

PART C — (1 × 20 = 20 marks)

(Compulsory)

17. Set up the two way ANOVA table for the following information relating to three drugs

Testing to judge the effectiveness in reducing blood pressure for three different groups of people:  
Amount of Blood Pressure Reduction in millimeters of mercury

Drug	X	Y	Z
Group of people A	14	10	11
	15	9	11
Group of people B	12	7	10
	11	8	11
Group of people C	10	11	8
	11	11	7

- Do the drugs act differently?
- Are the different groups of people affected differently?
- Is the interaction term significant?
- Answer the above questions taking a significant level of 5%.

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M.B.A. DEGREE EXAMINATION,  
DECEMBER 2014/JANUARY 2015.

First Semester

General/Marketing/Finance/IB/HRM/RM/Tourism

RESEARCH METHODOLOGY

(2012 - 2013 Batch onwards)

Time : Three hours

Maximum : 100 marks

PART A — (5 × 6 = 30 marks)

Answer any FIVE out of the following.

- What do you understand by the term "research"? State its objectives.
- Explain briefly the features of Good Research Design.
- Under what circumstances the observation method of data collection is used?
- How many types of errors are there in the context of testing of hypothesis?
- Define Research Report. What are the characteristics of Good Research Report?

6. A soap manufacturing company was distributing a particular brand of soap through a large number of retail shops. Before a heavy advertisement campaign, the mean sales per week per shop were 140 dozens. After the campaign a sample of 26 shops was taken and the mean sales were found to be 147 dozens with a standard deviation of 16 dozens. Can you consider the advertisement effective?

7. Calculate the standard deviation for the following data giving wages of 220 persons.

Wages in (Rs).	No. of Persons
70-80	12
80-90	18
90-100	35
100-110	42
110-120	50
120-130	45
130-140	20
140-150	8

8. To study the effect of rainfall on wheat, the following results were obtained.

	Mean	Standard Deviation
Yield in lbs per acre	800	12
Rainfall in inches	50	2

The coefficient correlation Between yield and rainfall is 0.8 Estimate the yield when the rainfall is 80 inches.

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PART B — (5 × 10 = 50 marks)

Answer any FIVE out of the following.

- Explain in detail the various steps involved in the Research.
- Briefly state the various methods in collecting the data from the respondents.
- Explain in detail the various types of research.
- The table given below shows the data obtained during outbreak of smallpox:

	Attacked	Not Attacked	Total
Vaccinated	31	469	500
Not Vaccinated	185	1315	1500
Total	216	1784	2000

Test the effectiveness of vaccination in preventing the attack from small pox. Test your Result with the help of chi - square @ 5 per cent level of significance.

13. Find the coefficient of correlation between X and Y for the following set of observations.

X	15	20	25	30	35	40
Y	90.5	100.8	120.7	140.9	160.1	170.8

- Explain in detail the various methods of sampling.
- What are the various steps in writing a Report?
- State the various types of Reports.

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