



M 1857

Reg. No. : .....

Name : .....

V Semester B.A./B.Sc./B.Com./B.B.A./B.B.A. T.T.M./B.B.M./B.C.A./B.S.W./  
B.A. Afsal UI Ulama Degree (CCSS – Reg./Supple./Improv.)  
Examination, November 2012  
CORE COURSE IN ECONOMICS/DEVELOPMENT ECONOMICS  
5B07 ECO : Basic Tools for Economic Analysis – I

Time: 3 Hours

Max. Weightage : 30

**Instruction :** Answer may be written either in **English** or in **Malayalam**.

PART – A

Objective type questions (in bunches of **two**). Choose the correct answer.

I

1. If  $2x^2 - 32 = 0$ ,  $x =$  \_?

- a) -16                      b) 8                      c) +4                      d) -4

2.  $1 + 2 + 3 + \dots + n =$  \_\_\_\_\_

- a)  $\frac{n^2 - 1}{2n}$                       b)  $\frac{n(n + 1)}{2}$                       c)  $\frac{n^2(n + 1)}{2}$                       d)  $\frac{n(n^2 + 1)}{2}$

3. Which of the following is a positional average ?

- a) AM                      b) GM                      c) HM                      d) Mode

4. Stratified sampling is

- a) Probability sampling                      b) Nonprobability sampling  
c) Quota sampling                      d) Purposive sampling                      **(Weightage 1)**

II

5. log 32 to the base 2 is equal to

- a) 1                      b) 0                      c) 5                      d) 3

P.T.O.



6.  $\log 4.638$  has characteristic value = \_\_\_\_\_  
 a) 0                      b) 1                      c) 2                      d) 3
7.  $4^{-5/2} =$  \_\_\_\_\_  
 a)  $\frac{1}{4}$                       b)  $\frac{1}{32}$                       c) 8                      d)  $\frac{-1}{8}$
8. If the first term of an AP is 4 and common difference is  $-1$ , find the 7<sup>th</sup> term.  
 a) 0                      b) 1                      c)  $-2$                       d) 2                      **(Weightage 1)**

### PART – B

Short answer questions.

Answer **any ten** questions. **Each** carry **1** weightage.

9. Distinguish between parameter and attributes.
10. Distinguish between cross section data and time series data.
11. What is the difference between frequency curves and frequency polygons ?
12. What is the empirical relation between mean, median and mode ?
13. Define dispersion.
14. Define Gini Coefficient.
15. Explain stratified samples.
16. Find the number of digits in  $2^{15}$ .
17. Define equal sets.
18. If  $g(x) = x^3 - 7x^2 + x + 2$  find  $g(0)$ .
19. If  $P = 15 - 2x$  is the demand function find the total revenue when  $x = 5$ .
20. If  $Q = AL^\alpha K^\beta$ . Find  $AP_L$  and  $AP_K$  where AP is the average production and Q is the total production. L and K and input factors of production. **(10×1=10)**



PART – C

Short essay :

Answer **any five** questions. **Each** question carry **2** weightage.

21. When the price of a sweet was Rs. 3 per kg, its demand was 12000 kg; when the price was Rs. 5 per kg its demand was 8000 kg. If the demand function is  $P = \sqrt{a - bx}$ , find the values of a and b ? When price is Rs. 7 per kg what is the demand ?

22. Explain the distinctions among Natural numbers, integers and real numbers.

23. Explain Bernoullian Trial.

24. In a distribution the difference between two quartiles is 15, their sum is 35,  $Q_2$  is 20. Find the coefficient of skewness.

25. The demand and supply functions of two commodities A and B are :

$$D_A = 10 - 2P_A + P_B, \quad D_B = 20 + P_A - 5P_B.$$

$$S_A = 4P_A, \quad S_B = -1 + 6P_B.$$

Find the equilibrium prices and quantities.

26. If the 7<sup>th</sup> and 12<sup>th</sup> terms of an AP are 20 and 35. Find the series.

27. Solve :

i)  $16^{3/4}$  and

ii) If  $x = 4.63 \times 85.76$ . What is  $\log x$  ?

(5×2=10)

PART – D

Long Essay.

Answer **any two** questions. **Each** question carry **4** weightage.

28. Explain skewness and its absolute and relative measures.

29. What are the characteristics of a good average and the appropriateness of each average ?

30. The agricultural production in India increases in AP beginning from 1950. If production in 1954 and 1964 was 68 and 88 mn tonnes then estimate 1967 production.

31. Explain the different methods of sample design.

(2×4=8)