BBA–102(O)

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B. B A. (First Semester)
EXAMINATION, Dec., 2014

(Old Course)

Paper Second

BUSINESS STATISTICS

Time : Three Hours] [*Maximum Marks* : 75

[*Minimum Pass Marks* : 26

Note : Attempt all the *five* questions. All questions carry equal marks. Statistical tables will be made available on demand.

1. Discuss the meaning and scope of statistics bringing out its importance particularly in the field of trade and commerce.

Or

In the frequency distribution of 100 families given below, the number of families corresponding to expenditure groups 20—40 and 60—80 are missing from the table. However the median is known to be 50. Find the missing frequencies :

Expenditure	No. of Families
0—20	14
20—40	?
40—60	27
60—80	?
80—100	15

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Or

The following table gives the marks obtained by a set of students in a certain examination. Calculate the average mark per student :

Marks	No. of Students
10—20	1
20—30	2
30—40	3
40—50	5
50—60	7
60—70	12
70—80	16
80—90	10
90—100	4

50

standard deviation :

Age	No. of Employees
50—55	25
45—50	30
40—45	40
35—40	45
30—35	80
25—30	110
20—25	170

3. Explain what is meant by the correlation between two variables. What are the methods of finding existence of correlation ? How can it be measured ?

Or

The following table gives the age of cars of a certain make and annual maintenance costs. Obtain the regression equation for costs related to age :

Age of Cars in Years	Maintenance Cost (in '000 ₹)
2	10
4	20
6	25
8	30

Estimate the maintenance cost for a ten-year old car.

X	Y
1	12
2	9
3	6
4	10
5	3
6	5
7	4
8	7
9	8
10	2
11	11
12	1

What degree of agreement is there between the judgement of the two judges.

5. What is an index number ? Explain their significance and mention their limitations.