[13/A-6] SEAT No. _____ No. of Printed Pages : 2

SARDAR PATEL UNIVERSITY

OCTOBER - NOVEMBER : 2018 EXAMINATION,
BBA (GEN) SEMESTER : III
FRIDAY, 30/11/2018
EVENING SESSON TIME : 2.00 P.M. TO 4.00 P.M.
SUBJECT CODE : UM03CBBA06
STATISTICS FOR MANAGEMENT – I

TOTAL MARKS : 60

Q-1 (A) From the following data, it is known that M = 46 and $\sum fi = 230$. [08]

Class	10-20	20-30	30-40	40-50	50-60	60-70	70-80
f	12	30	?	65	?	25	18

Find the missing frequencies and hence obtain mean and mode.

Q-1 (B) Prices of an item for two shops are recorded as below. Find price of which shop is more stable, Why? [07]

Shop A	14	13	8	10	7	6	12	8	10	12
Shop B	10	12	15	9	12	10	12	16	10	14

OR

Q-1 (A) Find Median, Q_2, D_5, P_{50}, Range, Quartile deviation and P_{75} for the following data. [08]

Class	0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80
f	5	9	8	11	13	10	3	1

Q-1 (B) Explain with appropriate formula [07]

(1) Range (2) Quartile Deviation (3) Mean Deviation (4) Standard Deviation.

Q-2 (A) If A, B and C are three mutually exclusive and exhaustive events and 3P(A) = 2P(B) = 6P(C) then find (1) P(AUB) (2) P(BUC) (3) P(AUC) [08]

Q-2 (B) With usual notations state and prove addition theorem of probability considering two joint events. [07]

OR

Q-2 (A) From a pack of 52 cards, if 2 cards are selected randomly then find the probabilities that, [08]

(1) Both cards are queen
(2) Both cards are spade
(3) Both cards red in colour
(4) One card is club and one card is diamond.

Q-2 (B) Define the terms : [07]

(1) Sample space (2) Random experiment (3) independent events (4) Mutually exclusive events.

Q-3 (A) In a Binomial variable, if n = 10, P (X=5) = 2P(X=4) then find p, q, Mean, Variance and S.D. [08]

Q-3 (B) In a normal distribution 31% of the observation are less then 45 and 8% are more than 64. Find mean and standard deviation of the distribution. [07]

(P.T.O)