

18U310

(Pages: 2)

Name:

Reg. No.

THIRD SEMESTER B.Com./B.B.A. DEGREE EXAMINATION, NOVEMBER 2019

(Regular/Supplementary/Improvement)

(CUCBCSS - UG)

CC15U GN3 A11 - 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. If A and B are disjoint sets, then $A \cap B$ is -----
2. Co-factor of an element is obtained by multiplying the minor of that element with -----
3. ----- is a statement of equality between two expressions.
4. The tenth term of the series 4, 2, 0, -2 is -----
5. When the interest is calculated on principal at a uniform rate every period, it is called ----- interest.
6. The point of intersection of the 'less than' and 'more than' Ogive corresponds -----
7. The smallest and the largest possible measurements in each class are known as -----
8. If Mean < Median < Mode, the distribution is -----
9. Method of least squares to fit in the trend is applicable only if the trend is -----
10. The values of a variable chronologically ordered over a successive period of time is called -----

(10 x 1=10 Marks)

Part B

Answer any *eight* questions. Each question carries 2 marks.

11. If $A = \{1, 2, 3, 4, 5, 6\}$, $B = \{2, 4, 5, 8\}$ find A-B and B-A.
12. Find the rank of the matrix $\begin{bmatrix} 5 & 2 & 1 \\ 0 & 1 & 3 \\ 2 & 1 & 0 \end{bmatrix}$
13. Distinguish between Simple and Compound interest.
14. Which term of the series $17+23+29\dots$ is 551.
15. What are the limitations of statistics?
16. What do you mean by primary data?
17. What is Platykurtic?
18. If $Q_1 = 4.13$, $Q_2 = 5.73$ and $Q_3 = 7.11$. Calculate the Bowley's Coefficient of Skewness.
19. Daily income of ten families of a particular place is given below.
85, 70, 15, 75, 500, 8, 45, 250, 40, 36 Find out Geometric Mean.
20. The largest of 100 measurements is 12 kg. If the range is 2 kg, find the smallest measurement.

(8 x 2 = 16 Marks)

Part C

Answer any *six* questions. Each question carries 4 marks.

21. If $A = \begin{bmatrix} 1 & 2 \\ 3 & 4 \end{bmatrix}$, $B = \begin{bmatrix} 1 & 0 \\ 2 & -3 \end{bmatrix}$, $C = \begin{bmatrix} 1 & -1 \\ 0 & 1 \end{bmatrix}$ Show that $A(B + C) = AB + AC$
22. During the basketball season, Jason scored 43 points. He scored 5 fewer points than 3 times the number Kevin did. How many points did Kevin score?
23. If the 5th term and 12th term of an Arithmetic Progression are 30 and 65 respectively, find the sum of its 26 terms.
24. Explain the different steps in the construction of a frequency table.
25. From the following draw a Multiple Bar Diagram.

Year	Production (in units)		
	A	B	C
2008	45	55	65
2009	35	60	70
2010	50	70	80
2011	55	80	60

26. Calculate the median

Marks:	0-10	10-30	30-60	60-80	80-90
No. of students:	5	15	30	8	2

27. Briefly explain the components of Time series?
28. Using the following data calculate Fisher's Ideal Index Number.

Commodity	2017		2018	
	Quantity	Price	Quantity	Price
A	50	32	50	40
B	35	30	40	35
C	55	16	50	18

(6 x 4 =24 marks)

Part D

Answer any *two* questions. Each question carries 15 marks.

29. Solve the system of equations with the help of matrices.

$$2x - 2y + z = 1$$

$$x + 2y + 2z = 2$$

$$2x + y - 2z = 7$$

30. What are the steps in conducting a sample survey?
31. Calculate Mean and Standard Deviation for the data given below:

Age (years)	10-19	20-29	30-39	40-49	50-59	60-69	70-79
Frequency	3	61	223	137	53	19	4

(2 x 15 =30 marks)
