K18U 1516

V Semester B.A. Degree (CBCSS-Reg./Sup./Imp.) Examination, November 2018
(2014 Admn. Onwards)
Core Course in Economics/Development Economics
5B 07 ECO – BASIC TOOLS FOR ECONOMIC ANALYSIS – I

Time : 3 Hours

Max. Marks : 40

PART – A

Answer **all** questions (**Each** question carries **1** mark) :

1. Define probability.

2. What is Gini coefficient ?

3. What is a Quadratic function ? Give an example.

4. Define set.

(4×1=4)

PART – B

Answer **any seven** questions (**Each** question carries **2** marks) :

5. Explain the law of indices.

6. Two thirds of a number increased by 5 equals 27. Find the number.

7. Solve the equation $x^2 + 9x + 18$.

8. Distinguish between census and sampling.

9. Compute the Arithmetic mean of the following data by direct and short cut method.
   5 10 15 20 30 40 50 30

10. If A = {1, 2} and B = {x, y, z}, find A×B, B×A, A×A, B×B.

11. What is skewness ? Draw diagrams for positively and negatively skewed distribution.

P.T.O.

12. A jar contains 3 red marbles, 7 green marbles and 10 white marbles. If a marble is drawn from the jar at random, what is the probability that the marble drawn is white ?

13. If the quantity supplied of a commodity in the market is given by Qs = −20 + 3p and the quantity demanded is 220 − 5p. Find the equilibrium price and quantity in the market.

14. Mention the various sources of secondary data.

$(7×2=14)$

PART – C

Answer **any 4** questions (**Each** question carries **3** marks) :

15. With the help of the following data, construct a Histogram.

Marks obtained	0-300	300-400	400-500	500-600	600-700	700-1000
Number of students	15	18	20	24	16	10

16. Solve the following equations.

$x + y = 7$

$x^2 + y^2 = 25$

17. Draw two ogive curves for the frequency distribution.

Class	0-20	20-40	40-60	60-80	80-100	100-120
Frequency	6	9	13	15	18	5

18. Explain the various types of sampling techniques.

19. Distinguish between Arithmetic progression and Geometric progression.

20. Write a short note on Lorenz curve.

$(4×3=12)$

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PART – D

Answer **any 2** questions (**Each** question carries **5** marks) :

21. Explain in detail the various methods of collecting primary data.

22. The marks obtained by 200 students in an examination are given below.

Marks	Number of Students
0-10	5
10-20	10
20-30	11
30-40	20
40-50	27
50-60	38
60-70	40
70-80	29
80-90	14
90-100	6

Draw an ogive for the above distribution. From the ogive, estimate the (1) median (2) lower quartile (3) the number of students who obtained more than 80% marks in the examination (4) the number of students who did not pass, if the pass percentage is 35%.

23. Explain the addition and multiplication rules of probability with suitable examples.

24. Explain the measures of dispersion.

(2×5=10)