



OSDAV Public School, Kaithal

First Unit Test (May, 2025)

Class : XI

Subject : Economics (030)

SET- A

Time: 1½ Hr.

M.M: 40

General Instructions:-

I. All questions are compulsory.

II. Q. No 1-10 carry 1 mark, Q. No 11-12 carry 3 marks, Q. No 13-15 carry 4 marks, Q. NO 16-17 carry 6 Marks.

| Q.No. | Questions | Marks | | | | | | | | | | | | |
|-----------------|---|----------|----------|----------|----------|----------|----------|-----------------|----|----|----|----|-----|---|
| 1 | Read the following statements carefully and choose the correct alternative from the following:- Statement 1:- The purpose of collecting statistical data needs to be decided in the advance. Statement 2:- In plural sense, the term statistics means statistical method. Alternatives:- A) Both the statements are true. B) Both the statements are false. C) Statement 1 is true and statement 2 is false. D) Statement 2 is true and statement 1 is false. | 1 | | | | | | | | | | | | |
| 2 | In exclusive class interval of a frequency distribution:- A) Upper limit of each class interval is excluded. B) Lower limit of each class interval is excluded. C) Both a and b D) None of these. | 1 | | | | | | | | | | | | |
| 3 | Classification of Population of India in terms of years is an example of : (a) Geographical Classification. (b) Chronological Classification (c) Quantitative Classification. (d) Qualitative Classification | 1 | | | | | | | | | | | | |
| 4 | In case of inclusive series, (a) Upper limit of class interval is excluded from the class (b) Lower limit of class interval is excluded from the class (c) Both upper & lower limits are included (d) Both upper & Lower limits are excluded | 1 | | | | | | | | | | | | |
| 5 | Basic Reason for existence of economic problem is:- A) Unlimited wants. B) Scarcity. C) Alternative uses. D) None of the above | 1 | | | | | | | | | | | | |
| 6 | The following data related to the marks of a group of students: <table border="1"><tr><td>Marks</td><td>Below 10</td><td>Below 20</td><td>Below 30</td><td>Below 40</td><td>Below 50</td></tr><tr><td>No. Of Students</td><td>15</td><td>38</td><td>65</td><td>84</td><td>100</td></tr></table> How many students get marks more than 30 ? A 65. B 50. C 35. D 43. | Marks | Below 10 | Below 20 | Below 30 | Below 40 | Below 50 | No. Of Students | 15 | 38 | 65 | 84 | 100 | 1 |
| Marks | Below 10 | Below 20 | Below 30 | Below 40 | Below 50 | | | | | | | | | |
| No. Of Students | 15 | 38 | 65 | 84 | 100 | | | | | | | | | |
| 7 | In a good questionnaire: A) Number of questions should be numerous/infinite. B) Questions related to mathematical computations should be asked. C) Personal questions should be preferred. D) Questions using double negatives should be avoided. Or Stratified sample is preferred where: A) Population is perfectly homogeneous. B) Population is non homogeneous. C) Random sampling is not possible. D) Small samples are required. | 1 | | | | | | | | | | | | |

| | | | | | | | | | | | | | | |
|-----------|---|-------------|----|----|----|----|----|-----------|---|---|----|---|---|--------|
| 8 | Read the following statements assertion and reason, choose one of the correct alternatives given below:- Assertion:- Scarcity is the root cause of all economic problems. Reason:- We face scarcity because human wants are limited. Alternatives:- A) Both assertion and reason are true and reason is the correct explanation of assertion. B) Both assertion and reason are true and reason is not the correct explanation of assertion. C) Assertion is true but reason is false. D) Assertion is false but reason is true | 1 | | | | | | | | | | | | |
| 9 | The data collected on the height of a group of students after recording their heights with a measuring tape are..... A) Primary data. B) Continuous data C) Discrete data. D) Secondary data | 1 | | | | | | | | | | | | |
| 10 | Read the following statements carefully and choose the correct alternative from the following:- Statement 1:- Data originally collected by an investigator for the first time for some specific purpose is known as secondary data. Statement 2:- Population census conducted by Government of India is an example of secondary data. Alternatives:- A) Both the statements are true. B) Both the statements are false. C) Statement 1 is true and statement 2 is false. D) Statement 2 is true and statement 1 is false. | 1 | | | | | | | | | | | | |
| 11 | The government and policy makers use statistical data to formulate suitable policies of economic development. Illustrate with 2 examples. | 3 | | | | | | | | | | | | |
| 12 | Out of census method and sampling method, which one is suitable in the following cases: A) When population is heterogeneous in nature. B) It is Comparatively easy to organise and supervise. C) It requires relatively less money, time and labour. | 1 1 1 | | | | | | | | | | | | |
| 13 | (A) Distinguish between discrete variable and continuous variable. (B) Distinguish between bivariate frequency distribution and univariate frequency distribution. | 2 2 | | | | | | | | | | | | |
| 14 | A) “Aggregates must be expressed numerically.” Explain this with the help of an example. B) Define the concepts of “Saving” and “Investment”. | 2 1+1 | | | | | | | | | | | | |
| 15 | Why should we study Economics ? Explain in detail. Or Differentiate Exclusive and inclusive series by taking illustrations. | 4 4 | | | | | | | | | | | | |
| 16 | A) Distinguish between Direct Personal Investigation and Indirect Oral Investigation methods. B) Convert the given series into an exclusive series: <table><tr><td>Mid Value</td><td>5</td><td>15</td><td>25</td><td>35</td><td>45</td></tr><tr><td>Frequency</td><td>4</td><td>8</td><td>10</td><td>6</td><td>2</td></tr></table> | Mid Value | 5 | 15 | 25 | 35 | 45 | Frequency | 4 | 8 | 10 | 6 | 2 | 3 3 |
| Mid Value | 5 | 15 | 25 | 35 | 45 | | | | | | | | | |
| Frequency | 4 | 8 | 10 | 6 | 2 | | | | | | | | | |
| 17 | (A) Discuss how you would use the lottery method to select 3 students out of 10 in your class ? (B) What do you mean by Chronological classification of data ? Explain with the help of an illustration. | 3 1+2 | | | | | | | | | | | | |

Ans. Key with Marking Scheme (May UT, 2025)

XI- Economics

Set A

| Q.No | Answer | Marks | | | | | | | | | | | | |
|------------------|---|---|-----------------------------------|----------------------------------|---------|--|---|------------------|--|--|-----------------|---|--|-----|
| 1 | C) Statement 1 is true and statement 2 is false. | 1 | | | | | | | | | | | | |
| 2 | A) Upper limit of each class interval is excluded. | 1 | | | | | | | | | | | | |
| 3 | B) Chronological classification | 1 | | | | | | | | | | | | |
| 4 | C) Both upper and lower limits are included. | 1 | | | | | | | | | | | | |
| 5 | B) Scarcity. | 1 | | | | | | | | | | | | |
| 6 | C) 35. | 1 | | | | | | | | | | | | |
| 7 | D) Questions using double negative should be avoided. Or B) Population is non homogeneous. | 1 | | | | | | | | | | | | |
| 8 | A) Both assertion and reason are true but reason is the correct exploration of reason. | 1 | | | | | | | | | | | | |
| 9 | A) Primary data. | 1 | | | | | | | | | | | | |
| 10 | B) Both the statements are false. | 1 | | | | | | | | | | | | |
| 11 | <p>The government and policy makers require greater information in the form of numerical figures, to fulfill the welfare objectives. Popular statistical methods such as time-series analysis, index numbers, forecasting and demand analysis are extensively used in formulating economic policies.</p> <p>Examples:</p> <p>(i) While preparing and implementing new poverty alleviation programmes, Government makes use of various statistical data to determine the pros and cons of earlier poverty alleviation programmes.</p> <p>(ii) While framing budget, Government and policy makers make extensive use of economic survey and data of previous years, to formulate budget for the coming fiscal year.</p> <p>So, it can be concluded that it is impossible to think about functioning of the modern government, in the absence of statistics.</p> | 3 | | | | | | | | | | | | |
| 12 | A) Census method B) Sample method C) Sample method | 3 | | | | | | | | | | | | |
| 13 A | <table border="1"> <thead> <tr> <th>Basis</th><th>Discrete Variable</th><th>Continuous Variable</th></tr> </thead> <tbody> <tr> <td>Meaning</td><td>Discrete variable is a variable which is capable of taking only exact value and not any fractional value.</td><td>Continuous variable is a variable which can take all the possible values (integral as well as fractional) in a given specified range.</td></tr> <tr> <td>Change in Values</td><td>These variables increase in complete numbers.</td><td>These variables can increase in fractions as well as in complete numbers.</td></tr> <tr> <td>Data Collection</td><td>In case of discrete variable, data is obtained by counting.</td><td>In case of continuous variable, data is obtained by measurement.</td></tr> </tbody> </table> | Basis | Discrete Variable | Continuous Variable | Meaning | Discrete variable is a variable which is capable of taking only exact value and not any fractional value. | Continuous variable is a variable which can take all the possible values (integral as well as fractional) in a given specified range. | Change in Values | These variables increase in complete numbers. | These variables can increase in fractions as well as in complete numbers. | Data Collection | In case of discrete variable, data is obtained by counting. | In case of continuous variable, data is obtained by measurement. | 2+2 |
| Basis | Discrete Variable | Continuous Variable | | | | | | | | | | | | |
| Meaning | Discrete variable is a variable which is capable of taking only exact value and not any fractional value. | Continuous variable is a variable which can take all the possible values (integral as well as fractional) in a given specified range. | | | | | | | | | | | | |
| Change in Values | These variables increase in complete numbers. | These variables can increase in fractions as well as in complete numbers. | | | | | | | | | | | | |
| Data Collection | In case of discrete variable, data is obtained by counting. | In case of continuous variable, data is obtained by measurement. | | | | | | | | | | | | |
| B | <table border="1"> <thead> <tr> <th>Basis</th><th>Univariate Frequency Distribution</th><th>Bivariate Frequency Distribution</th></tr> </thead> <tbody> <tr> <td>Meaning</td><td>When data is classified on the basis of single variable, the distribution is known as Univariate frequency distribution.</td><td>When the data is classified on the basis of two variables, the distribution is known as Bivariate frequency distribution.</td></tr> <tr> <td>Purpose</td><td>It aims to make description about the particular variable.</td><td>It aims to determine the empirical relationship between the two variables.</td></tr> <tr> <td>Alternate Name</td><td>It is also known as one-way frequency distribution.</td><td>It is also known as Two-way frequency distribution.</td></tr> </tbody> </table> | Basis | Univariate Frequency Distribution | Bivariate Frequency Distribution | Meaning | When data is classified on the basis of single variable, the distribution is known as Univariate frequency distribution. | When the data is classified on the basis of two variables, the distribution is known as Bivariate frequency distribution. | Purpose | It aims to make description about the particular variable. | It aims to determine the empirical relationship between the two variables. | Alternate Name | It is also known as one-way frequency distribution. | It is also known as Two-way frequency distribution. | |
| Basis | Univariate Frequency Distribution | Bivariate Frequency Distribution | | | | | | | | | | | | |
| Meaning | When data is classified on the basis of single variable, the distribution is known as Univariate frequency distribution. | When the data is classified on the basis of two variables, the distribution is known as Bivariate frequency distribution. | | | | | | | | | | | | |
| Purpose | It aims to make description about the particular variable. | It aims to determine the empirical relationship between the two variables. | | | | | | | | | | | | |
| Alternate Name | It is also known as one-way frequency distribution. | It is also known as Two-way frequency distribution. | | | | | | | | | | | | |
| 14 | A) Aggregates must be expressed in numerical or quantitative form because when data are not given in theoretical form, conclusion cannot be find out. If we say Ram is taller than Shyam, it is not statistics because this information is not given in quantitative form but when we say height of Ram is 5'7" and height of Shyam is 5'5" then it will be statistics because now information is given in quantitative form and we can find out the difference as well as the sum total and average and many other conclusions can be find out. | 2 | | | | | | | | | | | | |

| | <p>B) Saving is that part of income which is not consumed as we know that income is the sum total of consumption and saving so one part of income will not be consumed that is known as saving.</p> <p>Investment means an expenditure done on the purchase of such assets which help in the generation of income.</p> | 1+1 | | | | | | | | | | | | | | | | |
|---|---|---|-------------------------------|---|--|--|--|--|--|--|------------------------------------|--|---|------------------------------------|-----------------------------------|------------------------------------|----------------------------------|-------------|
| 15 | <p>We should study Economics because of the following reasons:</p> <p>1 To know about description of an economy</p> <p>2 To know about Economic policies</p> <p>3 To know about the decision making process related to Economic decisions.</p> <p>4 To know about the contribution of different sectors in the economy</p> <p>(Explain all points in detail, any other relevant points will be considered also.)</p> <p>Or</p> <p>Difference between Exclusive and inclusive series:-</p> <table><tr><th>Exclusive Series</th><th>Inclusive series.</th></tr><tr><td>1 It is a series in which upper limit of every class becomes the lower limit of next class.</td><td>1 It is a frequency series in which upper limit will not become the lower limit of next class.</td></tr><tr><td>2 During calculation of frequencies upper limit is excluded.</td><td>2 During calculation of frequencies, both upper and lower limits are included.</td></tr><tr><td>3 Marks Frequency</td><td>3 Marks Frequency</td></tr><tr><td>0-10 5</td><td>0-9 5</td></tr><tr><td>10-20 7</td><td>10-19 7</td></tr><tr><td>20-30 11</td><td>20-29 11</td></tr><tr><td>30-40 3</td><td>30-39 3</td></tr></table> | Exclusive Series | Inclusive series. | 1 It is a series in which upper limit of every class becomes the lower limit of next class. | 1 It is a frequency series in which upper limit will not become the lower limit of next class. | 2 During calculation of frequencies upper limit is excluded. | 2 During calculation of frequencies, both upper and lower limits are included. | 3 Marks Frequency | 3 Marks Frequency | 0-10 5 | 0-9 5 | 10-20 7 | 10-19 7 | 20-30 11 | 20-29 11 | 30-40 3 | 30-39 3 | 4 4 4 |
| Exclusive Series | Inclusive series. | | | | | | | | | | | | | | | | | |
| 1 It is a series in which upper limit of every class becomes the lower limit of next class. | 1 It is a frequency series in which upper limit will not become the lower limit of next class. | | | | | | | | | | | | | | | | | |
| 2 During calculation of frequencies upper limit is excluded. | 2 During calculation of frequencies, both upper and lower limits are included. | | | | | | | | | | | | | | | | | |
| 3 Marks Frequency | 3 Marks Frequency | | | | | | | | | | | | | | | | | |
| 0-10 5 | 0-9 5 | | | | | | | | | | | | | | | | | |
| 10-20 7 | 10-19 7 | | | | | | | | | | | | | | | | | |
| 20-30 11 | 20-29 11 | | | | | | | | | | | | | | | | | |
| 30-40 3 | 30-39 3 | | | | | | | | | | | | | | | | | |
| 16 A | <p>Direct Personal Investigation Vs Indirect Oral Investigation</p> <table><tr><th>Basis</th><th>Direct Personal Investigation</th><th>Indirect Oral Investigation</th></tr><tr><td>Coverage</td><td>This method is suitable for limited area.</td><td>This method can be used to cover a wide area of investigation.</td></tr><tr><td>Originality</td><td>The data collected is original in character.</td><td>This method lacks originality as data is collected from the witnesses.</td></tr><tr><td>Reliability and accuracy</td><td>Information collected by the investigator is more reliable and accurate.</td><td>There is a possibility of unreliable and inaccurate information due to indirect collection of data.</td></tr><tr><td>Cost</td><td>This method is more expensive.</td><td>It is an economical method.</td></tr></table> | Basis | Direct Personal Investigation | Indirect Oral Investigation | Coverage | This method is suitable for limited area. | This method can be used to cover a wide area of investigation. | Originality | The data collected is original in character. | This method lacks originality as data is collected from the witnesses. | Reliability and accuracy | Information collected by the investigator is more reliable and accurate. | There is a possibility of unreliable and inaccurate information due to indirect collection of data. | Cost | This method is more expensive. | It is an economical method. | 3 | |
| Basis | Direct Personal Investigation | Indirect Oral Investigation | | | | | | | | | | | | | | | | |
| Coverage | This method is suitable for limited area. | This method can be used to cover a wide area of investigation. | | | | | | | | | | | | | | | | |
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| Reliability and accuracy | Information collected by the investigator is more reliable and accurate. | There is a possibility of unreliable and inaccurate information due to indirect collection of data. | | | | | | | | | | | | | | | | |
| Cost | This method is more expensive. | It is an economical method. | | | | | | | | | | | | | | | | |
| B | <table><tr><td>Marks</td><td>0-10</td><td>10-20</td><td>20-30</td><td>30-40</td><td>40-50</td></tr><tr><td>Frequency</td><td>4</td><td>8</td><td>10</td><td>6</td><td>2</td></tr></table> <p>Conversion of mid value series into an exclusive series:</p> <p>$L1=M.V-1/2\times i$</p> <p>$L2=M.V+1/2\times i$</p> | Marks | 0-10 | 10-20 | 20-30 | 30-40 | 40-50 | Frequency | 4 | 8 | 10 | 6 | 2 | 3 | | | | |
| Marks | 0-10 | 10-20 | 20-30 | 30-40 | 40-50 | | | | | | | | | | | | | |
| Frequency | 4 | 8 | 10 | 6 | 2 | | | | | | | | | | | | | |
| 17 | <p>A First of all we will make slips of all10 students and put up these slips in a bowl, after shuffling them we will pick up the slips one by one randomly. First 3 slips will be selected as our samples. No Partiality is there as all the students have equal chance to be selected as sample.</p> <p>B When the data are classified on the basis of time period is known as chronological classification:</p> <table><tr><td>Years</td><td>1990</td><td>1991</td><td>1992</td><td>1993</td><td>1994</td></tr><tr><td>Profits of a firm (₹ in lakh)</td><td>10</td><td>12</td><td>15</td><td>14</td><td>17</td></tr></table> | Years | 1990 | 1991 | 1992 | 1993 | 1994 | Profits of a firm (₹ in lakh) | 10 | 12 | 15 | 14 | 17 | 3 3 | | | | |
| Years | 1990 | 1991 | 1992 | 1993 | 1994 | | | | | | | | | | | | | |
| Profits of a firm (₹ in lakh) | 10 | 12 | 15 | 14 | 17 | | | | | | | | | | | | | |



OSDAV Public School, Kaithal
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SET- B

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II. Q. No 1-10 carry 1 mark, Q. No 11-12 carry 3 marks, Q. No 13-15 carry 4 marks, Q. NO 16-17 carry 6 Marks.

Page 5 f 9/ MS:- UT-1(Set A,B)/XI-ECONOMICS

| | | | | | | | | | | | | | | |
|-----------|--|-----------|----|----|----|----|----|-----------|---|---|----|---|---|--------|
| | C) Random sampling is not possible. D) Small samples are required. | | | | | | | | | | | | | |
| 9 | The data collected on the height of a group of students after recording their heights with a measuring tape are..... A) Primary data. B) Continuous data C) Discrete data. D) Secondary data | 1 | | | | | | | | | | | | |
| 10 | Read the following statements carefully and choose the correct alternative from the following:- Statement 1:- Under Spatial classification, data is classified with respect to different periods of time. Statement 2:- Population of Bihar for different years can be given according to chronological classification. Alternatives:- A) Both the statements are true. B) Both the statements are false. C) Statement 1 is true and statement 2 is false. D) Statement 2 is true and statement 1 is false. | 1 | | | | | | | | | | | | |
| 11 | “Statistical methods are no substitutes for common sense”. Illustrate with 2 examples. | 3 | | | | | | | | | | | | |
| 12 | “You have unlimited wants and limited resources to satisfy them.” Explain the statement by giving 2 examples. | 3 | | | | | | | | | | | | |
| 13 | a) Differentiate between Census Method and Sample Method of Data Collection. b) Do you agree that Classified data is better than raw data? Why ? | 2+2 | | | | | | | | | | | | |
| 14 | A) “Aggregates must be expressed numerically.” Explain this feature of Statistics with the help of an example. B) Define the concepts of “Saving” and “Investment”. | 2 1+1 | | | | | | | | | | | | |
| 15 | Why should we study Economics ? Explain in detail. Or Differentiate Exclusive and inclusive series by taking illustrations. | 4 4 | | | | | | | | | | | | |
| 16 | (A) Discuss how you would use the lottery method to select 3 students out of 10 in your class ? (B) What do you mean by Chronological classification of data ? Explain with the help of an illustration. | 3 3 | | | | | | | | | | | | |
| 17 | A) Distinguish between Direct Personal Investigation and Indirect Oral Investigation methods. B) Convert the given series into an exclusive series: <table><tr><td>Mid Value</td><td>5</td><td>15</td><td>25</td><td>35</td><td>45</td></tr><tr><td>Frequency</td><td>4</td><td>8</td><td>10</td><td>6</td><td>2</td></tr></table> | Mid Value | 5 | 15 | 25 | 35 | 45 | Frequency | 4 | 8 | 10 | 6 | 2 | 3 3 |
| Mid Value | 5 | 15 | 25 | 35 | 45 | | | | | | | | | |
| Frequency | 4 | 8 | 10 | 6 | 2 | | | | | | | | | |

Ans. Key with Marking Scheme (May UT, 2025)

XI- Economics

Set B

| Q.No | Answer | Marks |
|------|---|-------|
| 1 | B) Both the statements are false. | 1 |
| 2 | A) Stratified random sampling. | 1 |
| 3 | C) Open end distribution | 1 |
| 4 | D) All of these. | 1 |
| 5 | A) Both assertion and reason are true and reason is the correct explanation of assertion. | 1 |
| 6 | A) 50% | 1 |
| 7 | B) Accuracy is important | 1 |
| 8 | D) Questions using double negatives should be avoided. Or B) Population is non homogeneous. | 1 |

| 9 | A) Primary data | 1 | | | | | | | | | | | | | | | | | | | | | |
|------------------------------|---|---|---------------|-----------------|-------------------|---|---|---------|---|--|-------------|---|---|--------------------------|--|--|-----------------|---|---|------------------------------|---|--|-----|
| 10 | D) Statement 2 is true and statement 1 is false. | 1 | | | | | | | | | | | | | | | | | | | | | |
| 11 | <p>Ans. Statistical data should not be believed blindly as it can be misinterpreted or misused. The statistical data may involve personal biasness or may undergone manipulations. For example, once a family of four persons (husband, wife and two children) set out to cross a river. The father knew the average depth of the river. So, he calculated the average height of his family members. Since the average height of his family members was greater than the average depth of the river, he thought they could cross safely. Consequently some members of the family (children) drowned while crossing the river.</p> <p>In the given case, the fault is not with the statistical method of calculating averages, but with the misuse of average. The Statistics has been be misused by the father as he has drawn wrong conclusions. So, it is rightly said "Statistical methods are no substitute for common sense".</p> | 3 | | | | | | | | | | | | | | | | | | | | | |
| 12 | <p>Ans. Human wants are never ending, i.e. they can never be fully satisfied. As soon as one want is satisfied, another new want emerges. Wants of the people are unlimited and keep on multiplying and cannot be satisfied due to limited resources.</p> <p>Examples:</p> <p>(i) Suppose you have ₹ 20,000 and you want to purchase one computer and a LED TV. With ₹ 20,000 only in hand, you cannot have both. You can either buy computer or LED TV.</p> <p>(ii) Suppose the Government wants to increase production of sugar to satisfy increasing human wants. Now, this is possible only by reducing the production of some other goods as every economy has limited resources.</p> <p>These examples clearly demonstrate a fundamental economic condition: 'As our resources are limited, we are always forced to make choices between alternate commodities'.</p> | 3 | | | | | | | | | | | | | | | | | | | | | |
| 13 | <p>Difference between Census Method and Sampling Method</p> <table border="1"> <thead> <tr> <th>Basis</th><th>Census Method</th><th>Sampling Method</th></tr> </thead> <tbody> <tr> <td>Nature of Enquiry</td><td>Extensive enquiry is conducted as each and every unit of the population is studied.</td><td>Limited enquiry is conducted as only few units of the population are studied.</td></tr> <tr> <td>Economy</td><td>It requires large amount of money, time and labour.</td><td>Relatively less money, time, and labour is required.</td></tr> <tr> <td>Suitability</td><td>It is more suitable if population is heterogeneous in nature.</td><td>It is more suitable if population is homogeneous in nature.</td></tr> <tr> <td>Reliability and Accuracy</td><td>Results are quite reliable and accurate under Census method.</td><td>Under sampling method, results are less reliable and accurate.</td></tr> <tr> <td>Nature of error</td><td>In census method, the only error that may arise in the collection of data is error of bias.</td><td>Sampling method gives rise to error of sampling apart from error of bias.</td></tr> <tr> <td>Organisation and Supervision</td><td>It is very difficult to organise and supervise census method.</td><td>Sampling method is comparatively easy to organise and supervise.</td></tr> </tbody> </table> <p>Ans. Yes, I agree with the statement that classified data is better than raw data. The following points of importance of classification will justify my viewpoint:</p> <ol style="list-style-type: none"> Classified data condenses the raw data into a form suitable for statistical analysis. It removes complexities and highlights the features of the data. It facilitates comparisons and in drawing inferences from the data. It provides information about the mutual relationships among elements of a data set. It helps in statistical analysis by separating elements of the data set into homogeneous groups and hence brings out the points of similarity and dissimilarity. | Basis | Census Method | Sampling Method | Nature of Enquiry | Extensive enquiry is conducted as each and every unit of the population is studied. | Limited enquiry is conducted as only few units of the population are studied. | Economy | It requires large amount of money, time and labour. | Relatively less money, time, and labour is required. | Suitability | It is more suitable if population is heterogeneous in nature. | It is more suitable if population is homogeneous in nature. | Reliability and Accuracy | Results are quite reliable and accurate under Census method. | Under sampling method, results are less reliable and accurate. | Nature of error | In census method, the only error that may arise in the collection of data is error of bias. | Sampling method gives rise to error of sampling apart from error of bias. | Organisation and Supervision | It is very difficult to organise and supervise census method. | Sampling method is comparatively easy to organise and supervise. | 2+2 |
| Basis | Census Method | Sampling Method | | | | | | | | | | | | | | | | | | | | | |
| Nature of Enquiry | Extensive enquiry is conducted as each and every unit of the population is studied. | Limited enquiry is conducted as only few units of the population are studied. | | | | | | | | | | | | | | | | | | | | | |
| Economy | It requires large amount of money, time and labour. | Relatively less money, time, and labour is required. | | | | | | | | | | | | | | | | | | | | | |
| Suitability | It is more suitable if population is heterogeneous in nature. | It is more suitable if population is homogeneous in nature. | | | | | | | | | | | | | | | | | | | | | |
| Reliability and Accuracy | Results are quite reliable and accurate under Census method. | Under sampling method, results are less reliable and accurate. | | | | | | | | | | | | | | | | | | | | | |
| Nature of error | In census method, the only error that may arise in the collection of data is error of bias. | Sampling method gives rise to error of sampling apart from error of bias. | | | | | | | | | | | | | | | | | | | | | |
| Organisation and Supervision | It is very difficult to organise and supervise census method. | Sampling method is comparatively easy to organise and supervise. | | | | | | | | | | | | | | | | | | | | | |
| 14 | A) Aggregates must be expressed in numerical or quantitative form because when data are not given in theoretical form, conclusion cannot be find out. If we say Ram is taller than Shyam, it is not statistics because this information is not given in quantitative form but when we say height of Ram is 5'7" and height of Shyam is 5'5" then it will be statistics because now information is given in quantitative form and we can find out the difference as well as the sum total and average and many other conclusions can be find out. | 2 | | | | | | | | | | | | | | | | | | | | | |

| | <p>B) Saving is that part of income which is not consumed as we know that income is the sum total of consumption and saving so one part of income will not be consumed that is known as saving.</p> <p>Investment means an expenditure done on the purchase of such assets which help in the generation of income.</p> | 1+1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|--|---|-------------------------------|---|--|--|--|--|--|--|------------------------------------|--|---|-------------------------------------|-----------------------------------|------------------------------------|----------------------------------|----------------------------|-------|-------|-------|-------|-----------|---|---|----|---|---|-------------------|
| 15 | <p>We should study Economics because of the following reasons:</p> <p>1 To know about description of an economy</p> <p>2 To know about Economic policies</p> <p>3 To know about the decision making process related to Economic decisions.</p> <p>4 To know about the contribution of different sectors in the economy</p> <p>(Explain all points in detail, any other relevant points will be considered also.)</p> <p>Or</p> <p>Difference between Exclusive and inclusive series:-</p> <table><tr><td>Exclusive Series</td><td>Inclusive series.</td></tr><tr><td>1 It is a series in which upper limit of every class becomes the lower limit of next class.</td><td>1 It is a frequency series in which upper limit will not become the lower limit of next class.</td></tr><tr><td>2 During calculation of frequencies upper limit is excluded.</td><td>2 During calculation of frequencies, both upper and lower limits are included.</td></tr><tr><td>3 Marks Frequency</td><td>3 Marks Frequency</td></tr><tr><td>0-10 5</td><td>0-9 5</td></tr><tr><td>10-20 7</td><td>10-19 7</td></tr><tr><td>20-30 11</td><td>20-29 11</td></tr><tr><td>30-40 3</td><td>30-39 3</td></tr></table> | Exclusive Series | Inclusive series. | 1 It is a series in which upper limit of every class becomes the lower limit of next class. | 1 It is a frequency series in which upper limit will not become the lower limit of next class. | 2 During calculation of frequencies upper limit is excluded. | 2 During calculation of frequencies, both upper and lower limits are included. | 3 Marks Frequency | 3 Marks Frequency | 0-10 5 | 0-9 5 | 10-20 7 | 10-19 7 | 20-30 11 | 20-29 11 | 30-40 3 | 30-39 3 | <p>4</p> <p>4</p> <p>4</p> | | | | | | | | | | | |
| Exclusive Series | Inclusive series. | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 It is a series in which upper limit of every class becomes the lower limit of next class. | 1 It is a frequency series in which upper limit will not become the lower limit of next class. | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 During calculation of frequencies upper limit is excluded. | 2 During calculation of frequencies, both upper and lower limits are included. | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 Marks Frequency | 3 Marks Frequency | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0-10 5 | 0-9 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10-20 7 | 10-19 7 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 20-30 11 | 20-29 11 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 30-40 3 | 30-39 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 16 | <p>Discuss how you would use the lottery method to select 3 students out of 10 in your class?</p> <p>The following steps will be needed to select 3 students out of 10 students:</p> <p>(i) First of all, names of all the 10 students will be written on separate slips of paper of identical size and shape.</p> <p>(ii) These slips are then folded and placed in a bowl and mixed thoroughly.</p> <p>(iii) A blindfolded or an unbiased person will be asked to select three slips at random, one by one.</p> <p>(iv) The names of the three students that are written on the three slips drawn, are considered as selected.</p> <p>Does the lottery method always give you a random sample? Explain.</p> <p>B When the data are classified on the basis of time period is known as chronological classification:</p> <table><tr><td>Years</td><td>1990</td><td>1991</td><td>1992</td><td>1993</td><td>1994</td></tr><tr><td>Profits of a firm (₹ in lakh)</td><td>10</td><td>12</td><td>15</td><td>14</td><td>17</td></tr></table> | Years | 1990 | 1991 | 1992 | 1993 | 1994 | Profits of a firm (₹ in lakh) | 10 | 12 | 15 | 14 | 17 | <p>3</p> <p>3</p> | | | | | | | | | | | | | | | |
| Years | 1990 | 1991 | 1992 | 1993 | 1994 | | | | | | | | | | | | | | | | | | | | | | | | |
| Profits of a firm (₹ in lakh) | 10 | 12 | 15 | 14 | 17 | | | | | | | | | | | | | | | | | | | | | | | | |
| 17 | <p>Direct Personal Investigation Vs Indirect Oral Investigation</p> <table><tr><th>Basis</th><th>Direct Personal Investigation</th><th>Indirect Oral Investigation</th></tr><tr><td>Coverage</td><td>This method is suitable for limited area.</td><td>This method can be used to cover a wide area of investigation.</td></tr><tr><td>Originality</td><td>The data collected is original in character.</td><td>This method lacks originality as data is collected from the witnesses.</td></tr><tr><td>Reliability and accuracy</td><td>Information collected by the investigator is more reliable and accurate.</td><td>There is a possibility of unreliable and inaccurate information due to indirect collection of data.</td></tr><tr><td>Cost</td><td>This method is more expensive.</td><td>It is an economical method.</td></tr></table> <table><tr><td>Marks</td><td>0-10</td><td>10-20</td><td>20-30</td><td>30-40</td><td>40-50</td></tr><tr><td>Frequency</td><td>4</td><td>8</td><td>10</td><td>6</td><td>2</td></tr></table> <p>Conversion of mid value series into an exclusive series:</p> <p>$L1=M.V-1/2\times i$</p> <p>$L2=M.V+1/2\times i$</p> | Basis | Direct Personal Investigation | Indirect Oral Investigation | Coverage | This method is suitable for limited area. | This method can be used to cover a wide area of investigation. | Originality | The data collected is original in character. | This method lacks originality as data is collected from the witnesses. | Reliability and accuracy | Information collected by the investigator is more reliable and accurate. | There is a possibility of unreliable and inaccurate information due to indirect collection of data. | Cost | This method is more expensive. | It is an economical method. | Marks | 0-10 | 10-20 | 20-30 | 30-40 | 40-50 | Frequency | 4 | 8 | 10 | 6 | 2 | <p>3</p> <p>3</p> |
| Basis | Direct Personal Investigation | Indirect Oral Investigation | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Coverage | This method is suitable for limited area. | This method can be used to cover a wide area of investigation. | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Originality | The data collected is original in character. | This method lacks originality as data is collected from the witnesses. | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Reliability and accuracy | Information collected by the investigator is more reliable and accurate. | There is a possibility of unreliable and inaccurate information due to indirect collection of data. | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Cost | This method is more expensive. | It is an economical method. | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Marks | 0-10 | 10-20 | 20-30 | 30-40 | 40-50 | | | | | | | | | | | | | | | | | | | | | | | | |
| Frequency | 4 | 8 | 10 | 6 | 2 | | | | | | | | | | | | | | | | | | | | | | | | |

