

Economics

Time allowed: 3 hours

Maximum Marks: 80

General Instructions:

- This question paper contains two parts:
Part A - Statistics (40 marks)
Part B - Micro Economic (40 marks)
- Marks for questions are indicated against each question.
- Question No. 1-7 and Question No. 16 – 22 are 1 mark questions and are to be answered in one word/sentence.
- Question No. 8-10 and Question No. 23 – 25 are 3 marks questions and are to be answered in 60 - 80 words each.
- Question No. 11-13 and Question No. 26 – 28 are 4 marks questions and are to be answered in 80-100 words each.
- Question No. 14-15 and Question No. 29 – 30 are 6 marks questions and are to be answered in 100-150 words each.

Questions

Q	PART - A (STATISTICS)	Marks
1	<p>The standard deviation of 100 workers in a factory was ₹400. If the wages of each worker are by ₹100, the standard deviation is:</p> <p>(a) 175 (b) 200 (c) 380 (d) 400</p> <p align="center">OR</p> <p>_____ is the Square Root of the Arithmetic Average of the squared of the deviations measured from the mean.</p>	1
2	<p>Fill in the blanks:</p> <p>_____ activities are concerned with production, distribution and consumption of goods and services which are not available for free.</p>	1
3	<p>A _____ is drawn on the basis of upper limits and increasing frequencies, whereas _____ is drawn on the basis of lower limits and declining frequencies.</p> <p>(a) More than; Less than</p>	1

	(b) Total frequency; histogram (c) Less than; two dimensional (d) Less than; more than	
4	Cost of living index is also known as (a) Weighted index (b) Consumer price index (c) Price index (d) Agricultural production index	1
5	Which of the following is the formula of the quantity index number of the unweighted simple aggregative method? (a) $q_{01} = \frac{\sum q_1}{\sum q_0} \times 100$ (b) $q_{01} = \frac{\sum q_1}{\sum q_1} \times 100$ (c) $q_{01} = \frac{\sum q_0}{\sum q_1} \times 100$ (d) $q_{01} = \frac{\sum p_1}{\sum q_0} \times 100$	1
6	True or False: Very high degree of negative correlation is signed by - 0.9.	1
7	A statistical investigation in which the data is collected from each and every element of the population, it is known as _____ method.	1
8	Differentiate between primary data and secondary data.	3
9	What is meant by arithmetic mean? What is the formula to calculate arithmetic mean in discrete series by assumed mean method?	3

	<p>Or</p> <p>From the given information, calculate the arithmetic mean by direct method:</p> <table><tr><td>Workers</td><td>A</td><td>B</td><td>C</td><td>D</td><td>E</td><td>F</td></tr><tr><td>Daily workers (₹)</td><td>110</td><td>130</td><td>180</td><td>200</td><td>120</td><td>160</td></tr></table>	Workers	A	B	C	D	E	F	Daily workers (₹)	110	130	180	200	120	160					
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10	<p>Construct a pie diagram to represent the following data about percentage break-up of the cost of construction of a house in Mumbai.</p> <table><tr><td>Items</td><td>% Expenditure</td></tr><tr><td>Steel</td><td>20</td></tr><tr><td>Bricks</td><td>15</td></tr><tr><td>Timber</td><td>25</td></tr><tr><td>Cement</td><td>10</td></tr><tr><td>Labour</td><td>30</td></tr></table>	Items	% Expenditure	Steel	20	Bricks	15	Timber	25	Cement	10	Labour	30	3						
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11	<p>Find out the mode of the following marks obtained by 15 students in a class by discrete series.</p> <table><tr><td>Marks: 8 12 10 14 18 16 20 8 14 12 10 16 14 14 18</td></tr></table>	Marks: 8 12 10 14 18 16 20 8 14 12 10 16 14 14 18	4																	
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12	<p>The arithmetic mean of a series of 40 items was calculated by a student as ₹280. But while calculating it an item ₹130 was misread as ₹180. Find the correct arithmetic mean.</p>	4																		
13	<p>From the following data calculate the median:</p> <table><tr><td>15</td><td>12</td><td>18</td><td>20</td><td>40</td><td>10</td></tr><tr><td>35</td><td>28</td><td>50</td><td>48</td><td>22</td><td>15</td></tr><tr><td>12</td><td>24</td><td>30</td><td>25</td><td>33</td><td>36</td></tr></table>	15	12	18	20	40	10	35	28	50	48	22	15	12	24	30	25	33	36	4
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14	<p>Calculate the standard deviation by direct method from the following data:</p> <table><tr><td>Marks</td><td>0 - 4</td><td>4 - 8</td><td>8 - 12</td><td>12 - 16</td></tr><tr><td>No. of students</td><td>8</td><td>16</td><td>4</td><td>2</td></tr></table>	Marks	0 - 4	4 - 8	8 - 12	12 - 16	No. of students	8	16	4	2	6								
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15	Construct price index number of 2019 from the following data by: (a) Laspeyre's method, and (b) Fisher's method.	6																													
	<table><tr><th rowspan="2">Commodities</th><th colspan="2">2017 Base Year</th><th colspan="2">2018 Current Year</th></tr><tr><th>Price</th><th>Quantity</th><th>Price</th><th>Quantity</th></tr><tr><td>A</td><td>30</td><td>50</td><td>34</td><td>90</td></tr><tr><td>B</td><td>26</td><td>20</td><td>30</td><td>40</td></tr><tr><td>C</td><td>22</td><td>30</td><td>22</td><td>50</td></tr><tr><td>D</td><td>18</td><td>10</td><td>22</td><td>30</td></tr></table>	Commodities	2017 Base Year		2018 Current Year		Price	Quantity	Price	Quantity	A	30	50	34	90	B	26	20	30	40	C	22	30	22	50	D	18	10	22	30	
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16	_____ is the study of making choices. It tells us how one can make optimum utilization of scarce resources to satisfy unlimited wants and desires.	1																													
17	Why is the selling cost not incurred in perfect competition?	1																													
18	_____ refers to the rate at which a consumer is willing to sacrifice one good for an additional unit of another good. (a) Indifference map (b) Indifference curve (c) Marginal Rate of substitution (d) Budget set OR _____ refers to all those combinations of two goods that offer the consumer the same level of satisfaction. It is the term used for all the bundles on the indifference curve only.	1																													
19	True or false Monotonic preferences imply that a consumer always prefers the combination, which has either more of both goods or more of at least one good and no less of the other good as compared to another bundle.	1																													
20	What is the shape of the average revenue curve (demand curve) in perfect competition?	1																													
21	If MR is parallel to the x- axis, what does it say about the price and the demand?	1																													
22	When demand for the commodity changes due to change in any factor other than the own price of the commodity, it is known as _____.	1																													
23	Discuss the concept of opportunity cost with the help of an example? OR Explain the central problem of 'choice of technique'?	3																													

24	The price elasticity of supply of a commodity is 2.5. At a price of ₹10 per unit, its quantity supplied is 600 units. Calculate its quantity supplied at a price of ₹8 per unit.	3
25	What is the difference between 'point of satiety' and 'point of equilibrium'?	3
26	Explain the concept of shift of the demand curve.	4
27	Explain the relationship between total product (TP) and marginal product (MP) with diagram. OR What will be the elasticity of demand of the goods in the following situation? (a) The use of which can be postponed (b) The goods whose substitutes are available.	4
28	Explain the situation when the demand curve is negatively sloped and steep in shape. Use diagram.	4
29	Using diagram explain the following: (a) Perfectly elastic demand (b) Inelastic demand (c) Perfectly Inelastic Demand	6
30	State the phases in the behaviour of total product as per the law of variable proportion. Use diagrams.	6