^\circ$
  - c)  $90^\circ$
  - d)  $270^\circ$
- (ii) If  $\vec{A} = n\hat{i} - \hat{j} + 2\hat{k}$  and  $\vec{B} = 2\hat{i} + 2\hat{j} - \hat{k}$  are perpendicular to each other then the value of n is
  - a) 1
  - b) 3
  - c) 2
  - d) 4
- (iii) If  $\vec{A} \times \vec{B} = 0$  then
  - a)  $\vec{A}$  is perpendicular to  $\vec{B}$
  - b)  $\vec{A}$  is parallel to  $\vec{B}$
  - c)  $\vec{A}$  is equal to  $\vec{B}$
  - d) None of these.

**OR**

If  $\vec{A} \cdot \vec{B} = |\vec{A} \times \vec{B}|$  then angle between  $\vec{A}$  and  $\vec{B}$  is

- a)  $90^\circ$
  - b)  $60^\circ$
  - c)  $45^\circ$
  - d)  $30^\circ$
- (iv) If the magnitude of sum of two vectors is equal to magnitude of difference of two vectors, the angle between vectors is
  - a)  $0^\circ$
  - b)  $180^\circ$
  - c)  $45^\circ$
  - d)  $90^\circ$

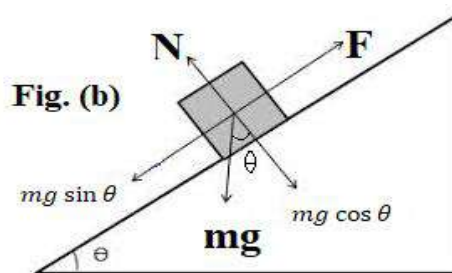
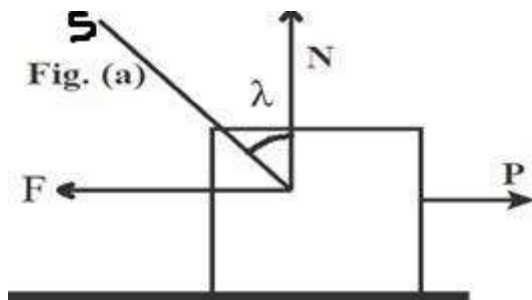
30. The force of limiting friction (F) between any two surfaces in contact is directly proportional to the normal reaction (N) between them i.e.,  $F \propto N$

Or,  $F = \mu N$ ,  $\mu$  is the coefficient of limiting friction.

The angle of friction  $\lambda$  is given as  $\mu = \tan \lambda$ , shown in fig. (a)

When an object is placed on an inclined plane, one component of its weight acts as driving force. The angle of repose is maximum at an inclination of the plane in equilibrium. The object just begins to slide down if the angle is further increased. The acceleration down the plane is –

$$a = g (\sin \theta - \mu \cos \theta)$$



- (i) If a body of mass  $m$  placed on horizontal surface as shown in figure (a). If the magnitude of the resultant of the friction and normal reaction be  $|S|$ , then,
- $|S| = mg(1+\mu)$
  - $|S| = \mu mg$
  - $|S| = mg\sqrt{1+\mu^2}$
  - $|S| = mg$
- (ii) What will be the angle of friction if the coefficient of friction is  $\sqrt{3}$  ?
- $60^\circ$
  - $30^\circ$
  - $45^\circ$
  - $90^\circ$
- (iii) If  $m = 10\text{kg}$ ,  $g = 10\text{ms}^{-2}$  and  $\theta = 30^\circ$  and  $\mu = \frac{1}{\sqrt{3}}$ , then, the downward acceleration of mass along the inclined plane is
- $10\text{ms}^{-2}$
  - $5\text{ms}^{-2}$
  - $12\text{ms}^{-2}$
  - Zero (0)  $\text{ms}^{-2}$

**OR**

If the angle of repose is  $30^\circ$ , then angle of friction is

- $30^\circ$
  - $65^\circ$
  - $80^\circ$
  - $10^\circ$
- (iv) A block has been placed on an inclined plane with the slope angle  $\theta$ , block slides down the plane at constant speed. The coefficient of kinetic friction is equal to
- $\sin \theta$
  - $\cos \theta$
  - $g$
  - $\tan \theta$

### SECTION: E

31. (a) A space probe is launched from the surface of the moon at an angle  $\theta$  to the lunar surface with an initial speed  $u$ . To map its trajectory, formulate the equation that represents the path of the probe. Describe the characteristics of this trajectory. 3+2
- (b) A body 'A' of mass  $m$  is thrown with a velocity  $v$  at an angle of  $30^\circ$  to the horizontal and another body 'B' of the same mass is thrown with velocity  $v$  at an angle of  $60^\circ$  to the horizontal, find the ratio of the horizontal range and maximum height of 'A' and 'B'.

**OR**

- (a) Derive an expression for the centripetal acceleration of a body moving with uniform speed  $v$  along a circular path of radius  $r$ .
- (b) An insect trapped in a circular groove of radius 12 cm moves along the groove steadily and complete seven revolutions in 100 sec. What will be the angular speed and linear speed of the motion?

32. (a) What are concurrent forces? Obtain a condition for the equilibrium of three concurrent forces. 3+2  
(b) The minimum force required to start pushing a body up rough inclined plane is  $F_1$  while the minimum force needed to prevent it from sliding down is  $F_2$ . If the inclined plane makes an angle  $\theta$  with the horizontal such that  $\tan \theta = 2\mu$ , then find the ratio  $F_1 : F_2$ .

**OR**

A circular track, of radius  $R$  is banked at an angle  $\theta$ . A vehicle negotiates this track while moving at speed  $v$ .

- (a) Draw a diagram showing all the forces acting on the vehicle.  
(b) Derive an expression for the maximum (safe) speed the vehicle can have on this track. Take  $\mu$  as the relevant coefficient of friction.

With what speed should be the vehicle negotiate the track to minimize the wear and tear of its tyres?

33. (a) In a space simulation, two spacecrafts dock head-on. The first spacecraft of mass  $m_1$ , has an initial velocity  $u_1$ , while the second spacecraft of mass  $m_2$ , approaches with velocity  $u_2$ . Derive the final velocities after the elastic collision to ensure a successful docking maneuver. 3+2  
(b) A mass  $m$  moves with velocity  $v$  and collides inelastically with another identical mass. After collision, the first mass moves with velocity  $\frac{v}{\sqrt{3}}$  in a direction perpendicular to the initial direction of motion. Find the speed of the second mass after collision.

**OR**

- (a) During an automotive crash test, a car of mass  $m$  moving at velocity  $\vec{v}$  collides elastically with a stationary car of the same mass. Determine the angle between their velocity vectors after the impact.  
(b) A ball moving with velocity  $2ms^{-1}$  collides head on with another stationary ball of double the mass. If the coefficient of restitution is 0.5, find their velocities after collision.

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# DAV INSTITUTIONS, WEST BENGAL ZONE

## HALF YEARLY EXAMINATION

SESSION – 2024 – 2025

CLASS : XI

MAXIMUM MARKS : 80

SUBJECT : POLITICAL SCIENCE (028)

TIME : 3 HOURS

### GENERAL INSTRUCTIONS:

1. The question paper consists of five sections (A, B, C, D and E) with 30 questions in all.
2. All questions are compulsory.
3. Question numbers 1-12 are Multiple Choice Questions of one mark each.
4. Question numbers 13-18 are of 2 marks each. Answers to these questions should not exceed 50- 60 words each.
5. Question numbers 19-23 are of 4 marks each. Answers to these questions should not exceed 50- 60 words each.
6. Question numbers 24-26 are passage, cartoon and map-based questions. Answer accordingly.
7. Question numbers 27-30 are of 6 marks each. Answers to these questions should not exceed 170- 180 words each. There is internal choice in 6 marks questions.

### SECTION – A (12 marks)

1. The Constituent Assembly was constituted in November 1946 under the scheme formulated by the Cabinet Mission Plan. Which of the following statement/s are **INCORRECT** with regard to this? 1

I. Each province and princely state was to be allotted seats in proportion to their respective population.

II. Seats allocated to each British province were to be decided among the three principal communities- Muslims, Christians and Hindus.

III. The representatives of princely states were to be nominated by the heads of the princely states.

#### Code:

(A) I and III

(C) II only

(B) II and III

(D) I and II

2. In the following question, a statement of Assertion (A) is followed by a statement of Reason (R). Choose the appropriate option as answer: 1

**Assertion (A):** The Indian Constitution is the bulkiest Constitution in the world, about five times the size of the Constitution of U.S.A.

**Reason (R):** The founding fathers of the Indian Constitution wanted to include all good elements from about four score Constitutions of the free world at that time and some special clauses have also been provided.

(A) Both Assertion (A) and Reason (R) are true and R is the correct explanation of A.

(B) Both Assertion (A) and Reason (R) are true but R is not the correct explanation of A.

(C) Assertion (A) is true but Reason (R) is false.

(D) Assertion (A) is false but Reason (R) is true.

3. Match the following: 1

| List 1           | List 2                                                                                                                           |
|------------------|----------------------------------------------------------------------------------------------------------------------------------|
| I. Habeas Corpus | a. When the Court finds that a particular office holder is not doing legal duty and is infringing on the right of an individual. |
| II. Mandamus     | b. Issued by the higher Court when a lower court has considered a case going beyond its jurisdiction                             |
| III. Prohibition | c. The Court orders the arrested person should be presented before it.                                                           |
| IV. Certiorari   | d. The Court orders a lower Court to transfer a matter pending before it to the higher authority or court                        |

**Code:**

- |           |        |         |        |
|-----------|--------|---------|--------|
| (A) I - b | II - d | III - a | IV - c |
| (B) I - c | II - a | III - d | IV - c |
| (C) I - c | II - a | III - b | IV - d |
| (D) I - b | II - c | III - a | IV - d |

4. **The electoral system First Past the Post System is also called the \_\_\_\_\_** 1  
(A) Proportional System (C) Democratic System  
(B) Plurality System (D) Representative System

5. **Which of these is not a good reason to say that Indian elections are democratic?** 1  
(A) India has the largest number of voters in the world  
(B) The Election Commission in India is very powerful  
(C) In India, everyone above the age of 18 years has the right to vote  
(D) In India, the losing parties accept the electoral verdict

6. **Which one of the following statements regarding the President of India is INCORRECT?** 1  
(A) He may dissolve any House of the Parliament  
(B) He has the right to address and send message to both the Houses  
(C) He may prorogue the Houses or either House  
(D) He may call joint sitting of both Houses in certain cases under Article 108

7. **Arrange the different stages of passing of a bill into a law in their correct sequence.** 1  
I. The bill is referred to the sub-committee, the committee makes some changes and sends it back to the house for discussion.  
II. The bill is read clause by clause and each is voted upon  
III. The concerned minister proposes the need for a bill  
IV. Legislative department in ministry of law drafts a bill  
V. The bill is referred to the President of India

**Code:**

- |                       |                       |
|-----------------------|-----------------------|
| (A) II, I, III, V, IV | (C) II, III, IV, I, V |
| (B) IV, III, I, V, II | (D) IV, III, I, II, V |

8. **Consider the following statements:** 1  
I. The objective of political theory is to train citizens to think irrationally about political questions and assess the political events.  
II. Politics is not confined to the affairs of the government.  
III. Politics arises from the fact that we have different visions of what is just and desirable for us and our society.

**Which of the statements given above is/are CORRECT?**

- |                   |                     |
|-------------------|---------------------|
| (A) I only        | (C) II and III only |
| (B) I and II only | (D) II only         |

9. **The government can put restrictions on our rights but they should be:** 1  
(A) Reasonable (C) Arbitrary  
(B) Illegal (D) Compulsory

10. **The first step towards bringing about equality is ending the formal system of inequality and privileges. In respect to the above, mark the CORRECT statement/s.** 1  
I. Providing free education to children from economically weaker sections  
II. The Constitution abolishes the practices of Untouchability  
III. Implementing policies that aim to reduce income disparities among citizens  
IV. Prohibiting discrimination based on caste, gender or religion in public places

**Code:**

- |                    |                    |
|--------------------|--------------------|
| (A) Only I and III | (C) Only II and IV |
| (B) Only I and IV  | (D) Only IV        |

11. **In the following question, a statement of Assertion (A) is followed by a statement of Reason (R). Choose the appropriate option as answer:** 1
- Assertion (A):** The concept of equality implies that all people as human beings are entitled to the same rights and opportunities to develop their skills and talents and to pursue their goals and ambitions.
- Reason (R):** It is not the lack of equality of status or wealth or privilege that is significant but the inequalities in people's access to basic goods that make for an unequal and unjust society.
- (A) Both Assertion (A) and Reason (R) are true and R is the correct explanation of A.  
 (B) Both Assertion (A) and Reason (R) are true but R is not the correct explanation of A.  
 (C) Assertion (A) is true but Reason (R) is false.  
 (D) Assertion (A) is false but Reason (R) is true.
12. **Free market is a product of \_\_\_\_\_** 1
- (A) Socialism (C) Neo-Liberalism  
 (B) Feminism (D) Patriarchy

### **SECTION – B (12 Marks)**

13. What is the procedure of the election of the President of India? 2
14. Give two arguments in favour of bicameral legislature. 2
15. Discuss the role of a Political Theorists. (Any two) 2
16. Differentiate between Self-regarding actions and Other-regarding actions. (Any two) 2
17. Are constraints desirable on liberty? Justify your answer by giving two arguments. 2
18. According to Immanuel Kant, what do you mean by Justice? 2

### **SECTION – C (24 Marks)**

19. Discuss the relationship between Fundamental Rights and Directive Principles of State Policy. 4

**OR**

Explain any four provisions of Right to Equality.

20. Distinguish between FPTP System and PR System. (Any four) 4
21. Discuss the importance of the Committees in the Indian Parliament. 4

**OR**

Apart from law-making, the Parliament is engaged in many other functions. Discuss any four functions of the Indian Parliament.

22. Explain Affirmative action with reference to achieving an egalitarian society in the Indian Constitution. 4
23. Explain the concept of the “veil of ignorance” as given by John Rawls. 4

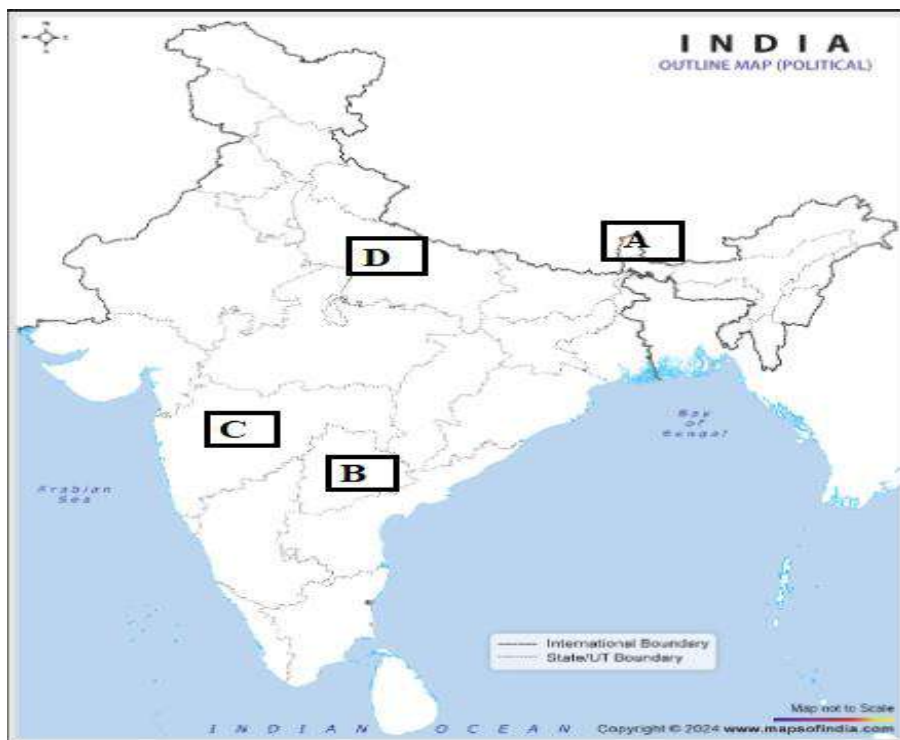
### **SECTION – D (12 Marks)**

24. Political theory has its roots in these twin aspects of the human self. It analyzes certain basic questions such as ‘how should society be organized?’, ‘why do we need government?’, ‘what is the best form of government?’ etc. Political theory examines questions of this kind and systematically thinks about the values that inform political life – values such as freedom, equality and justice. It explains the meanings and significance of these and other related concepts. It clarifies the existing definitions of these concepts by focusing on some major political thinkers of the past and present. The objective of political theory is to train citizens to think rationally about political questions and assess correctly the political events of our time. 4
- (A) What are the two objectives of political theory?  
 (B) Name any one book written by Mahatma Gandhi.  
 (C) State any one function of political theory.

25. In the given outline political map of India, four states have been marked as (A), (B), (C) and (D). Identify these states on the basis of the information given below and write their correct names in your answer book along with the respective serial numbers of the information used and the concerned alphabets as per the format that follows:

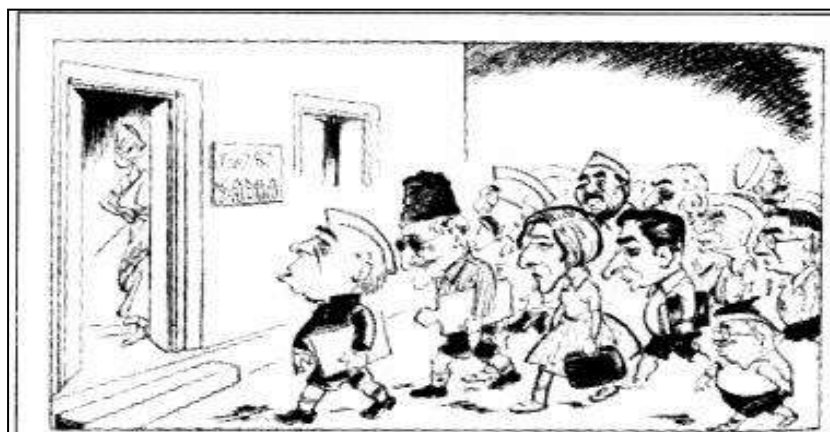
4

- (i) The state that sends 31 members to the Rajya Sabha.
- (ii) The state that sends one seat to the Rajya Sabha.
- (iii) A state in western part of India having bicameral legislature.
- (iv) The latest state of the Indian Union.



| Sr. Number for the information used | Alphabet Concerned | Name of the states |
|-------------------------------------|--------------------|--------------------|
| i                                   |                    |                    |
| ii                                  |                    |                    |
| iii                                 |                    |                    |
| iv                                  |                    |                    |





- (A) Identify the leader walking in the front.  
 (B) What does the above cartoon depict?  
 (C) What message does the above cartoon convey?

**SECTION – E (24 Marks)**

27. Discuss the functions of the Election Commission of India. 6

**OR**

“The Election Commission, political parties, independent groups and many scholars have come up with proposals for electoral reform”. What are the suggestions about changing the provisions involved in the electoral system?

28. Mention any three situations in which the President of India can use his discretionary powers. 6

**OR**

Jawaharlal Nehru described the Prime Minister as “the linchpin of the Government”. In view of the above statement describe the powers of the Prime Minister.

29. State the differences between negative and positive conceptions of Liberty. 6

**OR**

Explain the meaning and significance of Freedom of Expression.

30. What are the three principles of justice and briefly discuss each of them. 6

**OR**

Explain the central arguments in the debate between free market and state intervention approaches to economic management.

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**D.A.V. INSTITUTIONS, WEST BENGAL ZONE**  
**HALF-YEARLY EXAMINATION**  
**SESSION: 2024 – 2025**

**Class: XI**

**Maximum Marks:70**

**Subject: Psychology**

**Time: 3 Hours**

**General Instructions:**

- ❖ All questions are compulsory. Answers should be brief and to the point.
- ❖ **SECTION – A** has **15** Learning Checks carrying one mark each. Answer them as directed.
- ❖ Questions **16 to 21** in **SECTION – B** are Very Short Answer type questions carrying 2 marks each. Answer to each question should not exceed **40 words**.
- ❖ Questions **22 to 24** in **SECTION–C** are Short Answer Type I questions carrying 3 marks each. Answer to each question should not exceed **80 words**.
- ❖ Questions **25 to 28** in **SECTION– D** are Short Answer Type II questions carrying 4 marks each. Answer to each question should not exceed **120 words**.
- ❖ Questions **29 and 30** in **SECTION–E** are Long Answer Type questions carrying 6 marks each. Answer to each question should not exceed **200 words**.
- ❖ Questions **31 to 34** in **SECTION – F** are case study-based questions. There are two 2-marks and two 1-mark questions.

**SECTION-A**

1. The first psychological laboratory in Cambridge was set up by - 1  
a. Sigmund Freud      b. William James      c. Ivan Pavlov      d. Wilhelm Wundt
2. After identification of the problem, the researcher proceeds by developing a tentative answer of the problem which is called - 1  
a. Data      b. Null Hypothesis      c. Scientific Inquiry      d. Hypothesis
3. The test that assesses the underlying ability of the individuals by allowing them sufficient time is called - 1  
a. Speed test      b. Power test      c. Performance test      d. Nonverbal test
4. The name of a psychologist who believed in the Humanistic approach is - 1  
a. Carl Rogers      b. John Watson      c. John Dewey      d. B.F.Skinner
5. 'Different parts of an objects are organised into a meaningful whole. There are certain factors that facilitate or inhibit this process of organisation.' - The most widely accepted explanation for this statement has been given by a group of researchers, called - 1  
a. Humanistic psychologist      b. Gestalt psychologist  
c. Cognitive psychologist      d. Industrial psychologist
6. This refers to an increase in the size of body parts or of the organism as a whole - 1  
a. development      b. growth      c. maturation      d. evolution
7. The variable which is manipulated or altered by the researcher is called - 1  
a. Independent Variable      b. Dependent Variable  
c. Extraneous Variable      d. Situational Variable

8. The idea that recognition process begins from the parts, which serve as the basis for the recognition of the whole is known as -

  - a. top-down processing
  - b. bottom-up processing
  - c. spatial uncertainty
  - d. figure-ground segregation
9. When a finger or some other object is pressed against the baby's palm, the baby's fingers close around it. This reflex is called \_\_\_\_\_.

  - a. rooting
  - b. moro
  - c. grasp
  - d. babinski
10. In the early 20<sup>th</sup> century \_\_\_\_\_ has emerged in Germany as a reaction to structuralism.

  - a. Functionalism
  - b. Behaviorism
  - c. Humanistic approach
  - d. Gestalt Psychology
11. The study of development according to the Life-Span Perspective includes the following assumptions:

  - I. Development is a lifelong process.
  - II. Development is highly plastic in nature.
  - III. Development is uni-directional.
  - IV. Development is influenced by historical conditions.
  - a. I, II & III
  - b. II, III & IV
  - c. I, III & IV
  - d. I, II & IV
12. Assertion (A): Accommodation is the monocular cue which helps to perceive distance or depth.  
Reason (R): The signal about the degree of contraction of the muscle is sent to the brain, which provides the cue for distance.

  - a. Both A and R are true, and R is the correct explanation of A.
  - b. Both A and R are true, but R is not the correct explanation of A.
  - c. A is true, but R is false.
  - d. A is false, but R is true.
13. Assertion (A): The correlation coefficient varies between +1.0 through 0 to -1.0.  
Reason (R): The value of correlation coefficient can be both positive or negative

  - a. Both A and R are true, and R is the correct explanation of A.
  - b. Both A and R are true, but R is not the correct explanation of A.
  - c. A is true, but R is false.
  - d. A is false, but R is true.
14. Assertion (A): Cognition is considered as a higher-level mental process.  
Reason (R): It involves thinking, understanding, reasoning, perceiving, memorizing and problem solving and also a host of other mental processes by which our knowledge of the world develops.

  - a. Both A and R are true, and R is the correct explanation of A.
  - b. Both A and R are true, but R is not the correct explanation of A.
  - c. A is true, but R is false.
  - d. A is false, but R is true.

15. Assertion (A): In the study of Harlow and Harlow baby monkeys showed a preference for the cloth mother than wire mother and spent a lot more time with cloth mother. 1
- Reason (R): This study of Harlow and Harlow clearly demonstrates that providing nourishment or feeding was not crucial for attachment but contact-comfort is important.
- a. Both A and R are true, and R is the correct explanation of A.
  - b. Both A and R are true, but R is not the correct explanation of A.
  - c. A is true, but R is false.
  - d. A is false, but R is true.

### SECTION-B

16. How is psychology considered as a social science? 2

OR

You are an industrial/organizational psychologist, mention your role as industrial psychologist.

17. Write down the differences between naturalistic and controlled observation 2
18. What are teratogens? Give two examples of teratogens. 2
19. Explain 'phi-phenomenon' with proper example. 2

OR

What do you mean by perceptual constancies?

20. Define unstructured interview. Give an example of an unstructured interview. 2
21. Your grandfather is 63 years old. You noticed some changes in your grandfather's behaviour since his retirement. Discuss these changes based on the challenges faced in old age. 2

### SECTION- C

22. What is introspection method? Write down one disadvantage of introspection method. 3

OR

What is constructivism? How does it relate to cognitive psychology?

23. You want to conduct a survey on health and hygiene of primary students. Explain any three types of psychological data which you want to collect for your survey. 3
24. As you are a psychology student and preparing for half-yearly examination, want to help your friends in their preparation. Therefore, describe different factors influence 'sustained attention' so they can increase their concentration in study. 3

### SECTION-D

25. What is Neuropsychology? Write down two major differences between clinical and counselling psychology. 4
26. Explain the steps in conducting psychological research. 4

OR

Describe the goals of psychological research in detail.

27. Describe the development of egocentrism in childhood and adolescent. 4

28. You are mesmerized by a picture of an art gallery in which the artist creates three-dimensional effect on two-dimensional canvas. As a student of psychology explain the cues which help to perceive depth on that canvas. 4

OR

What is figure-ground segregation? Mention any four characteristics which help us to distinguish figure from the ground.

#### SECTION -E

29. You planned a psychological experiment to see the effect of parenting style on student's moral development. Explain the three major types of variables of your experiment. Write down any three techniques to control other relevant variables of your experiment. 6

OR

Mention any two limitations of psychological enquiry. Discuss any four ethical issues.

30. Discuss Bronfenbrenner's Contextual View of Development. 6

OR

Adolescent period is not only perceived as important but also perceived as vulnerable. Therefore, discuss some major concerns which disturbed the normal development of an adolescent boy/girl.

#### SECTION-F

Read the passage and answer the following questions:

The modern era of Indian psychology began in the Department of Philosophy at Calcutta University where the first syllabus of experimental psychology was introduced and the first psychology laboratory was established in 1915. Calcutta University started the first Department of Psychology in the year 1916 and another Department of Applied Psychology in 1938.

31. Name the person who influenced the beginning of modern experimental psychology at Calcutta University. 1
32. Mention the area of expertise of Professor G. Bose. Name the association established by him. 2

Read the passage and answer the following questions:

If you add a granule of sugar to a glass of water, you may not experience any sweetness in that water. Addition of a second granule to water may also not make it taste sweet. But if you go on adding sugar granules one after another, there will come a point when you will say that the water is now sweet. If you add more number of sugar granules, the chances are greater that the water will be reported more often as sweet than plain.

33. What is psychophysics? 1
34. Differentiate between 'absolute threshold' and 'difference threshold'. 2

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**DAV INSTITUTIONS, WEST BENGAL ZONE**  
**HALF YEARLY EXAMINATION**  
**SESSION-2024-25**

**CLASS: XI**

**MAXIMUM MARKS:80**

**SUBJECT: SOCIOLOGY**

**TIME: 3 HOURS**

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**General Instructions**


1. The question paper is divided into four sections.
2. There are 35 questions in all. All questions are compulsory.
3. Section A includes question No. 1-16. These are MCQ type questions. As per the question, there can be one answer.
4. Section B includes question No.17-25. These are very short answer type questions carrying 2 marks each. Answer to each question should not exceed 30 words.
5. Section C includes question No. 26-32. They are short answer type questions carrying 4 marks each. Answer to each question should not exceed 80 words.
6. Section D includes question No. 33-35. They are long answer type questions carrying 6 marks each. Answer to each question should not exceed 200 words each.

- 1 In sociological imagination C Wright Mills unravelled- 1  
(A) how public and personal issues are related  
(B) causes of poverty  
(C) process of socialization  
(D) importance of society
- 2 Match list 1 with list 2 1  
list 1 list 2  
a Informal social control 1 distinctive characteristic  
b Micro sociology 2 criticism  
c Prestige 3 study of everyday behaviour  
d Identity 4 value attached to status  
Codes :  
a b c d  
(A) 4 3 2 1  
(B) 1 2 3 4  
(C) 2 3 4 1  
(D) 3 4 1 2
- 3 Two statements are given, one is labelled as Assertion (A) and the other as Reason (R) : 1  
Assertion (A) : Capitalism was the new economic system that emerged in Europe during the 17<sup>th</sup> and 18<sup>th</sup> centuries.  
. Reason (R) :This system became the driving force behind industrial growth.  
. Select the correct answer from the codes given below:  
Codes :  
(A) Both (A) and (R) are true and (R) is the correct explanation for (A).  
(B) Both (A) and (R) are true, but (R) is not the correct explanation for (A).  
(C) (A) is true, but (R) is false.  
(D) (A) is false, but (R) is true
- 4 -----is the ability of individuals or groups to carry out their will even 1  
when opposed by others-  
(A)Prestige  
(B)Power  
(C) Authority  
(D) Status

- 5 Identify the wrongly matched pair 1  
 (A) Primary group- Family  
 (B) Peer group- Similar age group  
 (C) Secondary group-Association  
 (D) Reference group- Community
- 6 ----- can be defined as a set of symbols and beliefs providing the sense of being part of a single political community. 1  
 (A)Federalism  
 (B) Sovereignty  
 (C) Nationalism  
 (D) Citizenship
- 7 The Western writers in 19 century saw in India the past of European society and used the term - 1  
 (A) the infancy of society  
 (B) evolution of society  
 (C) diffusion of society  
 (D) reflection of society
- 8 Match list 1 with list 2 1  
 List I List II  
 a Authority 1 ideas and behaviour logically coherent Source  
 b Power 2 socially accepted norm  
 c Rationality 3 the legitimate form of power  
 d Legitimacy 4 depends on a personal source  
 Codes : a b c d  
 (A) 4 3 2 1  
 (B) 1 2 3 4  
 (C) 2 3 4 1  
 (D) 3 4 1 2
- 9 ‘ Sociology involves objective and systematic methods of investigation and evaluation of social reality in the light of empirical evidence and interpretation’. The statement given proves that sociology is - 1  
 (A) scientific in nature  
 (B) traditional in nature  
 (C) social in nature  
 (D) imaginary in nature
- 10 Two statements are given, one is labelled as Assertion (A) and the other as Reason (R) : 1  
 Assertion (A) :A stateless society has rigid boundary , permanent physical territory and stable pattern of administration.  
 Reason (R) : The absence of rules and regulations in such a society prove chaotic leading to the collapse of social system.  
 Select the correct answer from the codes given below:  
 Codes :  
 (A) Both (A) and (R) are true and (R) is the correct explanation for (A).  
 (B) Both (A) and (R) are true, but (R) is not the correct explanation for (A).  
 (C) (A) is true, but (R) is false.  
 (D) (A) is false, but (R) is true
- 11 Identify the incorrect statement 1  
 i- Social control can be positive or negative.  
 ii- Those modes of action which do not confirm to the norms of the society are known as deviance.  
 iii- A social group has shared interest.  
 iv- The Marxist believes that social values and pattern maintains social order.  
 (A) –i (B)-ii (C)-iii (D)-iv

- 12 Two statements are given, one is labelled as Assertion (A) and the other as Reason (R) : 1  
 Assertion (A) : Re-socialisation of criminals in prisons is a part of the reformation method helping in their rehabilitation.  
 Reason (R) : Released prisoners without proper re-socialisation resort to crime and come back to prison again.  
 Select the correct answer from the codes given below : Codes :  
 (A) Both (A) and (R) are true and (R) is the correct explanation for (A).  
 (B) Both (A) and (R) are true, but (R) is not the correct explanation for (A).  
 (C) (A) is true, but (R) is false.  
 (D) (A) is false, but (R) is true
- 13 “Recognising the cartoon of a politician” is an example of-----dimension of culture. 1  
 (A) cognitive  
 (B) normative  
 (C) material  
 (D) none of the above
- 14 Two statements are given, one is labelled as Assertion (A) and the other as Reason (R) : 1  
 Assertion (A) : As opposed to caste system, class does not have any religious or legal sanction.  
 Reason (R) : Membership of class is based on ascribed status.  
 Select the correct answer from the codes given below:  
 Codes :  
 (A) Both (A) and (R) are true and (R) is the correct explanation for (A).  
 (B) Both (A) and (R) are true, but (R) is not the correct explanation for (A).  
 (C) (A) is true, but (R) is false.  
 (D) (A) is false, but (R) is true
- 15 In a global world modern means of communication are shrinking distances between cultures and thus it promotes 1  
 (A) Cosmopolitan Outlook  
 (B) Metropolitan outlook  
 (C) Neutral Outlook  
 (D) Cultural conflict
- 16 Identify the source of external cultural change- 1  
 (A) New methods of farming  
 (B) Westernization  
 (C) Sanskritisation  
 (D) Land reforms
- 17 Write two kinds of changes observed in European society after the advent of intellectual revolution (Enlightenment). 2  
 Or  
 Discuss the different aspects of the term society.
- 18 How is society interdependent? Illustrate with two examples. 2
- 19 Trace the two reasons for the origin of sociology in India. 2
- 20 What is secondary group? Give one example of it. 2
- 21 Explain the role of stereotyping with examples. 2
- 22 Give the meaning of the term 'decentralisation of work' 2
- 23 Who are consanguinal kins and affines? 2
- 24 Write the central theme of the book 'The Protestant Ethic and the Spirit of Capitalism' authored by Max Weber. 2  
 Or  
 Why do sociologists study religion?
- 25 What is sub-cultural group? Give one example of it. 2



- 26 Express the correlation between Sociology and Political science. 4  
Or  
Express the correlation between Sociology and History
- 27 Discuss the types of social control with examples. 4
- 28 What is achieved status? State its two bases with examples. 4
- 29 "Caste is a closed stratification while class is an open stratification". 4  
Explain the statement.
- 30 "Power is exercised through authority." Based on this statement differentiate between 4  
power and authority.
- 31 What is culture? Explain its three dimensions. 4  
Or  
Differentiate between Little tradition and Great tradition.
- 32 'Ethnocentrism is opposite of cosmopolitanism'. Discuss. 4
- 33  6
- On the light of the picture mentioned above highlight the distinctive characteristics of the economics system of modern societies.
- 34 "In any political or military conflict it is of advantage to capture the information used by 6  
the intelligence organs of the opposing side. But this is so only because good intelligence consists of information free of bias. If a spy does his/her reporting in terms of the ideology and ambitions of his/her superiors, his/her reports are useless not only to the enemy, if the latter should capture them, but also to the spy's own side... The sociologist is a spy in very much the same way. His/her job is to report as accurately as he/she can about a certain terrain (Berger 1963:16 17)."
- 35 Considering the views mentioned above describe sociology as a scientific discipline. 6  
Define socialization. Examine the role its various agents in shaping human personality.
- Or  
Explain the need and importance of culture for human society.

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**DAV INSTITUTIONS, WEST BENGAL ZONE**  
**HALF YEARLY EXAMINATION**  
**SESSION: 2024-2025**

**CLASS: XI**

**MAXIMUM MARKS: 60**

**SUBJECT: WEB APPLICATIONS (CODE: 803)**

**TIME: 3 HOURS**

**General Instructions:**

- Please read the instructions carefully.
- This Question Paper consists of 24 questions in two sections – Section A & Section B.
- Section A has Objective type questions whereas Section B contains Subjective type questions.
- Out of the given (6 + 18 =) 24 questions, a candidate has to answer (6 + 11 =) 17 questions in the allotted (maximum) time of 3 hours.
- All questions of a particular section must be attempted in the correct order.

**SECTION A - OBJECTIVE TYPE QUESTIONS (30 MARKS):**

- i. This section has 06 questions.
- ii. There is no negative marking.
- iii. Marks allotted are mentioned against each question/part.
- iv. Do as per the instructions given.

**SECTION B – SUBJECTIVE TYPE QUESTIONS (30 MARKS):**

- i. This section contains 18 questions.
- ii. A candidate has to do 11 questions.
- iii. Marks allotted are mentioned against each question/part.
- iv. Do as per the instructions given.

**SECTION A: OBJECTIVE TYPE QUESTIONS (30 MARKS)**

**Q1. Answer any 4 out of the given 6 questions on Employability Skills (1 x 4 = 4 marks)**

- i. Open office Writer is the Open Source Software? Justify the statement. 1
- ii. Write down about different types of visual communication. 1
- iii. Give one example of an exclamatory sentence. 1
- iv. The shortcut to save the changes made to an existing file is? 1
  - a) File- Save
  - b) Ctrl+S
  - c) Insert- Save
  - d) Both the options (a) and (b)
- v. What is the difference between strength and ability. 1
- vi. Write two benefits of maintaining personal hygiene. 1

**Q2. Answer any 5 out of the given 7 questions (1 x 5 = 5 marks)**

- i. Define the term Firewall. 1
- ii. Do all HTML tags have an end tag? Explain your answer. 1
- iii. The default alignment of heading tag is: 1
  - a) Justify
  - b) right
  - c) left
  - d) center
- iv. What is web browser? List out any two popular web browsers? 1
- v. The property in CSS used to change the text color of an element is – 1
  - a) text-color
  - b) color
  - c) bgcolor
  - d) font-color
- vi. Mayank wants to transfer data within a city at very high speed. Write the name of the wired transmission medium that he should use. Write the type of network also. 1
- vii. Write the HTML code to display the alternate text for an Image (School.jpeg) when the image is not displayed by the web browser. 1

**Q3. Answer any 6 out of the given 7 questions (1 x 6 = 6 marks)**

- i. What are the requirements for setting up a network? 1
- ii. The CSS property used to specify the transparency of an element is - 1
  - a)opacity
  - b)filter
  - c)visibility
  - d)overlay
- iii. Any computer attached on the network is called a \_\_\_\_\_. 1
- iv. The location of a resource on the internet is given by its? 1
  - a) DNS
  - b) protocol
  - c) URL
  - d) Web address
- v. Define about the Physical address of the computer. 1

- vi. Consider the following: 1
- 1) Twisted pair cables
  - 2) Microwaves and Satellite Signals
  - 3) Repeaters
  - 4) Analog Transmissions
  - 5) Fiber optics
- Which of the above is consider as signal transmission medium for data communications?

- a) (1) and (5) b) (1) and (2)
- c) (1) (2) and (5) d) (1) (2) (3) and (5)

- vii. What are the different attributes of font tag used in HTML? 1

**Q4. Answer any 5 out of the given 6 questions (1 x 5 = 5 marks)**

- i. Define WWW. 1
- ii. Data transfer rate is often measured in\_\_\_\_\_. 1
- iii. Machine that places the request to access the data, is generally called as\_\_\_\_\_ 1
  - a) Server machine b) Client machine
  - c) Request machine d) Intelligent machine
- iv. What is the basic difference between VIRUS and Worm? 1
- v. Define Phishing. 1
- vi. When I am sending data from my computer to another then it uses the concept of: 1
  - a) analog signal to digital signal b) digital signal to analog signal
  - c) analog signal to analog signal d) Data transmission

**Q5. Answer any 5 out of the given 6 questions (1 x 5 = 5 marks)**

- i. Write the use of DIV tag in HTML. 1
- ii. Define the term Selector, Property and value used in CSS. 1
- iii. Write the correct syntax to make the background color of all paragraph elements to yellow using CSS? 1
- iv. ABC International School is planning to connect all computers of the school spread over a distance of 50 meters. Suggest an economic cable type having high speed data transfer to connect these computers. 1
- v. Explain about GET and POST method used in HTML Form. 1
- vi. Two teachers in the same school sitting in different labs wanted to transfer information. Which type of network will be used to implement the same? 1

**Q6. Answer any 5 out of the given 6 questions (1 x 5 = 5 marks)**

- i. How can we give comment line in HTML? 1
- ii. Define hyperlink in HTML. Write the different ways we can link the web pages. 1
- iii. What is the difference between Radio Button and Check Box? 1
- iv. White color is formed using RGB Combination? 1
  - A. 0 0 0 B. 255 255 255 C. 155 96 59 D. 197 136 18
- v. \_\_\_\_\_ is the network of networks. 1
- vi. Expand the following terms: 1
  - a) Tbps b) Https

**SECTION B: SUBJECTIVE TYPE QUESTIONS (30 MARKS)**

**Answer any 3 out of the given 5 questions on Employability Skills (2 x 3 = 6 marks)**

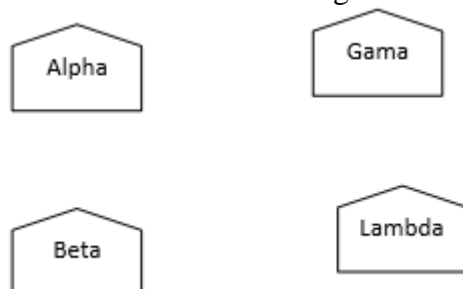
**Answer each question in 20 – 30 words.**

7. What are the difference process of communication? 2
8. Explain about different C's (at least any four) of commination. 2
9. Define SWOT (Related to Self-Management Skills). 2

10. Define Operating System. Give some examples of Mobile Operating system. 2
  11. Define Application Software. Give some examples of Application Software's used by you. 2
- Answer any 3 out of the given 5 questions in 20 – 30 words each (2 x 3 = 6 marks)**
12. What is IP Address? Explain its characteristics. 2
  13. Difference between client server and peer to peer network. 2
  14. Write the HTML code for the following output. 2

|   |   |   |   |
|---|---|---|---|
| A | B | C |   |
|   | D | E | F |
| G | H |   |   |

15. Explain about different formatting tags used in HTML. 2
  16. Explain the concept of the CSS Box Model and its components. 2
- Answer any 2 out of the given 3 questions in 30– 50 words each (3 x 2 = 6 marks)**
17. How CSS is different from HTML? Compare all the three ways of creating webpage using CSS. 3
  18. Explain in details about the common lists that are used when designing a page? Write about all the tags used for the same with their attributes and values. 3
  19. Define protocol. Explain about different protocols used for data transmission. 3
- Answer any 3 out of the given 5 questions in 50– 80 words each (4 x 3 = 12 marks)**
20. What is network topology? Explain about all the types of topology with their advantages and disadvantages. 4
  21. Knowledge Supplement Organization has set up its new centre at Manglore for its office and web based activities. It has four buildings as shown in the diagram below: 4



**Center to center distance between various buildings**

|                 |      |
|-----------------|------|
| Alpha to Beta   | 50m  |
| Beta to Gamma   | 150m |
| Gamma to Lambda | 25m  |
| Alpha to Lambda | 170m |
| Beta to Lambda  | 125m |
| Alpha to Gamma  | 90m  |

**Number of Computers**

|        |     |
|--------|-----|
| Alpha  | 25  |
| Beta   | 50  |
| Gamma  | 125 |
| Lambda | 10  |


- i) Suggest a cable layout of connections between the buildings with diagram.
- ii) Suggest the most suitable place (i.e building) to house the server of this organization with a suitable reason.
- iii) Suggest the placement of repeater in the network with appropriate justification:
- iv) The organization is planning to link its front office situated in the city in a hilly region where cable connection is not feasible, suggest an economic way to connect it with reasonably high speed?

22. Write the HTML code to display the following output.

4

REDUCE, REUSE, RECYCLE  
PROTECT ENVIRONMENT

How can we help?  
The waste that we create has to be carefully controlled to be sure that it does not harm our environment and health.



- What is Garbage?
- Meaning of Reduce, Recycle and Reuse.
- Kids Club
  1. Weekly Activities
  2. Recycle City

Contact Us : Be Our Member

Note the following points while generating the webpage. (Use CSS to include the following points)

- Background color is “yellow”, Link colour is blue, Active link color is red and visited link color is cyan.
- Fonts used are “Times New Roman” of size 12.
- Image used is “HotCofee.jpg” of width 30 X Height 50 .
- The links are Garbage.html, Reuse.html, Activity.html, City.html respectively.
- HR size is 90% and thickness is 10pt.

23. Write short notes on :

4

- a) Dynamic HTML
- b) DNS
- c) Homepage
- d) Web hosting

24. Write the HTML Code to design the following Feedback form.

4

## My feedback form

- Name:
- Email:
- Password:
- Please check all the emotions that apply to you:
  - Angry ☒
  - Sad ☐
  - Happy ☐
  - Ambivalent ☐
- How satisfied were you with our service?
  - Very satisfied ☒
  - Satisfied ☐
  - Didn't care ☐
  - Dissatisfied ☐
  - Very dissatisfied ☐
- Further comments:
- Bio photo:
- Location visited:
-

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