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Reg. No. : .....

Name : .....

Second Year B.Com. Degree Examination, April 2020

Part III

Paper VI : BUSINESS STATISTICS

(2006 Admission onwards)

Time : 3 Hours Max Marks : 100

PART – A

Answer **any ten** questions. Each question carries **2** marks.

1. Write any two uses of statistics.
2. What is secondary data?
3. Define classification of data.
4. What is class interval?
5. What is Pie Diagram?
6. What is Frequency Polygon?
7. What is Weighted Arithmetic mean?
8. What are various absolute measures of dispersion?
9. What is mean deviation?

P.T.O.

10 What is Probability?

11 What Perfect positive correlation?

12 What is time series?

(10 × 2 = 20 Marks)

PART – B

Answer **any eight** questions. Each question carries **5** marks.

13. What are the functions of statistics?

14 Explain the importance of Data.

15. Explain the Use of graph.

16. What are the Features of ogives?

17. What are the Points to be considered while selecting an average?

18. Calculate 5 yearly moving average of the number of students studying in an engineering college from the following data.

Year:	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
No of students	111	150	175	196	201	203	205	213	203	219

19. A coin is tossed six times. What is the probability of getting head in all the six times?

20. The height of school children of one institution is normally distributed with mean of 54 inches and SD of 12 inches. What percentage of students have height between 46 and 56 inches.

21. From the following details calculate arithmetic mean.

Number of employees 10

Income (Rs.) Rs. 890, 880, 845, 875, 920, 940, 550, 905, 975, 530.

22. Compute the median from the following data.

Wages (Rs.):	50-69	70-89	90-109	110-129	130-159
No. of workers:	18	75	21	10	41

23. From the following data calculate standard deviation.

Marks:	24	28	32	36	40	44	48
No. of students:	12	24	36	52	32	20	16

24. Represent the following data of family B by a pie diagram.

Item of Expenditure	Food	Clothing	Rent	Entertainment	Education
Expenditure	320	280	120	80	70

(8 × 5 = 40 Marks)

PART – C

Answer **any two** questions. Each question carries 20 marks.

25. Calculate coefficient of correlation from the following information. Comment on the result.

Experience:	16	12	18	4	3	10	5	12
Performance:	23	22	24	17	19	20	18	21

26. Age of husband and the age of wife is given below. Obtain two regression lines and calculate the husband's age when the wife's age is 18.

Husband's age:	38	25	29	30	30	31	32	33	35	37
Wife's age:	31	20	22	24	29	23	31	29	31	30

Also find the age of wife when husband's age is 42.

27 Calculate Fisher's ideal index and show how it satisfied the time reversal test and factor reversal test.

Commodity	A	B	C	D
Price (base) p_0	10	5	20	8
Expenditure (base) p_0q_0	120	40	60	80
Price (current) p_1	12	6	25	8
Expenditure current p_1q_1	144	54	100	72

28 Draw the two ogives from the following data, and locate the median value

Marks :	20-40	40-60	60-80	80-100	100-120	120-140
No. of students :	3	8	10	18	12	3

(2 × 20 = 40 Marks)
