



DAV NUPPL Public School
NUPPL Township, Ghatampur, Kanpur Nagar, UP – 209206
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HINDI Class:VIII

अपठित गद्यांश

नंदलाल बोस को भारतीय संविधान की मूल प्रति को अपनी चित्रों से सजाने का मौका मिला। नंदलाल बोस की मुलाकात पं. नेहरू से शांति निकेतन में हुई और वहीं नेहरू जी ने नंदलाल को इस बात का आमंत्रण दिया कि वे भारतीय संविधान की मूल प्रति को अपनी चित्रकारी से सजाएं। 221 पेज के इस दस्तावेज के हर पन्नों पर तो चित्र बनाना संभव नहीं था लिहाजा नंदलाल ने संविधान के हर भाग की शुरुआत में 8-13 इंच के चित्र बनाए। संविधान में कुल 22 भाग हैं। इस तरह उन्हें भारतीय संविधान की इस मूल प्रति को अपने 22 चित्रों से सजाने का मौका मिला। इन 22 चित्रों को बनाने में चार साल लगे। इस काम के लिए उन्हें 21,000 मेहनताना दिया गया। नंदलाल बोस के बनाए इन चित्रों का भारतीय संविधान या उसके निर्माण प्रक्रिया से कोई ताल्लुक नहीं है। वास्तव में ये चित्र भारतीय इतिहास की विकास यात्रा हैं। सुनहरे बॉर्डर और लाल-पीले रंग की अधिकता लिए हुए इन चित्रों की शुरुआत होती है भारत के राष्ट्रीय प्रतीक अशोक की लाट से। अगले भाग में भारतीय संविधान की प्रस्तावना है, जिसे सुनहरे बॉर्डर से घेरा गया है, जिसमें घोड़ा, शेर, हाथी और बैल के चित्र बने हैं। ये वही चित्र हैं, जो हमें सामान्यतः मोहन जोदड़ो की सभ्यता के अध्ययन में दिखाई देते हैं। भारतीय संस्कृति में शतदल कमल का महत्व रहा है इसलिए इस बॉर्डर में शतदल कमल को भी नंदलाल ने जगह दी है। इन फूलों को समकालीन लिपि में लिखे हुए अक्षरों के घेरे में रखा गया है। अगले भाग में मोहन जोदड़ो की सील दिखाई गई है। वास्तव में भारतीय सभ्यता की पहचान में इस सील का बड़ा ही महत्व है। शायद यही कारण है कि हमारी सभ्यता की इस निशानी को शुरुआत में जगह दी गई है। अगले भाग से वैदिक काल की शुरुआत होती है। किसी ऋषि के आश्रम का चिह्न है। मध्य में गुरु बैठे हुए हैं और उनके शिष्यों को दर्शाया गया है। बगल में एक यज्ञशाला बनी हुई है।

- क. नंदलाल बोस के चित्रों में भारतीय संविधान की मूल प्रति की सजावट के साथ-साथ क्या अन्य संविधानिक मूल्यों को उजागर किया गया है?
- (अ) राष्ट्रीय एकता और भारतीय संस्कृति के मूल्य
(ब) समाजिक न्याय और समानता
(स) स्वतंत्रता और लोकतंत्र के मूल्य
(द) सामर्थ्य और विकास की प्रोत्साहना
- ख. नंदलाल बोस के चित्रों में विभिन्न कला शैलियों का संयोजन कैसे दिखाई गया है?
- (अ) लोक कला और ऐतिहासिक कला का संगम
(ब) प्राचीन भारतीय साहित्य और कला का परिचय
(स) ग्रीक और रोमन कला का प्रभाव
(द) पश्चिमी और पूर्वी कला शैलियों का विवरण
- ग. नंदलाल बोस के चित्रों में विभिन्न क्षेत्रों की सांस्कृतिक विविधता कैसे प्रकट है?
- (अ) भौगोलिक स्थिति और पर्यावरणीय प्रदृश्य
(ब) भाषा, धर्म और संस्कृति का समावेश
(स) राजनीतिक और आर्थिक व्यवस्था का वर्णन
(द) व्यक्तिगत और सामाजिक जीवन के पहलू
- घ. नंदलाल बोस के चित्रों में भारतीय संविधान के प्रमुख विषयों की कैसे प्रतिष्ठा की गई है?
- (अ) न्यायपालिका और उसकी भूमिका (ब) स्वतंत्रता और सामान्य अधिकार
(स) संसद और उसकी कार्यप्रणाली (द) संविधान के निर्माण प्रक्रिया और इतिहास
- ङ. निम्नलिखित कथन A तथा कारण R को ध्यानपूर्वक पढ़िए। उसके बाद दिए गए विकल्पों में से कोई एक सही विकल्प चुनकर लिखिए।

कथन:(A) नंदलाल बोस के बनाए इन चित्रों का भारतीय संविधान या उसके निर्माण प्रक्रिया से कोई ताल्लुक नहीं है।

कारण:(R) वास्तव में ये चित्र भारतीय इतिहास की विकास यात्रा हैं।

(अ) कथन A तथा कारण R और दोनों गलत है।

(ब) कथन A गलत है तथा कारण R सही है।

(स) कथन A सही है, लेकिन कारण R उसकी गलत व्याख्या करता है।

(द) कथन A तथा कारण R दोनों सही हैं तथा कारण R और कथन A की सही व्याख्या करता है।

पाठ 1. अच्छे पड़ोसी के गुण (ज्ञान सागर / अभ्यास सागर)

1. पड़ोसी खाँसी को किसका प्रारंभिक लक्षण मानते थे?
2. लेखक की पत्नी के चेहरे पर भय का भाव क्यों था?
3. लेखक और उसका पड़ोसी कूड़े से किस प्रकार छुटकारा पाते थे?
4. नीचे दिए गये शब्दों के दो-दो पर्यायवाची शब्द लिखिए-
पक्षी, नभ, पेड़, गगन, किरण
5. अनुस्वार एवं अनुनासिक का उचित प्रयोग करके शब्द लिखिए-
चाद, अगूर, जाउगा, पसद
6. उपसर्ग और मूल शब्द अलग कीजिये –
प्रतिकार, अभिनव, अवगुण, अपयश
7. निम्नलिखित वाक्यों में उपयुक्त स्थान पर उचित विराम चिह्न लगाइए-
(अ) मधुकर ने कहा मैंने अब कनाडा में बसने का निर्णय लिया है।
(ब) अहा हलवा खाकर मजा आ गया।

पाठ 2. असल धन (ज्ञानसागर/अभ्यास सागर)

1. गाँव वाले दारा का सम्मान क्यों करते थे ?
2. दरबारी दारा से ईर्ष्या क्यों करते थे?
3. दारा अपने बक्से में क्या रखता था और क्यों ?
4. दारा चरवाहे का कैसा जीवन व्यतीत करता था ?
5. नीचे दिए गये मुहावरे का अर्थ स्पष्ट करते हुए वाक्य प्रयोग कीजिये –
6. कान भरना, दंग रह जाना, आँखों में चमक आना
7. नीचे दिए गये रूपों को तत्सम रूप में लिखिए-
8. आँसू जीभ खेत

अनुच्छेद

1. राष्ट्रीय पर्वों का महत्त्व
2. बालश्रम: सामाजिक अभिशाप
3. शहरी जीवन में प्रदूषण का प्रभाव
4. मनोरंजन के आधुनिक साधन
5. विज्ञान और पर्यावरण
6. यदि मैं शिक्षामंत्री होता

English

Reading Skills

1. Read the passage carefully.

[10]

India's labour market is the second largest in the world, after China, with a working-age population of about 520 million people. In 10 years, it is expected to be the world's largest as China's population aged 15 to 64 drops from 20.5 to 18.3 percent.

While this positive demographic growth should be advantageous for business, only a small portion of India's working-age population is engaged in the formal workforce. The primary reason is that barely one in four women are part of the country's workforce. Today, industry estimates show that women in India only make up five to six percent of directorships at most listed companies; this after amendments to the Companies Act mandated at least one woman on company boards.

These figures underline the highly distorted nature of India's labour market where women hold 45 percent of university degrees but are either denied employment opportunities or experience much slower career growth trajectories due to gender-based discrimination.

India has the lowest female labour force participation rate in its neighbourhood. At about 27 percent, it falls well below Sri Lanka, Bangladesh, and Nepal. While female employment is higher in rural India, it is mostly underpaid and temporary labour, though even here the rate of participation is declining.

The overall rate of female labour force participation declined as the Indian economy opened up, urbanised, and diversified with the growth of new industries, unlike most other regions in the world. The rapid growth experienced by the US and China in the past century illustrates how improving the gender balance in the workforce contributes to a nation's economic growth. Female labour force participation is 56 percent in the US and 64 percent in China.

The above correlation is also strengthened by a 2017 IMF study, which states that increasing female labour force participation will grow India's GDP by an estimated 27 percent. Contrast this with the projections made by the government's big idea reforms 'Make in India' and 'Digital India', which aim to boost India's growth by 16 percent and 5 percent respectively.

Yet, GDP goals aside, the gender imbalance in India's workforce stunts prospects for inclusive growth in the country. It deprives women and girls of positions of role models in the workplace, reduces their motivation to study further, and perpetuates unhealthy socio-cultural attitudes. Leaving out one-half of the population from its workforce will also prolong India's status as a developing country.

Based on your understanding of the passage, answer the following questions. [10x1=10]

- (i) According to the passage, what may be a negative factor that can impact the positive growth of the Indian labour force? 1
- (ii) What is the reason for the highly distorted nature of the female workforce in India's labour market?
(a) Women are unskilled and uneducated. (b) Women are denied employment opportunities.
(c) Women have slower career growth. (d) Both (b) and (c)
- (iii) What is the result of the gender imbalance in India's workforce? 1
- (iv) Complete the given sentence by selecting the most appropriate option: 1
The given passage highlights the _____.
(a) gaps in women's empowerment in the workforce
(b) need for more women participation in the workforce
(c) reasons for declining GDP
(d) caste-based discrimination
- (v) Which of the following statements is NOT substantiated by the passage? 1
(a) Leaving out one-half of the population from its workforce will also prolong India's status as a developing country.
(b) The female labour force participation is crucial for the development of the Indian economy.
(c) Female labour force participation is 56 percent in the US and 64 percent in China.
(d) Rapid growth experienced by the US and China in the past century illustrates how improving the gender balance contributes to a nation's economic growth.
- (vi) Based on the reading of the text, state a point, in about 40 words, to challenge the statement. 2
An increase in female labour participation will affect our GDP adversely.
- (vii) Complete the sentence based on the following statement: 1
Women in India experience a much slower growth.
This happens because of _____.
- (viii) State TRUE or FALSE: 1
The rapid growth made by the UK in the past century was due to the improvement of gender balance in the workforce.
- (ix) What socio-cultural consequences does the passage suggest are perpetuated by the gender imbalance in India's workforce? 1

Section – B
Grammar and Creative Writing Skills

2. Answer the given questions.
- (i) Rewrite the sentence in the Reported Speech: The teacher said, "You need to submit your assignments by Friday." Reported Speech: _____
- (ii) Read the conversation between Priya and Raj and complete the sentence by reporting Raj's reply correctly.
Priya: Why did you miss the meeting?
Raj: I had an emergency client call.
Priya enquired of Raj why he had missed the meeting. Raj replied that _____.
- (iii) Rahul asked Anjali the question given below. Report Rahul's question:
"Can you help me understand this question?"
- (iv) The teacher said, "Complete the assignment by tomorrow."
Reported Speech:
(a) The teacher says me to complete the assignment by tomorrow.
(b) The teacher advised me to complete the assignment by tomorrow.
(c) The teacher tells me to complete the assignment by tomorrow.
(d) The teacher told me that complete the assignment by tomorrow.
- (v) Report the dialogue between Parul and Nikhil, by completing the narration:
Parul : Where did you spend your holidays?
Nikhil : I went to many hill stations.
Parul asked Nikhil _____. Nikhil replied that he had gone to many hill stations.
- (vi) Read the conversation between John and Lisa and complete the sentence by reporting John's response correctly.
John: Did you enjoy the concert last night?
Lisa: No, I didn't. The music was too loud.
- (vii) John asked Lisa if _____.
- (viii) Rewrite the given sentence in the Reported Speech:
The doctor said, "You should take these medicines twice a day."
Reported Speech: _____.
- (ix) Report the question asked by David:
Have you seen my keys anywhere?
(a) David asked if I had seen his keys anywhere.
(b) David asked whether I have seen his keys anywhere.
(c) David asked if I see his keys anywhere.
(d) David asked whether I saw his keys anywhere.
- (x) Rewrite the given sentence in the Reported Speech: The coach said, "You must practice every day to improve." Reported Speech: _____.
3. You recently visited your hometown after several years and had a nostalgic trip down memory lane. Write a Diary Entry of your visit, capturing the essence of your emotions and experiences within 100-120 words.
4. You witnessed an unexpected natural phenomenon during a hiking trip to Mount Everest Base Camp. Describe your emotions and thoughts in a Diary Entry after observing the sudden glacial movement that caused a minor avalanche nearby. (Word Limit: 100-120)

Creative Work

1. Create a portfolio file for the academic session 2024-2025.

MATHEMATICS

Chapter 4: Direct & Inverse Variation

Answer the following questions.

1. If x and y are in direct variation, then what is the relation between x and y .
 2. Distance = Speed \times _____
 3. Number of books and their cost are said to be in _____ variation.
 4. If $xy = 5$, then x and y vary _____ with each other.
 5. If the cost of 9 toys is Rs 333, find the cost of 16 such toys.
 6. If 22.5 m of a uniform iron rod weighs 85.5 kg, then what will be the length of 22.8 kg of the same rod?
 7. If 15 oranges cost Rs 70, find the cost of 39 oranges.
 8. A farmer had enough food to feed 20 animals in his farm for 6 days. How long did the food last if there were 25 animals in his farm?
 9. Reema types 540 words during half an hour. How many words would she type in 6 minutes?
 10. If 52 men can do a piece of work in 35 days, then how many men will do the same work in 14 days?
 11. In a hostel of 50 girls, there are food provisions for 40 days. If 30 more girls join the hostel, how long will these provisions last?
 12. A train 150 meters long is running at a speed of 72 km/hr. It crosses a bridge in 13 seconds. Find the length of the bridge.
 13. A train 350 meters long crosses an electric pole in 28 seconds. Find the speed of the train in Km/hr.
- Direction:- In question numbers 14 and 17, a statement of assertion (A) is followed by a statement of reason (R) Choose the correct option out of the following :

- 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

14. Assertion (A) – 10 men can dig a trench in 15 days. Then in 55 days 3 men take to dig a trench
Reasons (R) – A direct proportion shows the direct the relation between two quantities. An inverse proportion shows inverse or indirect relation between two quantities

15. Assertion (A) – the cost of 50 sticks at Rs 24 per score is Rs 60
Reasons (R) – A direct proportion shows the direct the relation between two quantities. An inverse proportion shows inverse or indirect relation between two quantities

Creative Holiday Homework

Art Integration Activities:

1. To make a cylindrical pen stand with waste materials. (Roll No. 1 to 20)
2. Make a colourful Rangoli using Geo-gebra. (Roll No. 21 to 40)

Project Work / Experiential Learning Activities:

1. Value of Maths in your life & its relationship with other subjects.

OR

2. Make a Mathematical e-magazine.

SCIENCE

FORCE AND PRESSURE

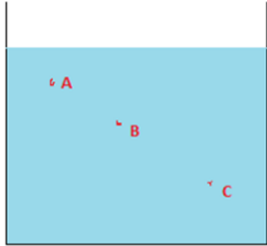
Multiple Choice Question:

1. A ball rolling on the ground slows down and finally stops because
(a) force (b) less force applied (c) friction (d) none of the above

2. The force involved in falling of an apple from a tree is known as?
(a) magnetic force (b) electrostatic force (c) contact force (d) gravitational force

3. Which of the following is an example of a non-contact force?
(a) The force exerted by us to lift a bucket (b) push a stationary car
(c) The force exerted by magnets (d) Force due to friction

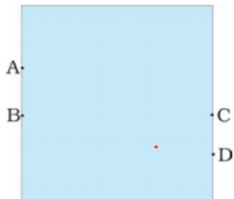
4. The below figure shows a container filled with water. Which of the following statements is correct about pressure of water?



(a) Pressure at A > Pressure at B > Pressure at C (b) Pressure at A = Pressure at B = Pressure at C
(c) Pressure at A < Pressure at B > Pressure at C (d) Pressure at A < Pressure at B < Pressure at C

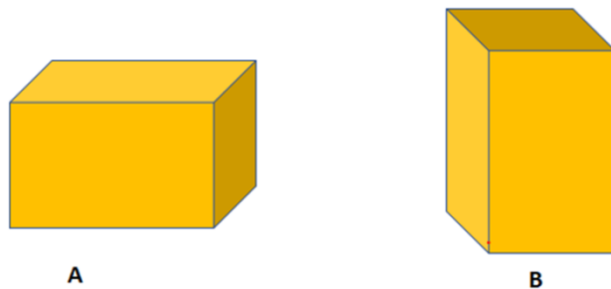
5. Which one of the following forces is a contact force?
(a) force of gravity (b) magnetic force (c) force of friction (d) electrostatic force

6. A water tank has four taps fixed at points A, B, C, D as shown above
The water will flow out at the same pressure from taps at



(a) B and C (b) C and D (c) A and B (d) A and C

7. A brick is kept in two different ways on a table as shown below. The pressure exerted by the brick on the table will be



(a) maximum in position A (b) maximum in position B (c) equal in both cases

8. Opening the door is an example of which type of force?
(a) contact force (b) spring force (c) non-contact force (d) magnetic force

9. Name the force used in removing iron scrap from a heap of mixed scrap.
(a) Magnetic Force (b) Electrostatic force (c) Gravitational force (d) Friction Force

10. The pressure on an object _____ with the increase in altitude from earth surface
(a) Increase (b) decrease (c) same (d) None

Assertion & Reason Based Question:

two statements are given- one labelled Assertion (A) and the other labelled Reason (R). Select the correct answer to these questions from the codes (i), (ii), (iii) and (iv) as given below:

- i) Both A and R are true and R is the correct explanation of the assertion.
- ii) Both A and R are true but R is not the correct explanation of the assertion.
- iii) A is true but R is false.
- iv) A is false but R is true.

1. Assertion (A): Water begins to flow towards the ground as soon as we open a tap.

Reason (R): It is because of the force of gravity, which makes things/objects fall towards the earth as it pulls them.

2. Assertion (A): The relationship between force, pressure, and area is given by $P=F/A$.

Reason (R): The SI unit of pressure is N/m^2 or Pascal (Pa).

3. Assertion (A): Fountains of water come out of the leaking joints or holes in pipes.

Reason(R): It is because liquids (water) exert pressure on the walls of the pipes.

Case Study Based Question:

1.The discovery of atmospheric pressure gives a fact that air has weight. The weight of the atmosphere presses down on the earth's surface and creates pressure on it. The pressure at any point exerted by the weight of the air above is called atmospheric pressure.

The atmospheric pressure on the earth's surface at sea level is one hundred thousand pascals i.e., 100 KPa. The atmospheric pressure at a place decrease with an increase in altitude. The atmospheric pressure at a place is the force exerted by the weight of the air column above that place. As we go up the length of the air column above us decreases. This means that its weight and the atmospheric pressure are smaller at higher places than at sea level. If the pressure of the atmosphere is removed suddenly, our blood vessels and tissues will rupture due to the pressure of the blood and other fluids inside. Thus, the spacemen also wear special pressurised suits as in space there is no air and hence, no air pressure. At the top of a mountain, some people can feel their ears "popping" due to a decrease in air pressure. The ears pop to balance the difference in pressure inside and outside the body.

Answer the questions given below:

- a) What is atmospheric pressure?
 - b) We know that there is a huge amount of atmospheric pressure on us. But we do not experience its effect. Why?
 - c) Why do some people feel their ears "popping" at the top of the mountain?
2. In our daily life, we perform or observe activities such as opening or shutting a door, lifting or pushing a weight, squeezing a bottle of ketchup, cutting vegetables, and making different shapes with clay. All these activities require us to apply some kind of push or pull. A push or pull is also used to hit the striker in a game of carom, kick a football, catch a ball, etc., A push or pull that tends to affect an object in some way is called a force and a force arises only when two objects interact. Force has magnitude as well as direction. Force can make a stationary object move, change the shape, increase or decrease the speed of the object, change the direction or even bring a moving object to rest.

- 1. What is force?
- 2. How does an applied force changes the speed of an object?
- 3. In the following situations. State the effect of the force in each case.
 - (i) Squeezing a piece of lemon between the fingers to extract its juice.
 - (ii) Taking out paste from a toothpaste tube.
 - (iii) A load suspended from a spring while its other end is on a hook fixed to a wall.
 - (iv)An athlete making a high jump to clear the bar at a certain height.

Answer the following question:

Q1.Give reason why a straw is rubbed with woolen cloth attracts another straw.

Q2 Give a reason why a coin is released from hand it begins to move downwards.

Q3.What is a force ? Give an example in daily life situation.

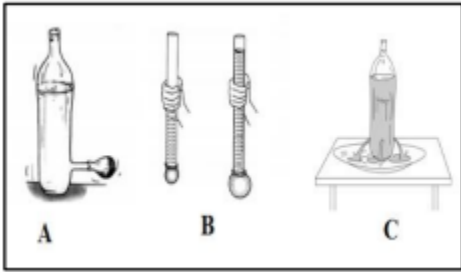
Q4.What is Pressure ? What are the factors on which Pressure depends on?

Q5. Why is it difficult to carry a bag of thin straps ?

Q6. An object which is thrown up finally comes down. Why?

Q7. In a tug of war, three boys of team A pull the rope with forces of 100 N, 120 N and 170 N. In team B, the three members pull the rope with forces of 130 N, 150 N and 155 N. Who will win the tug of war? What is the resultant force?

Q.8 What do the following activities prove?



Q9. a) Why is it difficult to pull out a toy having a rubber sucker, which is stuck to the wall?

b) Why do some people suffer from nose bleeding at high altitudes?

Q10. Give a reason for the following.

a) If you walk in the snow, your feet will sink. But if you put on skis, you can move over the snow easily.

b) Iron rails of railway tracks are fixed over wide wooden or concrete sleepers.

c) It is easier to sew with a pointed needle than a blunt needle.

d) Foundations of high-rise buildings are kept wide.

VERY SHORT ANSWER TYPE QUESTION:

1. What is combustion?

2. What do you mean by ignition temperature?

3. State the importance of a fire extinguisher.

4. Which substances produce a flame?

5. How is calorific value measured?

6. Burning of wood and coal causes -----

- a) Air purification b) Air pollution c) Precipitation d) Soil conservation

7. The suspended particles released by combustion of coal in air may lead to a health disease. Select the correct option:

- a). Goitre b) Arthritis c) Asthma d). Bone cancer

8. When the clothes of a person catch fire, the person is covered with a blanket to extinguish fire. Explain why?

9. What is flame?

10. Kerosene oil produces flame whereas coal does not produce flame. Comment on the statement.

ASSERTION AND REASON TYPE QUESTION:

For question numbers 1-3, two statements are given- one labelled Assertion (A) and the other labelled Reason (R). Select the correct answer to these questions from the codes (i), (ii), (iii) and (iv) as given below -

i) Both A and R are true and R is correct explanation of the assertion.

ii) Both A and R are true but R is not the correct explanation of the assertion.

iii) A is true but R is false.

iv) A is false but R is true

1. Assertion: Substances that burn in air are called combustible substances.

Reason: Substances that do not burn in air are called non-combustible substances.

2. Assertion: A non-luminous flame is accompanied with heat but very little light.

Reason: A blue flame is produced due to incomplete combustion .

3. Assertion: The inner zone of candle flame is black in colour.

Reason: The inner zone lacks oxygen, hence no combustion occurs here.

PASSAGE BASED Questions:

Read the passage carefully and attempt the questions given below.

A chemical process in which a substance reacts with oxygen to give off heat is called combustion. The substance that undergoes combustion is said to be combustible. It is also called a fuel. The fuel may be solid, liquid or gas. Sometimes, light is also given off during combustion, either as a flame or as a glow.

The lowest temperature at which a substance catches fire is called its ignition temperature. The substances which have very low ignition temperature and can easily catch fire with a flame are called inflammable substances. Examples of inflammable substances are petrol, alcohol, Liquefied Petroleum Gas (LPG).

i) What are combustible substance?

- a) Substance that undergoes combustion
- c) Substance that glows

- b) Substance reacts with ozone
- d) All of these

ii) Fuels can be :

- a) Solids only
- b) Liquids only
- c) Gases only
- d) All of these

iii) What is ignition temperature?

- a) Lowest temperature at which a substance catches fire.
- c) Temperature at which ice is formed
- b) Temperature when water boils
- d) Temperature of LPG.

iv) Identify the inflammable substance from the following.

- a) Soil
- b) Water
- c) Alcohol
- d) Vinegar

v) What are inflammable substances?

- a) Substances with low ignition temperature
- b) Substances that catches fire easily with a flame
- c) Only option a
- d) Both a and b

CASE STUDY-BASED QUESTIONS

1. A student burns three substances P, Q, and R and records the observation in a table. Which option correctly categorises the given substances?

Substance	Observation
P	Burns quickly producing heat and light
Q	Burns at room temperature on its own
R	Burns with evolution of heat, light and sound

- (a) All the substances are undergoing rapid combustion.
- (b) Substances P and Q are undergoing spontaneous combustion whereas substance R is undergoing rapid combustion.
- (c) Substance P is undergoing rapid combustion; substance Q is undergoing spontaneous combustion whereas substance R is undergoing explosion combustion.

(d) Substance R is undergoing rapid combustion; substance Q is undergoing spontaneous combustion whereas substance P is undergoing explosion combustion.

SHORT ANSWER TYPE QUESTIONS:

1. What are the characteristics of good fuel?
2. Crackers on ignition produces sound. Why?
3. State the difference between rapid and spontaneous combustion.
4. Although wood has a very high calorific value, we still discourage it as a fuel. Why?
5. In an experiment 4 kg of fuel was completely burnt. The heat produced was measured to be 160,000kJ. Calculate the calorific value of the fuel
6. What is explosion?
7. What do understand from the statement – calorific value of candle wax is 5000 kJ/kg?
8. Explain the term calorific value.
9. Introduce a glass plate into the luminous zone of the steady candle flame and hold it for few seconds, then remove it. What did you observe on the glass plate?
10. Ravi observed that a goldsmith was trying to melt a gold ring using the candle flame. Which part of the candle flame will the goldsmith use. Why?

SHORT ANSWER TYPE QUESTIONS:

1. a. Why do you have to use paper or kerosene oil to ignite fire in wood or coal?
b. You are provided with three watch glasses containing milk, petrol and mustard oil respectively. If a burning candle is brought near these materials, which one will catch fire instantly, why?
2. Draw a neat labelled diagram showing the different zones of a candle flame.

Ch-2 Microorganisms: Friends or Foe

Tick the correct option.

1. The scientists that deal with the micro-organisms are known as?
a. Herpetologists b. Oncologists c. Cardiologists d. Microbiologists
2. In which process micro-organisms are converted into sugar or alcohol?
a. Fermentation b. Pasteurization c. Condensation d. Evaporation
3. What are pathogens?
a. Life-oriented micro-organisms b. Used to form antibiotics
c. Disease-causing micro-organisms d. Used in the process of fermentation
4. In which technique the milk is preserved by the dairy industry?
a. Heating b. Pasteurization c. Fermentation d. Cooling
5. In which process the micro-organisms lose water from their bodies in the presence of excess salt or sugar in food?
a. Diffusion b. Preservation c. Osmosis d. Antigen
6. Vinegar is commonly known as
a. Citric acid b. Acetic acid c. Carbonic acid d. None
7. Mumps is a ——— disease.
a. Bacterial b. Virus c. Protozoan d. Fungal
8. Which of these can be prevented by vaccination?
a. Tetanus b. Polio c. Measles d. All of these
9. ——— helps in the formation of curd.
a. Lactobacillus b. Rhizobium c. Coccus d. None of these
10. Jams and jellies are preserved with the help of
a. Sugar b. Chemical preservatives c. Salt d. Both a & b
11. Which of the following are methods of preservation?
a. Canning b. Freezing c. Vacuum packing d. All of the above

12. Which of these are protozoans?
 a. Euglena b. Spirogyra c. Paramoecium d. a & c both
13. The special cells produced in response to a disease causing microbe are called
 a. Antigens b. Antibodies c. Immunity d. None of above
14. These are diseases caused by bacteria
 a. Cholera b. Typhoid c. Tetanus d. All of these
15. Which of these diseases get transmitted through animals?
 a. Tetanus b. Rabies c. Malaria d. Typhoid

Directions:

The question below consists of an assertion and a Reason. Use the following key to choose the appropriate answer.

- A. If both assertion and reason are correct and reason is correct explanation of the assertion
 B. If both assertion and reason are correct, but the reason is not the correct explanation of the assertion.
 C. If assertion is correct, but reason is incorrect.
 D. If assertion is incorrect, but reason is correct.

1. **Assertion:** Virus is considered as being on the borderline between living and nonliving entities.
Reason: They are able to multiply on their own.
2. **Assertion:** The replenishment of soil with nutrients is done by some microorganisms.
Reason: Fungi and bacteria are common decomposer.
3. **Assertion:** Antibiotics should be taken on the advice of doctors for prescribed time and duration.
Reason: If taken when not required antibiotics may kill some of useful bacteria in the body.
4. **Assertion:** Disease which spreads from an infected person to healthy person is known as non –communicable disease.
Reason: The disease spreads from one person to another through air, water, food, physical contact or insect.
5. **Assertion:** The fungi live on or inside other plant and animal.
Reason: they are able to grow anywhere on land, water
6. **Assertion:** A mosquito can cause many diseases in humans.
Reason: Mosquito can be controlled by preventing stagnation in water.

Fill in the blanks.

- Bacteria and _____ are some of the common decomposers.
- Harmful materials released by microorganisms in our body are called _____.
- Smut of _____ and red rot of _____ is a fungal disease.
- Sodium _____ and Potassium _____ are used to preserve_____, _____ & pickles.
- Dogs get infected with this virus disease called _____.

State whether these statements are True or False.

- Both humans and cattle get infected by tuberculosis and ringworm. _____.
- Tetanus and typhoid are diseases caused by viruses. _____.
- Microorganisms produce ethanol by fermentation of sugars. _____.
- Chlorella and Spirogyra are protozoans. _____.
- Vacuum packing used for storing nuts deprives bacteria of oxygen. _____.

Answer the following.

1. Rohan had idli in his breakfast which he found very soft & fluffy.
 - a. What made the idli soft & fluffy , according to you?
 - b. Which organism was responsible for making the idlis soft & fluffy ?
2. What is the role of microorganisms in enriching the soil?
3. Name two antibiotics obtained from fungi and discuss their role.
4. Discuss, how microorganisms play a vital role in agriculture.
5. Microorganisms are found everywhere in our environment. Explain.
6. Give reasons for the following.
 - a. Food kept in the open by hawkers should not be consumed.
 - b. Vacuum packing is commonly used to store nuts.
 - c. Stems of sugarcane show dull red colour along with White patches on stalks.
 - d. Common cold and conjunctivitis are communicable diseases.
- e. Microorganisms can help in the production of fuel for energy.
7. What are viruses? Name some common diseases in human caused by virus.
8. Explain the formation of curd from the milk.
9. Mention some beneficial effects of bacteria.
10. Explain the discovery of Pencillin.
11. How do microorganisms spoil food?
12. What are carriers of disease causing microbes? Explain with the help of two examples.
13. Explain nitrogen cycle and draw a schematic diagram of nitrogen cycle.
14. Name some common plant diseases their causative microorganisms mode of transmission with the help of the figures.
15. Explain the uses of Bacteria, Fungi and Algae.
16. What are food preservatives? Explain some common food preservatives.
17. Do some research and find out more about the SARS virus. Are there any similarities between SARS and Covid-19 virus? Which one of these two is more dangerous for humans? Does Covid-19 have more varieties/strains?

Case Based Questions .

A. Our atmosphere has 78% nitrogen gas. Nitrogen is one of the essential constituents of all living organisms as part of proteins, chlorophyll, nucleic acids, and vitamins. The atmospheric nitrogen cannot be taken directly by plants and animals. Certain bacteria and blue-green algae present in the soil fix nitrogen from the atmosphere and convert it into compounds of nitrogen. Once nitrogen is converted into these usable compounds, it can be utilised by plants from the soil through their root system. Nitrogen is then used for the synthesis of plant proteins and other compounds. Animals feeding on plants get these proteins and other nitrogen compounds. When plants and animals die, bacteria and fungi present in the soil convert the nitrogenous wastes into nitrogenous compounds to be used by plants again. Certain other bacteria convert some part of them to nitrogen gas which goes back into the atmosphere. As a result, the percentage of nitrogen in the atmosphere remains more or less constant.

- i) Which of the following can fix atmospheric nitrogen in the soil?
 - a) Rhizobium
 - b) Bread mould
 - c) Polio virus
 - d) Penicillium
- ii) The process by which the amount of nitrogen remains the same in the atmosphere is known as
 - a) Fermentation
 - b) Carbon cycle
 - c) Nitrogen cycle
 - d) Photosynthesis
- iii) Some plants have nitrogen-fixing bacteria in their root nodules. What are these bacteria called?
 - a) Blue-green algae
 - b) Nitrosomonas
 - c) Azotobacter
 - d) Rhizobium
- iv) The two microorganisms which live in symbiotic association in lichens are
 - a) fungus and protozoa
 - b) alga and bacteria
 - c) bacteria and protozoa
 - d) algae and fungus

B. Megha, a class VIII student was asked to submit a project report on mosquito-transmitted diseases. She visited a nearby hospital where her aunt was a nurse. Her aunt took her to a patient suffering from malaria. Megha consulted with the doctor and got the information that a protozoan called Plasmodium is responsible for malaria. It lives in the liver and blood of the person who has been infected by this disease. A female Anopheles mosquito when sucks blood from the infected person, Plasmodium along with blood, is taken into its stomach.

i) The disease caused by protozoa is

- a) Tuberculosis b) Polio c) Typhoid d) Malaria

ii) What are pathogens?

iii) Name the groups in which microorganisms are broadly classified.

iv) Explain how malaria is transmitted to humans.

Creative work:

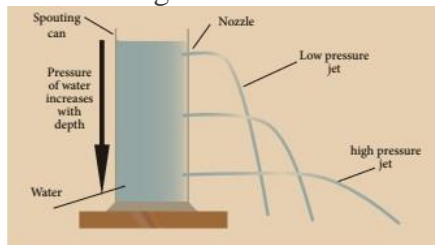
Activity 1 (Roll no :1-10)

Fix a matrix of sharp pins on a wooden board in rows and columns. Take a big blown up balloon. Place it gently over the pins and place a small book on the top of the balloon. Will the balloon burst? Will the pins prick the balloon?



Activity 2(Roll no: 11-20)

Take a plastic bottle. Punch three holes on its side in the same direction, but at different heights. Now pour some water into it and let it flow through the holes. Observe the flow of water. Water from the lowest hole comes out with the greatest force and the water from the topmost hole comes out with the least force.



CREATIVE WORK:

1. Energy Source Poster: Students to create a poster that illustrates different sources of energy, such as fossil fuels, solar power, wind energy, hydroelectric power, etc. They can include images, brief descriptions, advantages, and disadvantages of each source. **(Roll no :21-30)**

2. Energy Source Comparison Chart: students research various energy sources and create a comparison chart highlighting key factors such as cost, environmental impact, availability, and efficiency. This could be done in a table format or as a visually appealing infographic. **(Roll no :31-40)**

Creative work

Roll no. 1-10: Make a well defined model of Bacterial cell.

Roll no. 11-20: Make a model of Plant cell showing well defined organelles.

Roll no. 21-30: Make a model of Animal cell showing all the components and organelles of the cell.

Roll no. 31-40: Make a model containing structure of different microorganisms.

SOCIAL SCIENCE

Ch 1 -. Resources – Utilisation and Development

1. The student should look around and write a paragraph on how water (resource) is being wasted by people.

2. Fill in the blanks:

- All the things on the earth, which are necessary for existence on the planet are known as _____.
- Human needs and wants are neither _____ in all parts of the world nor _____ over the years.
- Renewable resources are also known as _____ resources.
- _____ resources are present in limited amounts on earth's surface and complete utilization of such resources would lead to its exhaustion.
- The _____ resources of a country are those which have been thoroughly surveyed and their quantities have been ascertained.

3. Multiple choice questions:

- The resources are classified as biotic and abiotic resources on the basis of
 - The renewability
 - the origin
 - the occurrence
 - the development
 - Which one is not a non-renewable resource?
 - Coal
 - Petroleum
 - Solar energy
 - natural gas
 - Human beings are using water for
 - Generating electricity
 - irrigation
 - navigation
 - all the above
 - Which natural resource is essential for survival of human beings and forms the base for development of a country?
 - Coal
 - Water
 - forest
 - Petroleum
 - Development that takes place without damaging the environment is known as _____.
 - Conservation
 - Sustainable development
 - non- sustainable development
 - protection of resources
- What are resources?
 - Why are human needs neither uniform nor static all over the world?
 - On what factors does utilization of resources depend?
 - Describe the various basis of classification of resources with the help of examples.
 - Why is there a need for sustainable development?
 - What leads to degradation and deterioration of quality of resources?
 - What do you understand about conservation? Why do we need to conserve our natural resources?

Ch 8 - The Modern Period

- Collect the pictures of different buildings (like Parliament House, Rashtrapati Bhawan etc) constructed during British rule and make a collage.
- Note down the name of some freedom fighters who helped India to become independent and also write down slogans in front of the names if any slogan was given by them.
- Fill in the blanks:**
 - The ever-changing political scenario heralded the _____ of _____ Period.
 - The _____ company was established as a trading company.
 - India was able to end the _____ and gain Independence in 1947.
 - _____ has about 6000 original photographs of Gandhij.
 - _____ book was written by Bankim Chandra Chattopadhyay.
 - The _____ style of old buildings, artifacts and people of that period also tell us tales of the past.
- Multiple choice questions:**
 - The Modern Period of Indian history began in eighteenth century after the
 - Death of Mughal Emperor Aurangzeb
 - End of Delhi Sultanate
 - Death of Bahadur Shah Zafar
 - End of Mughal empire
 - Which of them was not a major event of twentieth century India?
 - Partition of Bengal
 - Home Rule league
 - Death of Aurangzeb
 - Formation of Muslim League
 - The book My Experiments with Truth was written by
 - Mahatma Gandhi
 - Bal Gangadhar Tilak
 - Rabindranath Tagore
 - Lala Lajpat Rai
 - The building Victoria Memorial is in
 - Delhi
 - Mumbai
 - Kolkata
 - Chennai
 - The slogan '*Freedom is our birth right*' was given by

- a) Subhash Chander Bose
- b) Mahatma Gandhi

- c) Bal Gangadhar Tilak
- d) Bhagat Singh

5. What led to the dawn of the Modern Period?
6. When did the East India Company establish its control over a large part of India?
7. When did power go to the British crown?
8. What were the different measures taken by the British to consolidate its power in the nineteenth century?
9. When was the Indian Congress established? What were its far reaching effects?
10. Name three books written by great leaders that act as a source of information.
11. How do letters, writings, speeches act as a source of information?
12. Name the newspapers that act as a source of information?
13. Where is the biggest museum on Gandhiji? What does it have?
14. Name some old buildings that tell us tales of the past.
15. Which were the various changes that took place in the world that originated in Europe?

Chapter: Agriculture

1. Fill in the blanks

- A. _____ is the science and art of raising crops, rearing of livestock, forestry and fishing.
- B. _____ agriculture is also known as slash and burn agriculture.
- C. In _____ agriculture is practiced in sparsely populated regions where land is available in abundance and the input of labour is less
- D. A specialized form of agriculture for large scale production of milk is known as _____.
- E. Some countries have developed genetically modified crops through _____.

2. Multiple choice questions

- A. The agricultural development is possible only in certain regions depending on
 - a) Physical or geographical factors
 - b) Economic factors
 - c) Political factors
 - d) Social factors

Option-

- i. Only a
 - ii. Only a & b
 - iii. a, b, d
 - iv. All of the above
- B. Which of them is not a type of Subsistence agriculture?
 - a) Nomadic herding
 - b) Intensive agriculture
 - c) Shifting agriculture
 - d) Livestock ranching
 - C. Plantation agriculture is usually practiced in _____.
 - a) hot and dry regions
 - b) hot and humid regions
 - b) warm and dry regions
 - d) warm and humid regions
 - D. The process of retting is done in which crop?
 - a) Rice
 - b) Maize
 - c) Jute
 - d) Tea
 - F. Which of the following is a beverage crop
 - a) Wheat
 - b) Cotton
 - c) Millets
 - d) Coffee

3. Answer the following questions:

- A. What do you understand about Agriculture? Why is agriculture important for India?
- B. Explain various physical and economic factors which affect agriculture.
- C. What are the benefits of HYV seeds?
- D. Differentiate between the following:
 - a. Subsistence Agriculture and Commercial Agriculture
 - b. Intensive Subsistence Agriculture and Extensive Agriculture
 - c. Shifting Agriculture and Plantation Agriculture
 - d. Livestock Ranching and Dairy Farming
- E. Define the terms:
 - a. Mixed Farming
 - b. High Yield Variety Seeds
 - c. Organic Farming
 - d. Livestock Ranching
- F. What type of soil, temperature and rainfall is required for the cultivation of the following crops:
 - a. Rice
 - d. Cotton

- b. Maize
- c. Ragi

e. Tea

Assertion and Reason-

Direction- In the following questions, a statement of Assertion (A) is followed by a statement of Reason (R). Mark the correct choice as:

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

1. **Assertion:** Solar energy is an inexhaustible resource.
Reason: It is resource which is always available and does not get exhausted by human activities.
2. **Assertion:** Resources like water, minerals used by human beings to satisfy their needs are known as natural resources.
Reason: These are resources made by man.
3. **Assertion:** Road, buildings and machine are known as man-made resources.
Reason: All resources are made by nature.
4. **Assertion:** India was able to end the British rule and gain independence in 1947.
Reason: The British introduced series of reform to pacify Indians to weaken the freedom struggle.
5. **Assertion:** The record of Morley Minto Reform, Report of Simon Commission and the government of India Act are important source of information.
Reason: They tell us about the condition of people as well as the administration at that time.
6. **Assertion:** Wheat cultivation is mainly confined to the northern and central region of India.
Reason: The northern and central region of India have loamy soil and have temperature of 10-15⁰C at certain time of the year.

Read the given extract and answer the following questions:

Sustainable development means development that takes place without damaging the environment. It meets the needs of the present without compromising the needs of future generations. Therefore, resources should be utilised judiciously so that after fulfilling our present requirements, they are also conserved for the future generations. Most of our resources are limited in their supply. Over-use of many valuable resources has led to their degradation or deterioration in quality, for example, soil, land and water resources. Therefore, it is essential that we use all renewable resources judiciously, minimise the depletion of natural resources, and conserve the varied species.

- i. What is sustainable development?
- ii. What role do government play in promoting sustainable development?
- iii. How can individuals contribute to sustainable development in their daily life?

Read the given extract and answer the following questions:

We know food is the basic requirement of human beings for their survival. This requirement of food has led to the development of agriculture. Earlier, human beings were dependent upon food gathering, hunting and fishing for their survival. Gradually, they started growing crops along the river valleys which led to the beginning of agriculture. It helped ancient civilisations to flourish along the river valleys.

Agriculture means cultivation of land. In wider terms, agriculture is the science and art of raising crops, rearing of livestock, forestry and fishing. Most of the population of the world still depends on agriculture for its livelihood. It is a major occupation of people in the developing countries of the world. India is an agricultural country. Hence, it is the backbone of our country's economic development. Agriculture not only supplies food to the people but also creates huge market for tractors, threshers, harvesters, fertilisers, pesticides and other industrial products. It helps in providing employment, eradicating poverty, enhancing trade and earning foreign exchange. Agriculture also plays an important role in strengthening global relations by encouraging international trade of agricultural products.

- i. Define the term agriculture.
- ii. How agriculture plays an important role in strengthening global relations?
- iii. How agriculture is the backbone of our country's economic development?

Project Work

Through comic presentation, prepare a file on the Topic- 'Establishment of Company Rule in India'.

संस्कृतम्

प्रश्नः 1. अधोलिखितम् गद्यांशं पठित्वा प्रश्नानाम् उत्तराणि लिखत ।

भारतवर्षः अस्माकं देशः अस्ति । भारते सर्वत्र विविधता अस्ति । यथा — अत्र जनानां विविधाः सम्प्रदायाः, वेशभूषाः च सन्ति । परम् अनेकतायाम् अपि एकतायाः मधुरा धारा प्रवहति । अस्मिन् देशे सर्वे ऋतवः क्रमेण आगच्छन्ति । ते वसन्तः, ग्रीष्मः, वर्षा, शरद, हेमन्तः, शिशिरः च सन्ति । अत्र सर्वे भाषा-भाषिणः एकं राष्ट्रध्वजं नमन्ति एकं च राष्ट्रगानं गायन्ति । राष्ट्रीय-उत्सवान् सामाजिक उत्सवान् च मिलित्वा मानयन्ति । “प्रायः जनाः उत्सवेषु धार्मिक कार्येषु च संस्कृतभाषायां मन्त्रोच्चारणं कुर्वन्ति । यतः सर्व-संस्काराणां जननी संस्कृत भाषा एव अस्ति । अतः कथ्यते – भारतीया संस्कृतिः संस्कृते एव निहिता अस्ति ।”

प्रश्नाः- (अ) एकपदेन उत्तरत – (केवलं प्रश्नद्वयम्)

- (i) भारते सर्वत्र का अस्ति ?
- (ii) केषां जननी संस्कृतभाषा अस्ति ?
- (iii) भारतीया संस्कृतिः कुत्र निहिता अस्ति ?

(आ) पूर्णवाक्येन उत्तरत – (केवलं प्रश्नद्वयम्)

- (i) भारते सर्वे भाषा – भाषिणः किं कुर्वन्ति ?
- (ii) अस्मिन् देशे के ऋतवः सन्ति ?
- (iii) सर्वजनाः कान् मिलित्वा मानयन्ति ?

(इ) अस्य अनुच्छेदस्य कृते उपयुक्तं शीर्षकं संस्कृतेन लिखत ।

(ई) भाषिक कार्यम् – (केवलं प्रश्नत्रयम्)

- (i) ‘परम् अनेकतायाम् अपि एकतायाः मधुरा धारा प्रवहति’ अत्र ‘मधुरा’ इति कस्य विशेषणपदम् अस्ति ?

(क) भाषा (ख) धारा (ग) संस्कृतभाषा (घ) एकतायाः

- (ii) ‘अस्मिन् देशे सर्वे ऋतवः क्रमेण आगच्छन्ति ।’ अत्र ‘आगच्छन्ति’ इति क्रियापदस्य किं कर्तृपदम् अस्ति ?

(क) अस्मिन् (ख) देशे (ग) ऋतवः (घ) सर्वे

- (iii) अनुच्छेदे ‘समानता’ इति पदस्य किं विलोमपदं प्रयुक्तम् ?

(क) भाषा (ख) विविधता (ग) निहिता (घ) अज्ञानता

- (iv) ‘एकतायाः मधुरा धारा प्रवहति’ इत्यत्र किं क्रियापदम् प्रयुक्तम् ?

(क) एकतायाः (ख) धारा (ग) प्रवहति (घ) मधुरा

- प्रश्न: 2- "सुवचनानि" इतिपाठे अभ्यासभागे आगतानां प्रश्नानां उत्तराणि पूर्णवाक्येन लिखन्तु तथा च स्थूल पदमाधृत्य प्रश्ननिर्माणं कुर्वन्तु।
- प्रश्न: 3- प्रथम पाठे आगतानां शब्दार्थान् लिखन्तु।
- प्रश्न: 4- किम् सर्वनाम शब्दस्य त्रिषु लिङ्गेषु रूपाणि स्मरणं कुर्वन्तु।
- प्रश्न: 5- "वसुधैव कुटुम्बकम्" इति पाठस्य प्रश्नोत्तराणि अभ्यासपुस्तिकायां लिखन्तु।
- प्रश्न: 6- प्रथमपाठात् तृतीयं श्लोकम् अर्थसहितं लिखित्वा चार्टनिर्माणं कुर्वन्तु। (रोल नंबर 1-13)
- प्रश्न: 7- प्रथमपाठात् पञ्चमं श्लोकम् अर्थसहितं लिखित्वा चार्टनिर्माणं कुर्वन्तु। (रोल नंबर 14-26)
- प्रश्न: 8- उपसर्गानां स्मरणं कुर्वन्तु तथा च चार्टनिर्माणं कुर्वन्तु। (रोल नंबर 27-40)

नैतिक शिक्षा

- प्रश्न 1- पाठ 1 "ओ३म् ध्वज" ध्वज गीत को याद करें एवं A4 साइज पेपर पर लिखिए।
- प्रश्न 2- पाठ 2 "ईश्वर का सर्वश्रेष्ठ नाम" उक्त पाठ को पढ़कर प्रश्नोत्तर निर्माण कीजिए।
- प्रश्न 3- पाठ 3 "आत्मबोध" का सारांश 120-150 शब्दों में लिखिए।
- प्रश्न 4- पाठ 2 "ईश्वर का सर्वश्रेष्ठ नाम" के अनुसार ओ३म् के महत्व के ऊपर लिखे गए दो-दोहों को हिंदी अर्थ सहित लिखकर चार्ट बनाइए। (रोल नंबर 1-10 तथा 21-30 तक)
- प्रश्न 5- ईश्वर के 20 गुणवाची नामों को "सत्यार्थ प्रकाश" नामक पुस्तक की सहायता से खोजें एवं अर्थ सहित लिखकर चार्ट निर्माण कीजिए। (रोल नंबर 11-20 तथा 31-40 तक)