K*U 1412

V Semester B.A. Degree (CBCSS – Reg./Sup./Imp.)
Examination, November 2020
(2014 Admn. Onwards)
CORE COURSE IN ECONOMICS/DEVELOPMENT ECONOMICS
5B07 ECO : Basic Tools for Economic Analysis – I

Time : 3 Hours

Max. Marks : 40

PART – A

Answer all questions and each question carries 1 mark :

1. Descriptive statistics.

2. Real numbers.

3. Function.

4. Sample space.

$(4\times1=4)$

PART – B

Short answer type questions, answer any 7 questions and each question carries 2 marks :

5. Solve $\dfrac{2}{x+7} = \dfrac{4}{x}$.

6. Find the equation of a straight line passing through the point (4, 5) and whose slope is 6.

7. Find the AP of 6 terms, if the first term is $\dfrac{2}{3}$ and the last term is $\dfrac{22}{3}$.

8. In an examination written by 100 students, 48 students passed in mathematics, 40 students in economics and 25 students passed in both. How many students have failed in these two subject ?

9. Discuss the distributive law of set theory.

10. Properties of Arithmetic Mean.

11. The rate of increasing in population of India during the last three decades is 5%, 8% and 12%, then the average rate growth is

12. The average mark declared by a teacher in a class test is 180. The class consists of only 100 students. Later on it was discovered that a student's mark was misread as 220 instead of 120. Find the correct average mark.

13. Simple event and compound event.

14. In Tossing a coin thrice, let event, A : there is exactly one head and B : there are at least two head. Find out $P(A \cup B)$?

$(7 \times 2 = 14)$

PART – C

Short essay type questions. Answer **any 4** questions and **each** question carries 3 marks :

15. Find the value of $\dfrac{(18.4)^{1/3}(1.922)^2}{\sqrt{(1.12)(0.85)}}$.

16. Find the equilibrium price and quantity, if supply and demand functions are
    D = 100 – 6p
    S = 28 + 39.

17. Find the slope and Y-intercept of the function 2Y = 12x – 6.

18. What are the various types of statistical graphs and diagrams used in economics ?

19. Consider the values 32, 35, 36, 37, 39, 41 and 43. Show that AM>GM>HM.

20. An urn contains 10 black and 5 white balls. Two balls are drawn from the urn one after the other without replacement. What is the probability that both drawn balls are black ?

$(4 \times 3 = 12)$

PART – D

Essay type questions. Answer any 2 questions and each question carries 5 marks :

21. Solve :
    x + y = 7
    y + z = 9
    z + x = 8.

22. What are the various types of function and discuss its uses in economics ?

23. Calculate the coefficient of Skewness from the following data and comment the result :

X	0–10	10–20	20–30	30–40	40–50	50–60	60–70	70–80
f	6	12	22	48	56	32	18	6

24. Discuss the various approaches to probability.

$(2 \times 5 = 10)$