M.C.A. Sem - III (Choice Based Credit System 2011 & 2012 Course) :
SUMMER - 2019
SUBJECT: EMPIRICAL METHODS FOR RESEARCHING INFORMATION SYSTEMS

Day : Thursday
Date : 25/04/2019

S-2019-2172

Time 02.00 PM TO 05.00 PM
Max. Marks : 100

N.B.:

1) Attempt any **FOUR** questions out of **SIX** in Section – I and any **TWO** questions out of **THREE** in section – II.
2) Figures to the right indicate **FULL** marks.
3) Answers to both the sections should be written in SAME answer book.
4) Use of non-programmable **CALCULATOR** is allowed.

SECTION-I

Q.1 List 6 P's of research. Describe any two of your choice. **(15)**

Q.2 Explain 'right of participant' in the research. Also explain responsibilities of an Ethical research. **(15)**

Q.3 What are different data gathering methods? Explain in details interview as a data gathering method. **(15)**

Q.4 What is hypothesis? Explain different types of hypothesis with suitable examples. **(15)**

Q.5 Explain following significance tests. **(15)**
i) Test for proportion
ii) Correlation and Regression

Q.6 Write short notes on **ANY THREE** **(15)**
i) Ethnography type of research
ii) Literature review
iii) Quantitative data analysis
iv) Action research.

SECTION-II

Q.7 Calculate mean, median, mode for the following data: **(20)**

Class	20-40	40-60	60-80	80-100	100-120	120-140	140-160	160-180	180-200
Frequency	6	9	11	14	20	15	10	8	7

Q.8 Following data shows age of cars of certain make and annual maintenances costs. Obtain the regression equation for costs related to age. **(20)**

Age of cars(Years)	2	4	6	7	8	10	12
Annual maintenance costs	1600	1500	1800	1900	1700	2100	2000

Find the approximate cost of maintaining a 3 years old car of the same make.

Q.9 a) Calculate correlation coefficient between X and Y from the following data. **(10)**
$N=25 \quad \sum X=125 \quad \sum X^2=650 \quad \sum Y=100 \quad \sum Y^2=960 \quad \sum XY=508$

b) A sample of 400 male students is found to have mean height 67.47 inches. Can it be reasonably regarded as a sample from a large population with mean height 67.39 inches and standard deviation 1.30 inches? Test at 5% level of significance. **(10)**

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