

IMSc IT (DMVI) (NEP) Sem.-4 Examination

DSC-M-DMVI-244T

Basics Statistics & Distribution

Time : 1-00 Hour]

May-2025

[Max. Marks : 25

Instructions:

- **Figures to the right indicate Full Marks.**
- **Do not write anything on the question paper.**

Question

Marks

- Q.1 Find Mean, Mode, Quartile Deviation and Standard Deviation of the given data: [10]

Class	50-60	60-70	70-80	80-90	90-100	100-110
Freq.	5	10	15	20	15	10

OR

- Q.1 Find Correlation and Regression slope and intercept for given data: [10]

X	70	70	80	85	90	95	100	110	120	125
Y	200	250	270	300	310	350	370	400	450	500

- Q.2 a) A bag contains 2 black, 3 red and 5 blue balls. Three balls are drawn at random. Find the probability that three balls drawn. [05]
- 1) are blue.
 - 2) consist of 2 blue and 1 red ball
 - 3) consist of one black ball.
- b) In a bolt factory, machine A, B, C manufacture 25%, 35% and 40% of the total output and out of the total manufacturing 5%, 4% and 2% are defective bolts. A bolt is drawn at random from the product and is found to be defective. Find the probability that it is manufacture from [05]
- 1) machine A
 - 2) machine B
 - 3) machine C

OR

(P.T.O)

