



Seat No. _____

BACHELOR OF COMPUTER APPLICATION-CS Examination
BCA SEMESTER-1 JANUARY 2025 (Regular) JANUARY - 2025
MATHS. & STAT. FOUNDATION OF COMPUTER SCIENCE

Faculty Code : 017

Subject Code : 24CS-BCAP-SE-01-01006

Time : 1 Hours]

[Total Marks : 25

Q.1 (A) Discuss any three properties of determinant. 5

Q.1 (B) Define following. 5

1. Row Matrix
2. Null Matrix
3. Square Matrix

OR

Q.1 (A)

Find the value of $\begin{vmatrix} 10 & 4 & 6 \\ 12 & 25 & 50 \\ 5 & 2 & 3 \end{vmatrix}$ 5Q.1 (B) If $A = \begin{bmatrix} 2 & 1 \\ 0 & 4 \end{bmatrix}$, $B = \begin{bmatrix} 3 & 2 \\ 4 & 1 \end{bmatrix}$ & $C = \begin{bmatrix} 2 & 4 \\ 1 & 4 \end{bmatrix}$ then verify that $A(B + C) = AB + AC$ 5

Q.2 (A) From the following frequency distribution calculate the mean 5

Mark	0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80	80-90	90-100
No. Of Students	1	4	6	5	10	20	22	24	6	2

Q.2 (B) Calculate the median from the following frequency distribution. 5

X	10	20	30	40	50
F	3	12	18	12	6

OR

Q.2 (A) Calculate mode for these data. 5

1. 58, 60, 62, 56, 59, 56, 67, 68, 70, 55, 67, 58, 59, 60, 69, 67, 67, 63, 61, 70

(2 Marks)

2. 158, 160, 162, 156, 159, 169, 167, 168, 170, 155 (3 Marks)

Q.2 (B)

Calculate quartile deviations & Coefficient of quartile deviations for following data.

X	1	2	5	7	9
F	3	12	18	12	5

The third terms of an AP is 12 and sixth term is 42. Find twenty sixth terms.

OR

The second and fourth term of GP are 18 and 72 respectively. Find the sum of its first 10 terms.

Q.3

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