PBU-1601330102030800 Seat No. _____

M. L. W. (Sem. III) (CBCS) Examination

November / December - 2018

Labour Statistics

Time : $2\frac{1}{2}$ Hours] [Total Marks : **70**

1 Write an answer of the following question : (any **one**) **10**

(1) Calculate Karl Pearson coefficient of correlation from the following data :

X / Y	10	20	30	40
10 – 20	6	3	4	5
20 – 30	4	2	2	2
30 – 40	2	–	4	1
40 – 50	2	8	–	2

OR

(1) Find out regression equation from following information and find out X & Y, X = 80, Y = 70.

X	65	66	67	63	68	69	70	72
Y	67	68	66	68	72	72	69	71

2 Discuss about the sources of labour in India. **10**

OR

2 Find out regression coefficient from the following data :

P	10	20	30	40	50	60
Q	15	5	10	25	30	40

3 Find index number from Fisher's method : **10**

Commodity	Base Year		Current Year	
	P1	Q1	P2	Q2
Rice	6	50	10	60
Wheat	2	40	2	50
Flour	4	100	6	120
Sugar	10	12	30	24

OR

3 Discuss about the types of Hypothesis.

4 Attempt the following question : (any **five**) **25**

(1) Do the simple divided Bar diagram types of production :

Types of Products	*A*	*B*
Calculator	15000	17000
Television	13000	16000
Watches	12000	14000
Telephone	10000	12000
Radio	8000	1000
Total	58000	60000

(2) Find out the Quartiles from the following :

X	0 – 10	10 – 20	20 – 30	30 – 40	40 – 50	50 – 60	60 – 70	70 – 80
F	2	5	9	21	35	18	7	3

(3) What is Sampling ?

(4) Discuss about Wage statistics.

(5) Discuss about types of unemployment.

(6) Find out the Standard Deviation from the following :

X	0	1	2	3	4	5	6	7
F	1	2	3	4	7	4	4	3

(7) Discuss about the concepts of price relative.

5 Attempt the following questions : (any **five**) **15**

(1) Explain the Null Hypothesis.

(2) Find out the geometric mean.

X	25 – 29	30 – 34	35 – 39	40 – 44	45 – 49	50 – 54	55 – 59
F	12	16	50	82	15	10	5

(3) Find out the weighted arithmetic mean from the following information :

a	40	32	15
b	26	15	5

(4) Find out Quartile deviation from the following :

AB	5–10	10–15	15–20	20–25	25–30	30–35	35–40	40–45	45–50
CD	2	7	10	28	20	18	10	4	1

(5) Find out the harmonic mean :

X	10–20	20–30	30–40	40–50	50–60
F	4	6	10	7	3

(6) Do the sum of Index number :

Commodity	Base		Current	
	Po	Qo	P1	Q1
A	2	40	5	75
B	4	16	8	40
C	1	10	2	24
D	5	25	10	60

(7) Discuss about the Quartile Deviation.