

16U309

(Pages:2)

Name:

Reg. No.....

THIRD SEMESTER B.Com/BBA DEGREE EXAMINATION, NOVEMBER 2017

(Regular/Supplementary/Improvement)

(CUCBCSS-UG)

CC15U GN3 A11(2) - BASIC NUMERICAL SKILLS

(General Course)

(2015 Admission Onwards)

Time: Three Hours

Maximum: 80 Marks

Part A

Answer *all* questions. Each question carries 1 mark.

1. ____ refers to the values of a variable chronologically ordered over a successive period of time.
2. In ____ index numbers we use price as weights.
3. When the sum tends to a finite quantity, the series is said to be ____.
4. A matrix in which every element is zero is _____.
5. Lorenz curve is used to study _____ in a series.
6. $X^2 - 4 = 0$ implies $x =$ _____.
7. Find the 7th term of series 1, 4, 7, _____.
8. ____ is filled by the enumerator himself.
9. Classes with zero frequencies are called ____.
10. A simultaneous equation means a set of equations in _____ unknowns.

(10x1=10 Marks)

Part B

Answer *any eight* of the following. Each question carries 2 marks.

11. Explain Singleton set?
12. Index numbers are Economic Barometers. Explain.
13. Compute G.M of the following Figures : 57.5, 87.75, 53.5, 73.5, 81.75
14. Solve: $2x^2 + 8x + 8 = 0$.
15. What do you mean by Skewness?
16. What is a Pictogram?
17. Find an infinite G.P whose second term is $\frac{2}{9}$ and the sum to infinity is 1.
18. Find the number of years a sum of Rs. 5000 will take to become 9000 if the rate of interest is 8%.
19. Find Mode from the following values: 12,35,15,40,55,21,60,45.
20. What are the merits of Standard Deviation?

(8x2=16 Marks)

Turn Over

Part C

Answer **any six** of the following. Each question carries 4 marks.

21. Obtain the Quartile Measure of Dispersion and its Coefficient for the data given below:

Age	0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80
No of Persons	15	30	53	75	100	110	115	125

22. What are the functions of Statistics?

23. Solve completely the following equations:

$2x - 3y = 3$ and $4x - y = 11$ using matrices.

24. Explain the difference between Diagrams and Graphs.

25. Prove that $A(B-C) = (AB)-C$, by means of Venn Diagram.

26. Draw a Histogram to the frequency distribution given below:

Marks	10-15	15-20	20-30	30-40	40-50	50-75	75-100
No. of students	4	12	20	18	14	25	10

27. Compute the trend values by the method of Moving Averages(3yearly)

Year	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Profit (in Lakhs)	12.2	14.5	15.2	13.8	17.6	18.2	16.8	17.2	18.8	19.4

28. If $A = \{0, 2, 3, 5\}$, $B = \{-1, 2, 3, 7, 9\}$ find:

- (a) AB . (b) AB . (c) $A-B$ (d) $(A-B)(B-A)$

(6x4 =24Marks)

Part D

Answer **any two** of the following. Each question carries 15 marks.

29. Apply Crammers Rule to find the solution to the following equations.

i) $2x + 3y = 1$; $3x + y = 5$

ii) $3x + y + z = 8$; $x + y + z = 6$, $2x + y - z = 1$.

30. From the following table of marks of two students A and B in 10 sets of 100 marks each, find out who is more intelligent and who is more consistent.

A	10	38	99	45	79	15	81	12	92	60
B	58	49	55	52	63	49	50	61	42	56

31. Construct the Index Number of Prices from the following data using a) Laspeyer's b) Paasche's & c) Fisher's formula.

Commodity	Base year		Current year	
	Price	Quantity	Price	Quantity
X	1.25	8	5	10
Y	2	10	8.5	12
Z	3	6	10	4

(2x15 =30Marks)