



K17U 1582

Reg. No. :

Name :

**V Semester B.A. Degree (CBCSS – Reg./Sup./Imp.) Examination,
November 2017
(2014 Admn. Onwards)
Core Course in Economics/Development Economics
5B07ECO : BASIC TOOLS FOR ECONOMIC ANALYSIS – I**

Time : 3 Hours

Max. Marks : 40

PART – A

Answer all questions. Each question carries one mark.

1. What is a Set ?
2. What are Lorenz curve ?
3. What are equations ?
4. What is conditional probability ?

PART – B

Answer any seven questions. Each question carries 2 marks.

5. Construct market demand schedule and plot the demand curve given by

$$x = \frac{600}{p + 5} - 20$$

6. What is census and sampling ?
7. Find the SD of the following observations by the direct method and by short cut method.
20 25 35 40 15 10
8. Distinguish between cost and revenue function.
9. Distinguish between skewness and kurtosis.
10. If $A = \{1, 2, 3\}$, $B = \{3, 4, 5\}$, $C = \{1, 3, 5\}$. Prove that $A - (B \cup C) = (A - B) \cap (A - C)$.
11. Compare Bar-diagrams and Pie-diagrams.

P.T.O.



12. A box contains 3 black and 7 white balls. One ball is drawn at random and in its place the a ball of the another colour is put in the box. Now one ball is drawn at random from the box. Find the probability that it is black.
13. Calculate the mean, median and mode for the following data :
- | | | | | | | | | |
|-----------|---------|-------|-------|-------|-------|-------|--------|---------|
| Class | : 10-20 | 20-30 | 30-40 | 40-50 | 50-60 | 60-80 | 80-100 | 100-120 |
| Frequency | : 50 | 160 | 151 | 165 | 75 | 79 | 64 | 56 |
14. Two third of a number decreased by 2 equals 4. Find the number.

PART - C

Answer any four questions. Each question carries 3 marks.

15. Explain the methods of classification and tabulation of data.
16. Solve $(x + y)^2 + (x + y) - 6 = 0$ and $x - y = 1$.
17. Draw two ogives of the frequency distribution.
- | | | | | | | | |
|-----------------|--------|-------|-------|-------|-------|-------|-------|
| Marks | : 0-10 | 10-20 | 20-30 | 30-40 | 40-50 | 50-60 | 60-70 |
| No. of students | : 5 | 10 | 18 | 26 | 22 | 15 | 4 |
18. Explain important laws of set operations with suitable examples.
19. Distinguish between arithmetic progression and geometric progression.
20. What are economic functions ?

PART - D

Answer any two questions. Each question carries 5 marks.

21. Explain the representation of categorical data with suitable example.
22. The following table gives the distribution of the wages of 160 workers in a factory
- | | | | | | | | | |
|-----------------------|-----|-----|-----|-----|-----|-----|-----|-----|
| Wages more than (Rs.) | 80 | 90 | 100 | 110 | 120 | 130 | 140 | 150 |
| No. of workers | 160 | 151 | 134 | 104 | 60 | 29 | 10 | 0 |
- Draw the ogive for the above data and determine :
- 1) The number of workers earning less than Rs. 135.
 - 2) The no. of workers earning at least Rs. 118.
 - 3) The median wage of the workers.
- Also draw the frequency curve and estimate the proportion of workers getting wages between Rs. 95 and Rs. 112. Also get Q_1 and Q_3 .
23. Explain the measures of dispersion.
24. Explain the addition and multiplication rules of probability. Give suitable examples.