

**DEHRADUN PUBLIC SCHOOL
ASSIGNMENT (2022-23)
SUBJECT - ECONOMICS (030)
CLASS-XI**

**STATISTICS FOR ECONOMICS
CHAPTER:- 1 (INTRODUCTION)**

Answer the following questions

- Q1.** Scarcity of resources applies to all:
a. Individuals
b. Organizations
c. Countries
d. All of these
- Q2.** is the process through which consumers satisfy their wants by the use of goods & services.
a. Consumption
b. Production
c. Distribution
d. None of these
- Q3.** Statistics as a plural noun indicates:
a. Statistical Methods
b. Descriptive Statistics
c. Statistical Data
d. Inductive Statistics
- Q4.** In Sense, statistics means a collection of numerical facts.
a. Plural
b. Qualitative
c. Singular
d. None of these
- Q5.**is the root of all Economic Problems.
a. Consumption
b. Distribution
c. Scarcity
d. All of these
- Q6.** Which of the following is/are limitations of Statistics?
a. Statistics can lead to misleading conclusion
b. Statistical data should be homogeneous
c. Both
d. None of these
- Q7.** Statistical data are affected by..... cause/causes.
a. a single
b. multiple
c. Both
d. All of these
- Q8.** Statistics facilitates:
a. Comparison of Data
b. Disposal of Data
c. Both
d. None of these
- Q9.** Which activity is the base of all production activities?
a. Production
b. Consumption
c. Investment
d. Exchange
- Q10.** From the following statement given in column I and column II, Choose the correct pair of statement:

Column I	Column II
A. Economic forecasting	1. Unlimited
B. Economic Activities	2. Importance of statistics
C. Homogeneous data	3. Limitation of statistics
D. Human Wants	4. Activities undertaken to earn a living

- | | |
|------------------|------------------|
| A B C D | A B C D |
| a. 3 4 2 1 | b. 4 2 3 1 |
| c. 3 1 4 2 | d. 2 1 3 4 |

- Q11.** called economics the study of man in the ordinary business of life.

Q12. A is a person who buys goods to satisfy his/her wants.

Q13. A person who works for some other person is called

Q14. Resources are in supply and also have

Q15. Read the following statements Assertion (A) and Reason (R). Choose one of the correct alternatives given below:

Assertion (A): Statistics is considered both art as well as science, due to its nature and use.

Reason (R): Statistics has a multi disciplinary approach as it is universally accepted.

- a. Both Assertion (A) & Reason (R) are true and Reason (R) is the correct explanation of Assertion.
- b. Both Assertion (A) & Reason (R) are true, but Reason (R) 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

Q16. Read the following statement Assertion (A) and Reason (R). Choose one of the correct alternatives given below:

Assertion (A): Statistical results are correct only on an average due to the presence of personal bias.

Reason (R): Statistics helps in enhancing human knowledge by using its method of interpretation of Primary data.

- 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 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

Q17. Case based questions

Read the following case study paragraph carefully & answer the questions on the basis of the same. Statistics in Plural sense refers to collection of numerical facts where as in singular sense, it refers to all Statistical methods. Statistics plays an important role in economic policies as well as in economics laws like law of demand, law of supply.

Government uses various statistical information related to macroeconomics issues like poverty, unemployment, etc. However it is open to criticism as it does not deal with individual facts and results are true only on an average. Various tools are used to analyse their different components like central tendency, measures of variations, correlations and index number.

i. Arrange the following stage of Statistics-

- i. Organisation
- ii. Collection
- iii. Interpretation
- iv. Presentation

Choose from the options below

- a. i., ii., iv., and iii.
- b. ii., i., iv. and iii.
- c. Both
- d. None of these

ii. Which of the following is/are known as positional averages?

- a. Mean
- b. Median
- c. Mode
- d. Both b. and c.

iii. tool is used to calculate Mode graphically.

- a. Histogram
- b. More than Ogive
- c. Pie chart
- d. None of these

Q18. 'Economics is about making choices in the presence of scarcity.' Explain the statement.

Q19. Distinguish between quantitative and qualitative data.

Q20. In what way is statistics useful to economist?

Q21. Explain importance of Statistics in Economics.

Q22. Define economics as clearly as you can.

Q23. 'Economics is a study of economic activities' Explain.

Q24. Describe in brief the scope of statistics.

Q25. Explain with illustrations the importance of statistics in economics.

CHAPTER:- 2 (COLLECTION OF DATA)

Answer the following questions

- Q1.** Primary data are
 a. Original data
 b. Already collected
 c. Organished data
 d. None of these
- Q2.** Data collected on religion from the census reports are:
 a. Secondary Data
 b. Primary Data
 c. Sample Data
 d. Either (a) or (b)
- Q3** Census method is
 a. Economical
 b. Suitable where the area of enquiry is wide
 c. Suitable where units of the universe are homogeneous
 d. Suitable where all units of the universe are not homogeneous
- Q4.** Data collected from 'The Times of India' is an example of:
 a. Primary Data
 b. Secondary Data
 c. Census
 d. None of these
- Q5.** The data collected on the height of a group of students after recording their heights with measuring tape are:
 a. Primary Data
 b. Continuous Data
 c. Discrete Data
 d. Secondary Data
- Q7.** From the following statement given in column I and column II, Choose the correct pair of statement:

Column I	Column II
A. Census method	1. 2011
B. Sampling method	2. 1950
C. NSSO	3. Covers every individual unit of the universe
D. Latest Population census in India	4. Selection of a representative sample

- | A | B | C | D | A | B | C | D |
|------|---|---|---|------|---|---|---|
| a. 3 | 4 | 2 | 1 | b. 4 | 2 | 3 | 1 |
| c. 3 | 1 | 4 | 2 | d. 2 | 1 | 3 | 4 |

- Q8.** A survey that includes all units of population is known as survey.
- Q9.** Error which occur due to non-response from the respondents is an example of
- Q10.** Quota sampling is a sampling.
- Q11.** Data obtained from published or unpublished sources is known as Data.
- Q12. Read the following statement Assertion (A) and Reason (R). Choose one of the correct alternatives given below:**

Assertion (A): As the sample size increases variable tends to become close to census values.

Reason (R): Samples are always collected from different groups of heterogeneous data randomly.

- 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)

CHAPTER:- 3 (ORGANISATION OF DATA)

Answer the following questions

- Q1.** Annual income of person is:
 a. A continuous variable
 b. A discrete variable
 c. An attribute
 d. Either (b) or (c)
- Q2.** Tally marks determine:
 a. Class width
 b. Class boundary
 c. Class limit
 d. Class frequency
- Q3.** The class interval of the continuous grouped data: 0-5; 6-10; 11-15; 16-20; 21-25 is:
 a. 4
 b. 5
 c. 4.5
 d. None of these
- Q4.** Choose the incorrect statement from the given below
 a. In a continuous frequency distribution, class interval should be equal
 b. In an exclusive continuous frequency distribution, upper limit of the class is excluded from the class
 c. In an inclusive continuous frequency distribution, upper limit of the class is excluded from the class
 d. In an open-ended continuous frequency distribution, extreme class limits are missing
- Q5.** The class Mark's of a distribution are 26,31,36,41,46 and 51. Then the first class-interval is:
 a. 23.5-28.5
 b. 23-28
 c. 22.5-27.5
 d. None of these
- Q6.** Drinking habit of a person is:
 a. An attribute
 b. A discrete variable
 c. A variable
 d. None of these
- Q7.** Frequency of a variable is always:
 a. A fraction
 b. In percentage
 c. An integer
 d. None of these
- Q8.** The value exactly at the middle of a class interval is called:
 a. Class marks
 b. Mid-value
 c. Class limit
 d. None of these
- Q9.** A continuous variable can take:
 a. Integral values
 b. Discrete values
 c. Both
 d. None of these
- Q10.** From the following statement given in column I and column II, Choose the correct pair of statement :

Column I	Column II
A. Spatial	1. Classification of data based on time
B. Quantitative	2. Classification of data based on qualities
C. Chronological	3. Classification of data based on numerical values
D. Qualitative	4. Classification of data based on location

- | | |
|------------|------------|
| A B C D | A B C D |
| a. 3 4 2 1 | b. 4 2 3 1 |
| b. 3 1 4 2 | d. 2 1 3 4 |

- Q11.** The most important aspect of organising data is to it.
- Q12.** are the two ends of a class.
- Q13.** A..... shows the distribution of different values of a variable in different classes along with their corresponding frequencies.

Q14. The classification of data for a discrete variable is known as..... .

Q15. Read the following statements Assertion (A) and Reason (R) Choose one of the correct alternatives given below:

Assertion (A): Classification facilitates grouping of data based upon similarities and dissimilarities

Reason (R): Classification enables a person to compare various forms of data.

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

Q16. Read the following statements Assertion (A) and Reason (R). Choose one of the correct alternatives given below:

Assertion (A): Bi-variate frequency distribution is a form of exclusive frequency distribution.

Reason (R): A form of presentation capable of representing more than two variables at a time is considered as bi-variate.

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

Q17. Prepare a frequency distribution from the following data.

Mid -values	5	15	25	35	45	55
frequency	3	9	16	11	7	4

Q18. Thirty students in an examination obtained marks as under. Prepare a discrete frequency distribution. (Use tally bars also)

15	16	20	16	15	18	19	13	14	19
13	17	18	16	17	19	18	15	14	13
16	18	13	14	15	14	15	13	17	14

Q19. Construct a frequency table of inclusive series with a class interval of 4.

20	25	24	23	48	35	37	38	24	21
23	33	43	46	32	31	29	37	25	22
38	37	36	32	21	22	45	29	26	31

Q20. Convert the following simple frequency distribution into cumulative frequency distribution by using 'less than 'as well as 'more than' method.

Marks	0-10	10-20	20-30	30-40	40-50	50-60
No. of students	11	15	20	25	15	10

Q21. What do you mean by 'discrete series'? Explain various stages of its construction with the help of Illustrations.

Q22. Define 'continuous series'. Explain with illustration the various stages of its construction.

Q23. Prepare a frequency table according to class intervals from the following information.

- 7 students get less than 10 marks
- 18 students get less than 20 marks
- 38 students get less than 30 marks
- 63 students get less than 40 marks
- 70 students get less than 50 marks

Q24. Do you agree that classified data is better than raw data? Why?

Q25. What is a variable? Distinguish between a discrete and continuous variable.

Q26. Convert the following into simple frequency distribution.

Marks (more than)	No. of students
0	60
10	57
20	50
30	32
40	12

Q27. Convert the following into simple frequency distribution.

Marks (less than)	No. of students
10	2
20	15
30	33
40	50
50	60
60	63
70	65

Q28. What is the frequency distribution? What are the main points underlying the construction of a frequency distribution?

CHAPTER:- 4,5 & 6 (PRESENTATION OF DATA)

Answer the following questions

Q1. The most accurate mode of data presentation is:

- a. Diagrammatic method
- b. Tabulation
- c. Textual presentation
- d. None of these

- Q2.** Simple Table is also known as :
- a. First Order Table
b. One- Way Table
c. Treble Table
d. None of these
- Q3.**is placed just below the title.
- a. Source
b. Table Number
c. Head Note
d. Foot note
- Q4.** If a household spends 70% of his income on food, then degree measure of an angle in the pie diagram will be:
- a. 200
b. 210
c. 252
d. 70
- Q5.** One dimensional diagrams are also known as:
- a. Pie Diagrams
b. Histogram
c. Bar Diagrams
d. None of these
- Q6.** Which of the following statements is true?
- a. Breadth of the bar is different
b. Bars may be drawn either vertically or horizontally
c. Bars need to be equidistant from each other
d. All of these
- Q7.** There are quadrants in a graph paper.
- a. 1
b. 2
c. 3
d. 4
- Q8.** Frequency Polygon is prepared in case of :
- a. Individual Series
b. Discrete Series
c. Continuous Series
d. None of these
- Q9.** Table presents characteristics.
- a. 2
b. 3
c. More than 2
d. 4
- Q10.** Table contains data, which was initially collected from the primary source.
- a. Summary
b. Derivative
c. Reference
d. Original
- Q11.** gives an indication of the contents of the table.
- a. Head note
b. Title
c. Caption
d. Footnote
- Q12.** Stubs are the of the rows.
- a. parts
b. designations
c. tool
d. All of these
- Q13.** The most common graphical presentation of quantitative data is a:
- a. Histogram
b. Bar graph
c. Relative frequency
d. Pie chart
- Q14.** There are methods of presentation of data.
- a. two
b. three
c. four
d. None of these
- Q15.** is the process of presenting the data in the form of columns and rows.
- a. Presentation
b. Classification

c. Organisation

d. Tabulation

Q16. From the following statement given in column I and column II , Choose the correct pair of statement :

Column I	Column II
A. Textual presentation	1. Data is presented with the help of pictures
B. Tabular presentation	2. Data is presented in rows and columns
C. Diagrammatic presentation	3 Data is presented in the form of text
D. Pictorial presentation	4. Data is presented with the help of graphs

A B C D

A B C D

a. 3 2 1 4

b. 4 2 3 1

c. 3 1 4 2

d. 2 1 3 4

Q17. From the following statement given in column I and column II , Choose the correct pair of statement :

Column I	Column II
A. Deviation bar diagram	1. Presentation of data with very wide variation
B. Broken bar diagram	2. each component is shown in percentage
C. Percentage bar diagram	3 Suitable for showing net quantities
D. Limitation of diagram	4. Limited information

A B C D

A B C D

a. 3 1 2 4

b. 4 2 3 1

c. 3 1 4 2

d. 2 1 3 4

Q18. Read the following statements Assertion (A) and Reason (R) . Choose one of the correct alternatives given below:

Assertion (A): Tabulation of data precedes classification.

Reason (R): In classification, data is arranged based upon varying attributes of the statistics.

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

b. Both Assertion (A) & Reason (R) are true, but Reason (R) 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

Q19. Read the following statements Assertion (A) and Reason (R). Choose one of the correct alternatives given below:

Assertion (A): A proper proportion between the vertical axis and horizontal axis of the diagram should be marked.

Reason (R): Mathematically, dependent variables are measured on the Y-axis and independent variable on X-axis.

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

b. Both Assertion (A) & Reason (R) are true, but Reason (R) 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

Q20. Present the following information in a suitable tabular form.

i. In 2000, out of total 3800 workers in factory, 2550 members of a trade union. The number of women workers employed was 700 out of which 500 did not belong to any trade union.

ii. In 2010, the number of union workers was 2850 of which 2500 were men. The number of non union workers was 1350, among which 550 were women.

Q21. Why is tabular presentation better than textual presentation?

Q22. Using the following table make (a) multiple bar diagram (b) percentage bar diagram (c) sub-divided bar diagram.

Student	A	B	C
Marks in Economics	40	35	30
Marks in English	30	15	25

Q23. Present the following data by a deviation bar diagram, showing the difference between sales and cost of the firm.

Year	Sales	Cost
2008-09	115	100
2009-10	140	115
2010-11	145	155
2011-12	150	140
2012-13	160	145
2013-14	170	165

Q24. Using the following table of number of students of different years, make

- i. Multiple bar diagram
- ii. Percentage bar diagram
- iii. Sub-divided bar diagram.

Faculty	2011-12	2012-13	2013-14
Arts	600	550	500
Science	400	500	600
Commerce	200	250	300

Q25. What is text presentation?

Q26. Make a histogram and frequency polygon from the following data.

Variable	10-20	20-30	30-40	40-50	50-60	60-70
Frequency	12	30	35	65	45	25

Q27. Make a frequency curve without using histogram.

Marks	0-10	10-20	20-30	30-40	40-50	50-60	60-70
Frequency	14	12	17	13	13	9	10

Q28. Make a pie diagram using the following information.

Items	Agriculture	Industry	Health & Education	Miscellaneous
Expenditure	4200	1500	1000	500

Q29. Make less than and more than ogive from the following data in a single graph.

Marks	0-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40
No. of students	4	6	10	10	25	22	18	5

Q30. Draw less than and more than ogive from the following information separately.

Weekly Wages	0-20	20-40	40-60	60-80	80-100
Number of workers	10	20	40	20	10

Q31. Present the following information in form of two variable arithmetic line graph.

Month	Jan	Feb	Mar	Apr	May	Jun
Production	5	7.5	5	10	12.5	15
Sales	7.5	10	7.5	12.5	15	17.5

CHAPTER:- 7 (MEASURES OF CENTRAL TENDENCY)

Answer the following questions

- Q1.** Average value of given variables is known as:
 a. Median
 b. Mean
 c. Both
 d. None of these
- Q2.** Measures of central tendency are known as:
 a. Difference
 b. Averages
 c. Both
 d. None of these
- Q3.** Mean of 0.3, 5, 6, 7, 9, 12, 0.6 is:
 a. 4.9
 b. 5.7
 c. 5.6
 d. None of these
- Q4.** If there are two groups containing 30 and 20 observations and having 50 and 60 as arithmetic means, then the combined arithmetic mean is:
 a. 51
 b. 54
 c. 53
 d. 52
- Q5.** The mean of 12 numbers is 24. If 5 is added in every number, the new mean is:
 a. 25
 b. 84
 c. 29
 d. None of these
- Q6.** The most commonly used measure of Central tendency is
 a. Arithmetic Mean
 b. Median
 c. Mode
 d. All of these
- Q7.** The total of the deviation of a set of observation from their mean is always:
 a. 0
 b. 1
 c. (-1)
 d. (-2)
- Q8.** In..... arithmetic mean, all values are assumed to be equally important.
 a. Simple
 b. Weighted
 c. Combined
 d. None of these
- Q9.** Mean should be:

- a. Simple
- b. Based upon all items
- c. Both
- d. None of these

Q10. Find the mean of first 8 odd number.

- a. 8
- b. 10
- c. 15
- d. 12

Q11. Median is a average.

Q12. Extreme value has effect on mode.

Q13. The sum of the values of all observation divided by their number given us _____.

Q14. The formula of calculating arithmetic mean by direct method under discrete series is _____

Q15. Arithmetic mean is affected by _____ values in the series.

Q16. From the following statement given in column I and column II, Choose the correct pair of statement :

Column I	Column II
A. Median	i. Most fashionable value
B. Arithmetic Mean	ii. Affected by extreme values
C. Mode	iii. Positional average

- | | |
|---|---|
| <ul style="list-style-type: none"> A B C a. i. ii. iii. c. iii. ii. i. | <ul style="list-style-type: none"> A B C b. ii. iii. i. d. i. iii. ii. |
|---|---|

Q17. Read the following statement Assertion (A) and Reason (R). Choose one of the correct Alternatives given below:

Assertion (A): Arithmetic mean is a positional average, which can be calculated using graphical presentation methods.

Reason (R): Histograms and cumulative graphs are used to locate positional averages.

- 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

Q18. Read the following statement Assertion (A) and Reason (R). Choose one of the correct alternatives given below:

Assertion (A): Median is not dependent on all the data values in a dataset.

Reason (R): The distance between the median and the rest of the values is less than the distance from any other point.

- 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.

Q19. Case based questions

Read the following case study paragraph carefully & answer the questions on the basis of the same.

Mr. Viaan's is head of human resources in ABC Limited. His job is to see if his company's

two items 180 & 90 were wrongly taken as 100 & 10. What will be the correct value of mean. Will these values change effect median?

Q28. Find the value of mean when mode is 20 & median is 24.

Q29. Find mean, median & mode:

Size (below)	5	10	15	20	25	30	35
No. of students	1	3	13	17	27	36	38

Q30. Find the missing frequency if $N=100$ & $M=30$

Marks	0-10	10-20	20-30	30-40	40-50	50-60
No. of Students	10	?	25	30	?	10

Q31. Mean of 5 observations is 7. Later on it was found that two values 4 & 8 were wrongly taken instead of 5 & 9. Find out the correct mean?

Q32. Find the weighted arithmetic mean

X	10	20	30	40	50
W	2	3	4	6	5

Q33. Find median & mode graphically

Weekly Wages	10	20	30	40	50
Number of workers	10	20	40	20	10

Q34. Find median and mode graphically.

Variable	10-20	20-30	30-40	40-50	50-60	60-70
Frequency	12	30	35	65	45	25

CHAPTER:-9 (CORRELATION)

Answer the following questions

Q1. A scatter diagram

- a. Is a statistical test
- b. Must be liner
- c. Must be curvilinear
- d. Is a graph of x and y values

Q2. Scatter diagram helps us to

- a. Find the nature of correlation between two variable
- b. Obtain the mathematical relationship between two variable
- c. Compute the extent of correlation between two variable
- d. Both (a)and(c)

Q3. Karl Pearson's coefficient is defined from

- a. Ungrouped data
- b. Grouped data
- c. Both (a) and (b)
- d. None of these

Q4. There is a high degree of negative correlation between 'overweight' and 'life expectancy'. A Correlation coefficient consistent with the above statement is

- a. $r = 0.80$
- b. $r = 0.20$
- c. $r = -0.20$
- d. $r = -0.80$

Q5. Identify the correct sequence of alternatives given in column II by matching them with respective

terms in Column I

Column I	Column II
A. Simple correlation coefficient	1. $r = -1$
B. Rank correlation	2. Karl Pearson
C. Upper limit of correlation coefficient	3. Spearman
D. Lower limit of correlation coefficient	4. $r = +1$

- | | | | | | | | |
|------|---|---|---|------|---|---|---|
| A | B | C | D | A | B | C | D |
| a. 3 | 1 | 2 | 4 | b. 4 | 2 | 3 | 1 |
| c. 3 | 1 | 4 | 2 | d. 2 | 3 | 4 | 1 |

- Q6.** _____ is a non-mathematical method of correlation.
- Q7.** Formula of measuring Spearman's Rank Correlation is _____
- Q8.** Formula of calculating coefficient of correlation by direct method is _____
- Q9.** _____ offers a graphic expression of the direction and degree of correlation
- Q10. Read the following statement Assertion (A) and Reason (R). Choose one of the correct alternatives given below:**

Assertion (A): Quantitative method of calculating correlation is given by Karl Pearson

Reason (R): Karl Pearson's coefficient of correlation is generally written as 'y'

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

- Q11. Read the following statement Assertion (A) and Reason (R). Choose one of the correct Alternatives given below:**

Assertion (A): Karl Pearson formula applies only to those series that comes out from the actual average

Reason (R): The value of the coefficient of correlation can vary between + 1 and -1

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

- Q12.** Define Correlation.

- Q13.** Explain degrees of correlation.

- Q14.** Why is short-cut method convenient for the calculation of Karl Pearson's coefficient of correlation?

- Q15.** Calculate Coefficient of correlation by using Karl Pearson's method:

Husband(age)	23	27	28	29	30	31	33	35	36
Wife(age)	18	20	22	27	29	27	29	28	29

- Q16.** Find out rank difference correlation of X & Y:

X	80	78	75	75	58	67	60	59
Y	12	13	14	14	14	16	15	17

Q17. Calculate rank difference correlation:

Teaching methods	I	II	III	IV	V	VI	VII
Rank of A students	2	1	5	3	4	7	6
Rank of B students	1	3	2	4	7	5	6

Q18. Calculate coefficient of correlation:

X	10	6	9	10	12	13	11	9
Y	9	4	6	9	11	13	8	4

Q19. Deviation of two series is shown. Find coefficient of correlation:

X	+5	-4	-2	+20	-10	0	+3	0	-15	-5
Y	+5	-12	-7	+25	-10	-3	0	+2	-9	-15

Q20. What is a scatter diagram? How does it help in determining the form of relationship between two variables X and Y?

Q21. What are the properties of coefficient of correlation?

Q22. What are the merits and demerits of Karl Pearson's coefficient of correlation?

Q23. Find the coefficient of rank correlation:

Judge X	46	56	39	45	54	58	36	40
Judge Y	30	60	40	50	70	70	30	50

Q24. Calculate Karl Pearson's coefficient of correlation:

Age group	20-25	25-30	30-35	35-40	40-45	45-50
% of players	40	45	28	20	15	5

CHAPTER:- 10 (INDEX NUMBERS)

Answer the following questions

Q1. The base year in an index number is taken:

- a. 100
- b. 0
- c. 1
- d. None of these

Q2. P_0 in an index number indicates.

- a. Price of the current year
- b. Quantity of the current year
- c. Price of the base year
- d. Average price of base year and current year

Q3. Which of the following is used as weighted under Paasche method?

- a. Quantity of current year
- b. Quantity of base year

- c. Quantity of both base year and current year d. None of these
- Q4.** Rate of inflation in India is calculated on the basis of
- a. Consumer price Index b. Wholesale Price Index
- c. Sensex d. Index of Agricultural Production
- Q5.** Identify the correct statement.
- a. Index numbers measure absolute change b. In Q_0 indicates price of the base year
- c. Fisher Index number is an ideal index number d. None of these
- Q6.** Identify the correct sequence of alternatives given in column II by matching them with respective terms in Column I

Column I	Column II
A. Current year price	1. q_0
B. Base year price	2. q_1
C. Current year quantity	3. P_1
D. Base year quantity	4. P_0

- | | | | | | | | |
|------|---|---|---|------|---|---|---|
| A | B | C | D | A | B | C | D |
| a. 3 | 1 | 2 | 4 | b. 4 | 2 | 3 | 1 |
| c. 3 | 4 | 2 | 1 | d. 2 | 3 | 4 | 1 |
- Q7.** Laspeyre used quantity of _____ as weight.
- Q8.** q_1 indicates the quantity of _____ .
- Q9.** An _____ is a statistical device for measuring changes in the magnitude of a group of related variables.
- Q10.** _____ measures the changes in the physical volume of production.
- Q11.** The value of index number in the base year is _____ .
- Q12.** P_0 indicates _____ price.
- Q13. Read the following statement Assertion (A) and Reason (R). Choose one of the correct alternatives given below:**
- Assertion (A):** Index numbers are statistical devices
- Reason (R):** Index numbers measures only changes in the price level over a period of time.
- 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
- Q14.** Write a short note on inflation & index number.
- Q15.** From the following data find out price index number by fisher's ideal formula for 2002 based on 2001.

Items	Price (2001)	Quantity (2001)	Price (2002)	Quantity (2002)
A	12	100	20	120
B	04	200	04	240
C	08	120	12	150
D	20	60	24	50

- Q16.** Compute Paasche's and Laspeyre's Index Number

- Q11.** is the situation when demand for a good exceeds its supply.
- a. Excess
b. Scarcity
c. Both
d. None of these
- Q12.** The causes of economic problem include:
- a. Human wants are Unlimited
b. Economic resources are limited
c. Resources have alternative uses
d. All of these
- Q13.** The problem of what to produce is related with:
- a. Types of good to be produced
b. Types of production technique to be used
c. quantity of goods to be produced
d. Both (a) and (c)
- Q14.** From the following statement given in column I and column II, Choose the correct pair of statement :

Column I	Column II
A. Economics	1. Theory of price
B. Microeconomics	2. Theory of multiplier
C. Macroeconomics	3. Scarcity and choices
D. Economic Problem	4. Human wants are Unlimited

- | | |
|------------------|------------------|
| A B C D | A B C D |
| a. 3 4 2 1 | b. 4 2 3 1 |
| c. 3 1 2 4 | d. 2 1 3 4 |
- Q15.** Read the following statement Assertion (A) and Reason (R). Choose one of the correct alternatives given below:
- Assertion (A):** Scarcity of resources is a major cause of all economic problems in a country
Reason (R): Human wants are unlimited while the resources have alternative uses as well.
- 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
- Q16.** “ Make in India “ campaign would shift the PPC to the right . How?
- Q17.** Define the subject matter of Micro Economics.
- Q18.** What will likely be impact of large scale inflow of foreign capital in India on PPC?
- Q19.** You plan to attend the NCC camp for two months .If you do, you won't be able to take your part time job that pays ₹ 10,000 for two months and you won't be able to live at home for free. The cost of your NCC Camp includes:
- Q20.** Living expenses ₹ 2,000, costume and stationery expenses ₹ 3,000 and study materials ₹ 1,000. Calculate opportunity cost of joining the NCC Camp.
- Q21.** Why marginal opportunity cost must rise as resources are shifted from Use-1 to Use-2, even when given resources are fully and efficiently utilized?
- Q22.** Distinguish between microeconomics and macroeconomics.
- Q23.** Discuss the central problem of a economy.
- Q24.** Explain the concept of opportunity cost with the help of an example.
- Q25.** Explain the concept of production possibility curve with the help of a hypothetical table.
- Q26.** What is production possibility curve? Show the central problem of an economy with the help of this curve.

CHAPTER:- 2 (CONSUMER'S EQUILIBIRUM)

Answer the following questions

- Q1.** According to the Law of diminishing marginal utility, satisfaction obtained from consumption of each successive unit:
 a. Increases
 b. Decreases
 c. Remains same
 d. None of these
- Q2.** When we add up utility derived from consumption of all units of the commodities, we get:
 a. TU
 b. Initial utility
 c. Marginal Utility
 d. None of these
- Q3.** Total Utility is at the point of satiety:
 a. Minimum
 b. Maximum
 c. Zero
 d. None of these
- Q4.** Cardinality means utility can be:
 a. Measured
 b. Ranked
 c. Not measured
 d. None of these
- Q5.** For consumer's equilibrium to be stable, the requirement is :
 a. Constant MRS
 b. Increasing MRS
 c. Diminishing MRS
 d. None of these
- Q6.** Exceptions to law of diminishing marginal utility include:
 a. Reading
 b. Money
 c. Acquiring knowledge
 d. All of these
- Q7.** The points outside the budget line of two goods (X) and (Y) are:
 a. unavailable points
 b. unattainable points
 c. attainable points
 d. All of these
- Q8.** From the following statement given in column I and column II, Choose the correct pair of statement :

Column I	Column II
A. Law of DMU	1. Slope of IC
B. MRS	2. Fundamental Psychological Law
C. Indifference Map	3. Point of satiety
D. Zero Marginal Utility	4. Family of indifference curves

- | | |
|------------------|------------------|
| A B C D | A B C D |
| a. 3 2 1 4 | b. 4 2 3 1 |
| c. 3 1 4 2 | d. 2 1 4 3 |
- Q9.** curve is a downward sloping curve cutting the X-axis.
- Q10.** The ratio of exchange between two goods on an Indifference Curve analysis is shown by the..... .
- Q11. Read the following statement Assertion (A) and Reason (R). Choose one of the correct alternatives given below:**
Assertion (A): Consumer's utility is the point of 'Satiety' where he attains maximum gain with given resources.
Reason (R): A rational consumer always prefers consumption of more units of goods as compared to less units.
 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

Q12. Read the following statements Assertion (A) and Reason (R) . Choose one of the correct alternatives given below:

Assertion (A): Different persons derive different levels of utility from consumption of similar types of commodities.

Reason (R): The want satisfying power of any commodity is known as its utility, which is measured in 'utils' under cardinal approach.

- a. Both Assertion (A) & Reason (R) are true and Reason (R) is the correct explanation of Assertion.
- b. Both Assertion (A) & Reason (R) are true, but Reason (R) 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

Q13. Case based questions

Read the following case study paragraph carefully and answer the questions on the basis of the same.

Mohan and Sohan are two friends and room partner. Mohan enjoys Burgers and Pizzas very much while Sohan enjoys Indian cuisines. Sohan is a smoker, he smokes when he is alone while Mohan is non-smoker. Sohan always prefers consuming one particular brand of Cigarettes in every situation. After their classes they usually have ice-cream from a nearby outlet, which both of them likes equally.

- i. Identify the characteristics of Utility as mentioned in the above situation.
 - a. Utility is subjective
 - b. Utility is not same as usefulness
 - c. Utility depends upon urgency of wants
 - d. Both (a) and (b)
- ii. The elasticity of demand for Cigarettes in case of Sohan is
 - a. Elastic
 - b. Inelastic
 - c. Both
 - d. None of these
- iii. The unit of utility under cardinal approach is known as
 - a. TU
 - b. MU
 - c. Utils
 - d. None of these
- iv. As both Sohan and Mohan consumes ice-cream regularly, how much will they consume if its available for free?
 - a. Till marginal utility remains positive
 - b. Till marginal utility becomes negative
 - c. Till marginal utility becomes zero
 - d. It cannot be determined from the above situation

Q14. State the condition of consumer equilibrium.

Q15. Ice cream sell for ₹ 30. Lakshmi who loves ice cream has already eaten three. Her MU from eating three ice creams is 90. Suppose further that for the MU of ₹ 1 is ₹ 3. Should she eat more ice cream or should she stop?

Q16. If IC is not convex at the point of equilibrium, the consumer can't reach the point of stable equilibrium. Comment.

Q17. A consumers budget is ₹ 40. He is buying Good 1 and Good 2. Price of Good 1 is ₹ 8 and Good 2

is ₹ 10 per unit:

a. Draw a budget line

b. Is consumer can purchase 5 units of Good 1 and 5 units of Good 2?

c. Show effect on budget line due to falling price of Good 1 from ₹ 8 to ₹ 4 per unit.

Q18. Explain Hicks approach of consumer's equilibrium.

Q19. Why do two indifference curves never cut each other?

Q20. A consumer has only two goods. Explain his equilibrium with the help of utility approach.

Q21. Explain the three properties of indifference curve.

Q22. Define a budget line. Explain why is it a straight line?

Q23. Define consumer's equilibrium. Explain its conditions under indifference curve analysis.

CHAPTER:- 3 (THEORY OF DEMAND)

Answer the following questions

Q1. Which of the following is an example of substitute goods?

a. Tea and Coffee

b. Coke and Pepsi

c. Car and Petrol

d. Tea and Sugar

Q2. Market demand curve is obtained by summation of the individual demand curves.

a. Vertical

b. Horizontal

c. Both

d. None of these

Q3. An increase in real income of a consumer induces him to buy more of a commodity whose prices has fallen. This is known as:

a. Inducement Effect

b. Substitution Effect

c. Income Effect

d. Utility Effect

Q4. The slope of demand curve is generally:

a. Negative

b. Positive

c. Constant

d. None of these

Q5. When two or more goods are demanded simultaneously, it is known as:

a. Joint Demand

b. Alternate Demand

c. Direct Demand

d. Composite Demand

Q6. Demand of a commodity depends upon..... .

a. price

b. income

c. price of related good

d. All of these

Q7. Giffen paradox is an exception of

a. Law of Demand

b. Law of Supply

c. Law of Production

d. Law of utility

Q8. If price of sugar increases, the demand for tea will..... .

a. decrease

b. increase

c. not affected

d. None of these

Q9. From the following statement given in column I and column II, Choose the correct pair of statement :

Column I	Column II
A. Movement along demand curve	1. Decrease in demand
B. Shift in demand curve	2. Extension in demand
C. Normal goods	3. Negative income effect

D. Inferior goods	4. Positive income effect
-------------------	---------------------------

A	B	C	D	A	B	C	D
a. 3	4	2	1	c. 4	2	3	1
b. 3	1	4	2	d. 2	1	4	3

- Q10.** An increase in the price of Will increase the demand for tea.
- Q11.** In case of, a fall in the price of one causes increase in demand for the other.
- Q12.** is shown by rightward shift in demand curve.
- Q13.** Is shown by leftward shift in demand curve.
- Q14.** There exists direct price demand relation in case of
- Q15. Read the following statement Assertion (A) and Reason (R). Choose one of the correct alternatives given below:**

Assertion (A): Demand curve shows the inverse relation between own price of a good and its quantity demanded.

Reason (R): Law of diminishing marginal utility advocates that consumer gets lesser satisfaction for each additional units consumed

- 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

Q16. Case based questions

Read the following case study paragraph carefully and answer the questions on the basis of the same.

Year 2020 has witnessed many ups and downs, there were natural calamities around the globe, political tensions and what not. The outbreak of corona virus pandemic had led to worldwide lockdown for several months. The world almost stopped during April, 2020. Indian is also not untouched with the impact of pandemic. Many people lost their jobs during this time, specially migrant workers. Government announced relief packages but still it didn't boost enough demand.

- i. What will be the impact on the consumption demand of necessity goods during the pandemic?
 - a. Demand curve shifts to the right
 - b. Demand curve shifts to the left
 - c. No change in demand curve
 - d. None of these
- ii. People loose their jobs during the nationwide lockdown, how will this impact the demand curve for inferior goods?
 - a. Right ward shift in demand curve
 - b. Left ward shift in demand curve
 - c. Both
 - d. None of these
- iii. How should the demand be affected due to the relief package announced by the government?
 - a. Increase in demand
 - b. Decrease in demand
 - c. Both
 - d. None of these
- iv. Demand for automobile industry decreased in spite of decreasing price during pandemic. This is referred to as
 - a. Exception of law of demand
 - b. Contraction of law of demand
 - c. Increase in demand
 - d. None of these

Q17. Explain the effect of following on demand for a good.

- i. Rise in income of its buyer

ii. Fall in income of its buyer

- Q18.** The price of eggs rises in winter and yet it is observed that the demand of eggs is rising. Do it mean that the demand curve of eggs is upwards sloping?
- Q19.** “Giffen goods must be inferior goods, while inferior goods, may or may not be Giffen Goods”. Comment.
- Q20.** Why should diamond be priced so high and water be priced so low even when water is essential to sustain life, while diamonds are not?
- Q21.** How is the demand for commodity affected by change in the price of related goods? Explain with the help of diagram?
- Q22.** Explain with the help of diagrams the effect of the following changes on the demand of a commodity.
- i. A rise in the price of complementary goods.
 - ii. A rise in the price of substitute goods.
- Q23.** Distinguish between a change in quantity demanded and a change in demand of a commodity.
- Q24.** Explain the effect of the following on the demand for a good:
- i. Rise in the income
 - ii. Rise in the prices of related goods
- Q25.** What is the demand function? Explain

CHAPTER:- 4(PRICE ELASTICITY OF DEMAND)

Answer the following questions

- Q1.** If there is no change in demand for commodity 'x', even after rise in its price, then its demand is:
- a. Perfectly Elastic
 - b. Perfectly Inelastic
 - c. Less Elastic
 - d. Highly Elastic
- Q2.** Which of the following will have elastic demand?
- a. Matchbox
 - b. Coke
 - c. Medicines
 - d. Air Conditioners
- Q3.** With increase in price of burgers by 22%, its demand falls by 25%. This indicates that Demand for burgers is:
- a. Elastic
 - b. Inelastic
 - c. Unitary Elastic
 - d. Perfectly Elastic
- Q4.** A 5% fall in the price of X leads to a 10% rise in its demand. In case of Good Y, a 2% rise in price leads to a 6% fall in its demand. In the given case, is more elastic.
- a. X
 - b. Y
 - c. Both X and Y are equally elastic
 - d. Both X and Y are inelastic
- Q5.** If a good takes up significant share of consumers budget, it will be:
- a. Less elastic
 - b. Highly elastic
 - c. Unitary elastic
 - d. Perfectly elastic
- Q6.** Which of the following influence price elasticity of demand?
- a. Nature of the commodity
 - b. Income Level
 - c. Availability of substitutes
 - d. All of these
- Q7.** If the percentage increase in the quantity demanded of a commodity is less than the percentage fall in its price, then elasticity of demand is:
- a. Greater than 1
 - b. Equal to 1
 - c. Less than 1
 - d. Equal to zero

- i. The elasticity of demand of salt is.....
 - a. elastic
 - b. inelastic
 - c. Both
 - d. None of these
- ii. Which of the following is not a determinant of Elasticity of Demand?
 - a. Availability of substitutes
 - b. Nature of the good
 - c. Number of buyers in the market
 - d. None of these
- iii. Why demand for toothpaste is elastic in nature?
 - a. It is not a necessity of life
 - b. It has a competitive market
 - c. Both
 - d. None of these

Q15. Explain price elasticity demand.

Q16. How is the price elasticity of demand of a commodity affected by the number of its substitutes? Explain

Q17. What kind of good will have elastic demand? Explain

Q18. Consider the demand curve $D(p)=10-3p$. What is the elasticity at price 5/3?

Q19. When price of a good rises from ₹ 20 per unit to ₹ 23 per unit, its demand falls by 30%. Calculate price elasticity of demand.

Q20. For a commodity $\Delta P/P=-0.2$, and elasticity of demand $=-0.6$. Find % change in quantity demanded.

Q21. A consumer spends ₹1500 on a good priced at ₹10 per unit. When price rises by 20%, the consumer continues to spend ₹1500 on the good. Calculate price elasticity of demand by % method?

Q22. On December 2014, the following news was printed in the economic times “Narrow petrol diesel price gap in higher price of diesel cars alter the buyers Preference” Explain this statement linking it to the concept of elasticity of demand?

CHAPTER:-5 (PRODUCTION FUNCTION)

Answer the following questions

- Q1.** Which of the following explains the short-run production function?
 - a. Law of demand
 - b. Law of Variable Proportion
 - c. Returns to scale
 - d. Elasticity of demand
- Q2.** Long run production function is related to
 - a. Law of demand
 - b. Law of increasing returns
 - c. Law of returns to sale
 - d. Elasticity of demand
- Q3.** In which stage of production a rational producer likes to operate in short-run production?
 - a. First stage
 - b. Second stage
 - c. Third stage
 - d. None of these
- Q4.** When MP increase
 - a. TP is at its maximum point
 - b. TP increases at a diminishing rate
 - c. TP increases at an increasing rate
 - d. None of these
- Q5.** Law of variable proportions is related to
 - a. Short run
 - b. Long run
 - c. Both
 - d. Very long run
- Q6.** From the following statement given in column I and column II, Choose the correct pair of statement :

Column I	Column II
A. Fixed factor	1. Technology can be changed
B. Variable factor	2. Technology remain same
C. Short-run production	3. Quantity can not be changed in short-run

D. Long-run production				4. Quantity can be changed in short-run			
A	B	C	D	A	B	C	D
a. 3	4	2	1	c. 4	3	2	1
b. 3	1	4	2	d. 2	1	4	3

Q7. Case based questions

Read the following case study and answer the question on the basis of the same.

Farmers in our country are mostly small and marginal. They produce for self-consumption and hardly have any surplus crop to sell in market. These farmers produce with the help of their family member. Also due to limited land holding at times, there are more labour working compared with what is actually required, this leads to disguised unemployment. Use of primitive tools and techniques further reduces the ability of these families to increase production.

i. Output of rise in India is at one stage which was less than it's domestic demand. However it is actually not. Do you think it means that the law of diminishing returns has failed in Indian Agriculture?

ii. Complete the following table:

Unit of labour	TP	AP	MP
0	-	-	0
1	-	-	10
2	-	-	12
3	-	-	14
4	-	-	14
5	-	-	12

Q8. Read the following statements Assertion (A) and Reason (R) . Choose one of the correct alternatives given below

Assertion (A): In the first phase of the Law of Variable proportion, TP rises at an increasing rate and MP increases.

Reason (R): In the third phase of the Law of variable proportion, TP falls and MP become negative.

- a. Both Assertion (A) & Reason (R) are true and Reason (R) is the correct explanation of Assertion.
- b. Both Assertion (A) & Reason (R) are true, but Reason (R) 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

Q9. Short-term production function is known as _____ .

Q10. Returns to scale is related to _____ .

Q11. Cost incurred in per unit production is _____ .

Q12. Increase in income from a unit of production is called _____ .

Q13. What does the Law of Variable Proportions show? State the behavior of TP according to this law.

Q14. Let the production function of a firm be: $Q=5L^{1/2}K^{1/2}$ Find out the maximum possible output that the firm can produce with 100 units of L and 100 units of K.

i. What makes long run different from short run?

ii. Why MP Curve cuts AP Curve from its top?

iii. What is meant by diminishing returns to a factor? Why does it occur?

Q15. Explain the Law of Variable Proportions with the help of total and marginal physical product curves.

Q16. Define short-run production function.

Q17. The following table gives the MP of factor. It is also known that the TP at zero level of employment is zero. Determine its TP and AP schedule.

Units of labour	1	2	3	4	5	6
MP	20	22	18	16	14	8

Q18. The following table gives the AP of factor. It is also known that the TP at zero level of employment is zero. Determine its TP and MP schedule.

Units of labour	1	2	3	4	5	6
AP	50	48	45	42	39	35

Q19. Identify the three phases of the Law of Variable proportion on the basis of the given schedule. Give reason.

Variable of Input(Units)	1	2	3	4	5
Total Product (Units)	3	7	10	12	11

CHAPTER:- 6 (CONCEPTS OF COST)

Answer the following questions

- Q1.** If a firm produces zero output in the short period, then
 a. Total Cost will be zero
 b. Variable Cost will be zero
 c. Fixed Cost will be zero
 d. None of these
- Q2.** Salary of permanent staff is
 a. Variable and implicit cost
 b. Fixed and implicit cost
 c. Fixed and explicit cost
 d. None of these
- Q3.** Which of the following is an explicit cost item?
 a. Investment of personal saving by a producer
 b. Hired labour
 c. Management of business by its owner
 d. Rent of own land
- Q4.** Normal profit earned by a firm are included in
 a. Variable cost
 b. Explicit cost
 c. Fixed cost
 d. Implicit cost
- Q5.** When AC is rising, MC is
 a. Equal to AC
 b. Constant
 c. Less than AC
 d. More than AC
- Q6.** From the following statement given in column I and column II, Choose the correct pair of statement :

Column I	Column II
A. AFC	1. Expenditure incurred by the producer
B. Short Run Cost	2. Cost that as firm incurs to employ
C. Fixed Costs	3. Costs cannot be changed
D. Variable Costs	4. Per unit fixed cost of production

- | | |
|--|--|
| <p>A B C D</p> <p>a. 3 4 2 1</p> <p>c. 3 1 4 2</p> | <p>A B C D</p> <p>b. 4 3 2 1</p> <p>d. 2 1 3 4</p> |
|--|--|
- Q7.** $TC/Q - TFC/Q = \dots\dots\dots$
- Q8.** When average cost falls with an increase in output, marginal cost always remains..... than average cost.
- Q9.** Total fixed Cost
- Q10.** $\dots\dots /Q - AVC = AFC$

Q11. Average fixed cost

Q12. Case based questions

Read the following case study and answer the question no. on the basis of the same.

Fixed Costs are expenditures that do not change regardless of the level production at least not in the short term. Whether you produce a lot or a little, the fixed costs are same. One example is the rent of a factory or a retail space. Once you sign the lease, the rent is same.

Variable Costs, on the other hand, are incurred in the act of producing the more you produce, the greater is the variable cost, since producing a greater quantity of a good service typically requires more workers or more working hour. Variable cost would also include cost of raw material used.

- i. State the cost which remains constant with change in output.
- ii. Give two example of fixed cost.
- iii. Define variable cost.

Q13. Read the following statements Assertion (A) and Reason (R). Choose one of the correct alternatives given below:

Assertion (A): Total Variable Cost (TVC) can be changed in the short run.

Reason (R): TVC increases initially at a decreasing rate, then at a constant rate and finally, at an increasing rate.

- a. Both Assertion (A) & Reason (R) are true and Reason (R) is the correct explanation of Assertion.
- b. Both Assertion (A) & Reason (R) are true, but Reason (R) 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

Q14. Explain relationship between MC and AC.

Q15. The distance between AVC and AFC curve tends to reduce as output increases. Is it true?

Q16. Why does average fixed cost falls as output rises?

Q17. Can MC be calculated both from TC or TVC? Explain.

Q18. State the relation between total cost and marginal cost.

Q19. The distance between AVC and AFC curve tends to reduce as output increases. Is it true?

Q20. Why does average fixed cost falls as output rises?

Q21. A firm is producing 20 units. At this level of output, ATC and AVC are respectively equal to ₹ 40 and ₹ 37. Find out the total fixed cost of the firm.

Q22. Explain the meaning of cost in economics.

Q23. Complete the following tables:

i.

Output	AFC	TFC	TVC	MC
0	-	50	-	-
1	-	-	-	10
2	-	-	18	-
3	-	-	-	6
4	-	-	28	-
5	-	-	-	2

ii.

Output	ATC	AVC	MC	TFC
1	54	30	30	-
2	-	24	-	-
3	-	-	24	-
4	33	-	-	-

Q24. Complete the following tables:

i.

Output	AFC	TFC	TVC	MC
0	-	50	-	-
1	-	-	-	10
2	-	-	18	-
3	-	-	-	6
4	-	-	28	-
5	-	-	-	2

ii.

Output	ATC	AVC	MC	TFC
1	54	30	30	-
2	-	24	-	-
3	-	-	24	-
4	33	-	-	-

Q25. Why does average fixed cost falls as output rises?

Q26. A firm is producing 20 units. At this level of output, ATC and AVC are respectively equal to ₹ 40 and ₹ 37. Find out the total fixed cost of the firm.

Q27. Explain the meaning of cost in economics.

CHAPTER:- 7 (CONCEPTS OF REVENUE)

Answer the following questions

- Q1.** When price remains the same with rise in output. AR curve is a:
- Vertical straight line parallel to Y axis
 - Horizontal straight line parallel to X axis
 - Downward sloping
 - None of these
- Q2.** Suppose total revenue is rising at constant rate as more and more units of a commodity are sold, marginal revenue would be:
- Greater than average revenue
 - Equal to average revenue
 - Less than average revenue
 - Rising
- Q3.** When TR is maximum:
- AR is maximum
 - MR is maximum
 - AR is zero
 - MR is zero
- Q4.** If TR of 5 units of output is ₹ 80 and of 8 units is ₹ 110, then MR of 8th unit of output is:
- ₹ 22
 - ₹ 16
 - ₹ 8
 - ₹ 10
- Q5.** When average revenue is Rs 20 and output is equal to 50 units, total revenue will be:
- ₹ 100
 - ₹ 600

c. ₹ 450

d. ₹ 1000

Q6. From the following statement given in column I and column II, Choose the correct pair of statement :

Column I	Column II
A. Total Revenue	1. Quantity cost Price
B. Average Revenue	2. $TR_n - TR_{n-1}$
C. Marginal Revenue	3. Change in total Revenue/Change in number of unit

- | | | | | | |
|------|---|---|------|---|---|
| A | B | C | A | B | C |
| a. 1 | 2 | 3 | b. 4 | 3 | 2 |
| c. 3 | 1 | 4 | d. 2 | 1 | 3 |

Q7. Read the following statements Assertion (A) and Reason (R) . Choose one of the correct alternatives given below:

Assertion (A): Total Revenue is at its maximum point when marginal revenue is zero.

Reason (R): When every additional unit is sold at the same price, Marginal Revenue = Average Revenue.

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

Q8. Case based questions

Read the following case study and answer the question on the basis of the same.

Revenue is an important aspect of producer’s behavior. It indicates a firm’s receipts from sales. In other words, it also indicates the demand for firm’s goods and services. More sales usually indicate more revenue but higher sales depend upon the form of market and elasticity of demand. Firms have better control over price when demand is inelastic.

- Explain the relationship between AR and MR under perfect competition. Use a diagram.
- Find a fall in market demand for the commodity when TR of the monopoly firm reduces from rupees 5000 to rupees 500, AR increases from rupees 50 to rupees 90.

Q9. If all the units of output are sold at the same price, how will it affect AR and MR ?

Q10. Can AR curve lie in the negative axis?

Q11. Why is average revenue always equal to price?

Q12. How is MR derived from TR?

Q13. What is revenue in microeconomics?

Q14. Read the following information carefully and answer the given question:

Output (units)	Price	Total Revenue	Marginal Revenue
1	10	10	10
2	--	18	8
3	8	24	--
4	7	--	4

- At 2nd unit of output sold, average revenue will be
- At 3rd unit of output sold, marginal revenue will be
- Which concept of revenue is called price?

iv. At 4th unit of output sold, total revenue will be..... .

Q15. How do changes in marginal revenue affect total revenue?

Q16. Explain the AR and MR curve of a firm under the Monopoly and Monopolistic competition.

Q17. Complete the following table:

i.

Output	Price	TR	MR
1	-	18	-
-	16	-	14
3	-	42	-
4	12	-	-
-	10	-	2

ii.

Output	AR	TR	MR
1	20	-	-
2	-	36	-
3	-	-	9
4	13	52	-
5	-	-	-2

Q18. Draw AR and MR for a firm when in a perfectly competitive market, price of the product reduces from ₹12 to ₹10 per unit?

Q19. Under what market conditions does average revenue always equal marginal revenue? Explain.

Q20. Suppose, a book seller can sell 10 books at the price of ₹ 200 per book. His marginal value (MR) from the 11th book is ₹ 255. At what price did he sell the 11th book?

Q21. When sale of a unit increased from 20 unit to 35 units, the total revenue increased by ₹ 1200. Calculate marginal revenue.

CHAPTER:- 8(PRODUCER'S EQUILIBRIUM)

Answer the following questions

Q1. Normal profit is treated as a part of implicit cost because

- It is imputed cost of entrepreneurial services by the owner
- It is fixed cost
- It is variable cost
- It is social cost

Q2. At a particular level of output, a producer finds that $MC < MR$. What will a producer do to maximize his profits?

- Producer will increase the production
- Producer will reduce his production
- No change as already getting maximum profit
- None of the above

Q3. _____ refers to a situation when a firm has no intention to expand or contract the output.

- Producer's Equilibrium
- Market Equilibrium
- Consumer's Equilibrium
- None

Q4. Producer is not at equilibrium when $MC > MR$ because:

- Profits can be increased by producing more
- Benefit is less than cost
- Both (a) and (b)
- None of these

Q5. Producer's equilibrium refers to stage of that output level when:

- Firm earns maximum profits
- Firm bears minimum losses
- Firm has no inclination to expand or contract the output
- All of these

- Q6.** In case of perfect competition, a firm is in equilibrium when:
 a. MC = MR
 b. MC cuts MR from below
 c. MC is rising when it cuts MR
 d. All of these
- Q7.** From the following statement given in column I and column II, Choose the correct pair of statement :

Column I	Column II
A. Profit	1. MC = MR and MC greater than MR after MC = MR output level
B. When Price remains constant	2. When price Falls with rise in output
C. At Producer's Equilibrium	3. Excess of receipts from the sale of goods over the expenditure incurred on producing them
D. Price is more than MC at the equilibrium level	4. Price is equal to MC at the equilibrium level

- | | | | | | | | |
|------|---|---|---|------|---|---|---|
| A | B | C | D | A | B | C | D |
| a. 1 | 2 | 3 | 4 | b. 4 | 3 | 2 | 1 |
| c. 3 | 4 | 1 | 2 | d. 2 | 4 | 1 | 3 |

- Q8.** Read the following statements Assertion (A) and Reason (R) . Choose one of the correct alternatives given below:

Assertion (A): The state of the Producer's Equilibrium either reflects maximum profits or minimum losses.

Reason (R): When $MC > MR$ after equilibrium, it means producing more will lead to rise in profits.

- a. Both Assertion (A) & Reason (R) are true and Reason (R) is the correct explanation of Assertion.
 b. Both Assertion (A) & Reason (R) are true, but Reason (R) 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

- Q9.** Explain producer's equilibrium with the help of numerical example when MR is falling.

- Q10.** Why should MC and MR be equal at equilibrium output?

- Q11.** What is the difference between break even point and shut down point?

- Q12.** What is the difference between equilibrium output and optimum output?

- Q13.** When does a firm in equilibrium earn normal profit?

- Q14.** On the basis of the data given below, determine the level of output at which the producer will be in equilibrium. Use the marginal cost-marginal revenue approach.

Output (Units)	1	2	3	4	5	6	7
Average Revenue(₹)	7	7	7	7	7	7	7
Total cost (₹)	8	15	22	28	33	40	48

- Q15.** From the following information about a firm, find the firm's equilibrium output in terms of marginal cost and marginal revenue. Give reason. Also find profit at this output.

Output (Units)	1	2	3	4	5
Total Revenue(₹)	6	12	18	24	30
Total cost (₹)	7	13	17	23	31

CHAPTER:- 9 (THEORY OF SUPPLY)

Answer the following questions

- Q1.** Which of following does not cause shift of supply curve of a good?
 a. Price of input
 b. Price of the good
 c. Goods & service tax
 d. Subsidy

- i. How is the impact of Covid-19 will affect the supply of the goods of a firm? Use a diagram.
 ii. Explain the concept of change in supply.
- Q12.** How does technological progress affect the supply curve of a firm?
Q13. How does the imposition of unit tax affect the supply curve of a firm?
Q14. Explain the difference between change in supply and change in quantity supplied.
Q15. The market price of a good changes from ₹5 to ₹20. As a result quantity supplied by a firm increases by 15 units. The price elasticity of firm's supply curve is 0.5. Find the initial and the final output level of the firm.
Q16. At the market price of ₹10, a firm supply 4 units of output. The market price increases to ₹30. The price elasticity of firm's supply is 1.25. What quantity will the firm supply at new price?
Q17. A firm earns a revenue of ₹50 when the market price of a good is ₹10. The market price increases to ₹15 and the firm now earn a revenue of ₹150. What is the price elasticity of firm's supply curve?
Q18. The price elasticity of supply of good X is half the price elasticity of supply of Good Y. A 10% rise in the price of good Y results in a rise in its supply from 400 units to 520 units. Calculate the percentage change in quantity supplied of good X when its price falls from ₹ 10 to ₹ 8 per unit.
Q19. Define price elasticity of supply. Explain the percentage method for measuring price elasticity of supply.
Q20. The price elasticity of supply of a good is 2. If the percentage change in its price is 5%, find the percentage change in its quantity supplied?
Q21. Define supply. Distinguish between Supply and Stock.

CHAPTER:- 10(MAIN FORMS OF MARKET)

Answer the following questions

- Q1.** A firm under perfect competition is a:
 a. Price taker
 b. Price leader
 c. Price maker
 d. None of these
- Q2.** A firm under perfect competition can sell ----- amount of its output at the prevailing price:
 a. Limited
 b. Any
 c. Controlled
 d. None of these
- Q3.** A firms demand curve under perfect competition is:
 a. Perfectly elastic
 b. Perfectly inelastic
 c. Elastic
 d. Inelastic
- Q4.** Under perfect competition a firm can earn:
 a. Normal profit in long run
 b. Super normal profit in long run
 c. Sub-normal profit in long run
 d. All of these
- Q5.** In case of perfect competition:
 a. A firm is able to charge higher price
 b. A firm is able to charge uniform price
 c. A firm is able to sell any amount at the prevailing price
 d. Both (b) & (c)
- Q6.** From the following statement given in column I and column II, Choose the correct pair of statement:

Column I	Column II
A. Oligopoly	1. Homogenous products
B. Perfect competition	2. Product differentiation

C. Monopoly	3. Mutual interdependence
D. Monopolistic competition	4. Price maker

- | | | | | | | | |
|------|---|---|---|------|---|---|---|
| A | B | C | D | A | B | C | D |
| a. 1 | 2 | 3 | 4 | b. 4 | 3 | 2 | 1 |
| c. 3 | 1 | 4 | 2 | d. 2 | 4 | 1 | 3 |

- Q7.** A monopolist firm has full control over _____ but no control over _____
- Q8.** Demand curve of a firm is _____ under monopolistic competition.
- Q9.** The number of firms is _____ in an oligopoly market.
- Q10.** Uniform price is found in _____ market.
- Q11. Read the following statements Assertion (A) and Reason (R) . Choose one of the correct alternatives given below:**
Assertion (A): Under perfect competition, revenue from each additional unit is equal to price.
Reason (R): Price is given and it remains constant at all levels of output.
- Both Assertion (A) & Reason (R) are true and Reason (R) is the correct explanation of Assertion.
 - Both Assertion (A) & Reason (R) are true, but Reason (R) is not the correct explanation of Assertion.
 - Assertion (A) is true, but Reason (R) is false
 - Assertion (A) is false, but Reason (R) is true

Q12. Case based questions

Read the following case study and answer the question on the basis of the same.

Under perfect competition, there are a large number of seller selling homogenous product. Each seller sells quite an insignificant portion of total price in the market. Both buyers and sellers do not have any trade union or association. The price of the commodity under perfect competition is determined by the forces of demand and supply of the product. Every seller accepts the price as determined by the market. No individual firm can influence this price. It has to decide how much quantity of the commodity it wants to sell. It is because of this, that the seller under perfect competition is a price taker.

- Explain the implications of freedom of entry and exit of firms under perfect completions.
 - A perfectly competitive firm is a price taker and industry the price maker. Comment.
- Q13.** Define perfect competition.
- Q14.** What is implication of homogeneous product under perfect competition?
- Q15.** Why there are no selling cost in perfect competition?
- Q16.** What is the shape of revenue curve under perfect competition?
- Q17.** State any two features of perfect competition.
- Q18.** Define perfect competition. Explain the various features of perfect competition.
- Q19.** Explain why new firms can easily enter the industry under perfect competition.
- Q20.** What do you mean by price floor?
- Q21.** State three sources of leftward shift of demand curve.
- Q22.** What is meant by a product being perfectly homogeneous? What is its implication for the price charged by producers in the market?

CHAPTER:- 11(MARKET EQUILIBRIUM)

Answer the following questions

- Q1.** In the situation of market equilibrium:
- Market demand = Market supply
 - Market demand > Market supply

- c. Assertion (A) is true, but Reason (R) is false
- d. Assertion (A) is false, but Reason (R) is true

Q15. Case based questions

Read the following case study and answer the question on the basis of the same.

Based on the recommendation of the Commission for Agriculture Costs and Prices (CACP), the Department of Agriculture and Co-operation, Government of India, declares Minimum Support Price (MSP) The MSP System was started in 1966-67 for Wheat and was expanded further to include other essential food crops, Which was then sold to the poor under subsidized rates under PDS. The Production Cost is one of the main factors to determine the MSP and the CACP considers all the cost in comprehensive manner.

- i. On which agency’s recommendation minimum support price is declared?
- ii. State the term for “Selling essential food items to poor at subsidized price”.
- iii. Under which policy, does minimum support price fall?

Q16. What is meant by excess supply of the product?

Q17. How is price affected by increase in supply?

Q18. What is meant by price floor?

Q19. How is the price of a commodity affected when its demand increase less than supply?

Q20. What is buffer stock?

Q21. Read the following hypothetical information carefully and answer the given question:

Items	Quantity
Equation of demand curve of commodity X	$Q_d = 400 - 2p$
Equation of supply curve commodity X	$Q_s = 100 + 4p$
New equation of supply curve of commodity X after the change in input price	$Q_s = 160 + 4p$

- i. What will be equilibrium price in initial case?
- ii. What will be equilibrium quantity in initial case?
- iii. What will be new equilibrium price after change in input price?
- iv. What will be equilibrium quantity after change in input price?

Q22. Market for good is in equilibrium. What is the effect on equilibrium price and quantity if the proportionate increase in market demand is greater than increase in market supply? Use diagram.

Q23. How is equilibrium price and equilibrium quantity is affected due to increase in the number of firms?

Q24. Distinguish between price ceiling and price floor.

Q25. How does an increase in demand of a commodity affect its equilibrium price and equilibrium quantity? Explain with the help of a diagram.

Q26. Explain the meaning and need for Maximum Price Ceiling.

Q27. Explain the effect of equilibrium price when price of input increases.