

SYBCA-III



MK-3735

Second Year B.C.A. (Sem. III) Examination

October / November - 2015

301 : Statistical Methods

(New Course)

Time : . Hours]

[Total Marks : 70

Instructions :

(1)

नीचे दशांश निशानीवाणी विगतो उत्तरवही पर अवश्य दायवी. Fillup strictly the details of signs on your answer book.	Seat No. :
Name of the Examination :	
Second Year B. C. A. (Sem. III)	
Name of the Subject :	
301 : Statistical Methods (New)	
Subject Code No. : 3 7 3 5	Section No. (1, 2,.....) : Nil
Student's Signature	

- (2) Attempt all questions.
- (3) Figures to the right indicates full marks.
- (4) Mention your options clearly.
- (5) Use of calculator is permitted.

1 Do as directed : (any seven)

14

- (1) Define : Mean and Median.
- (2) Find Geometric mean of 8, 2, 16 and 48
- (3) If $n=10$, $\sum X = 60$, $\sum X^2 = 1000$ then find standard deviation.
- (4) Find the range and co-efficient of range of the data 8, 5, 6, 4, 2, 3.
- (5) Define : co-efficient of correlation.
- (6) In the rank co-relation coefficient if $\sum d^2 = 0$, $r =$ _____.
- (7) A regression equation given by $2x+4y=18$, if $y=2$ then find x .

- (8) If mean = 68, mode = 28.5 and c.v.=58 then median = _____.
- (9) Calculate median of 10, 15, 14, 20 observations.
- (10) Value of r^2 lies between _____ and _____.

2 Attempt any two :

14

- (1) Calculate Median for following data.

Class	10-19	20-29	30-39	40-49	50-59	60-69
Frequency	12	19	31	27	16	8

- (2) Calculate Quartile deviation and coefficient of Quartile Deviation.

Class	15-20	20-25	25-30	30-35	35-40	40-45
Frequency	12	40	86	60	52	30

- (3) Given the following frequency distribution with some missing frequencies :

Class	10-20	20-30	30-40	40-50	50-60	60-70	70-80
Frequency	185	-	34	180	136	-	50

If total frequency is 685 and median is 42.6, find out the missing frequency.

3 Attempt any two :

14

- (1) Find mean deviation from mean, and median. Also find co-efficient of mean deviation and mean variation.

x_i	0	1	2	3	4
f_i	5	8	12	3	2

- (2) Find standard deviation, co-efficient of S.D., co-efficient of variation of following data.

Class	20-25	25-30	30-35	35-40	40-45	45-50
F	170	110	80	45	40	35

- (3) Arithmetic mean and S.D. of series of 20 items were calculated by students as 20 and 5 respectively. But while computing the item 13 was misread as 30. Find the correct mean and standard deviation.

4 Attempt any two :

14

- (a) Calculate the co-efficient of correlation from the following data :

X	100	200	300	400	500	600	700
Y	30	50	60	80	100	110	130

- (2) Find the rank correlation co-efficient of the following data.

Marks in Statistics	84	51	91	60	68	62	86	58	53	47
Marks in Accountancy	78	36	98	25	75	82	90	62	65	39

- (3) For 50 pairs of observations, $\bar{x}=10$, $\bar{y}=6$, $S_x=3$, $S_y=2$, $r=0.3$. Late on one pair (10, 6) was omitted. Calculate the correlation coefficient between x and y .

5 Attempt any two :

14

- (1) From the following data, find the two regression equations.

X	4	5	6	7	1	2	3
Y	6	5	6	5	2	4	7

