US - 529

II Semester B.B.A. Examination, May 2017 (CBCS) (F+R) (2014 – 15 & Onwards) BUSINESS ADMINISTRATION Paper – 2.4 : Quantitative Methods for Business – II

Time : 3 Hours

Max. Marks: 70

RJAT

(5×2=10)

Instruction : Answers should be written in English only.

SECTION-A

- 1. Answer any five sub-questions. Each sub-question carries 2 marks.
 - a) What is a variable ?
 - b) What is secondary data?
 - c) What is probable error?
 - d) What are ogive curves ?

e) State any two uses of index numbers.

- f) If r = 0.9, N = 100, find probable error.
- g) State any two merits of arithmetic mean.

SECTION-B

Answer any three questions. Each question carries 6 marks.

(3×6=18)

- 2. Briefly explain the types of correlation.
- 3. Briefly explain the parts of an ideal statistical table.
- 4. Calculate arithmetic mean from the following data

Height	No	o. of St	udent	s		
(in cin s)						
0 - 10		2				
10-20		4				
20-30		6				
30-40		8				
40 - 50		10				Temperatur
50-60		12				
60-70		14				

5. Calculate first and third quartiles.

No. of Persons
20
14
6
26
9
13
4

6. Calculate co-efficient of rank correlation.

Marks in Economics	48	60	72	62	56	40	39	52	30
Marks in Accountancy	62	78	65	70	38	54	60	32	31
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Answer any three questions from the following. Each question carries 14 marks.

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- (3×14=42)
- 7. An agent obtained samples of bulbs from two companies. He had tested them for durability and got the following results.

Life (in kms)	Туре – А	Туре – В		
17 – 19	100	30		
19-21	160	420		
21 – 23	260	120		
23-25	80	30		

Which company's bulbs are more uniform life?

8. Calculate Karl Pearson's co-efficient of correlation between temperature and germination time.

Temperature	:	57	42	40	38	42	45	42	44	40
Germination time	::	10	26	30	41	29	27	27	19	18
Take 17 and 26 as	2	eeiin	nod mos	n						

Take 47 and 26 as assumed mean.

9. Construct Fisher's ideal index numbers and also show that it satisfy both Time Reversal Test (TRT) and Factor Reversal Test (FRT).

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Commodity	Base	Year	Current Year			
	Price	Qnty.	Price	Qnty.		
А	2	150	4	120		
В	5	10	6	15		
С	4	12	5	10		
D	2	60	2	50		
E	3	20	3.5	30		

10. Draw ogive curves from the following data and measure the median value verify it by actual calculations.

Class interval	Frequency	
0 - 10	5	
10-20	11	1 Starter Starter
20-30	21	14 X Y
30 - 40	16	KGF-\$\$\$ 5/2/
40 - 50	10	Soll of the second s
		and the second se

11. The following table shows the Age (x) and blood pressure (y) of 8 persons :

x	52	63	45	36	72	65	47	25
у	62	53	51	25	79	43	60	33

Obtain the two regression equations. Also find the expected blood pressure of a person who is 49 years old.