

Are you sure you are playing with an unbiased die ?

9. A sample of 400 male students is found to have a mean height 67.47" . Can it be reasonably regarded as a sample from a large population with mean height 67.39" and standard deviation 1.3" and at significance level of 5%? [10]

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Question Paper Code : 1651

MBA (Semester-II) Examination, 2018

(Common Subject)

RESEARCH METHODOLOGY

[IMS-026]

Time : Three Hours]

[Maximum Marks : 70

Note : Answer **five** questions in all. Question **no. 1** is **compulsory** .Besides this, attempt **one** question from each unit.

1. Write brief answer of the following : [3x10=30]
- (a) Define research as a flow diagram.
 - (b) Distinguish exploratory from descriptive research with suitable examples.
 - (c) "Good research is empirical and data driven not just a pie in the sky, abstract brain wave" Why or why not ?
 - (d) Briefly explain the confounded relationship with an example.
 - (e) What is indeterminacy principle ? Explain with an example.

- (f) What is the role of absolute zero in interval and ratio scale ?
- (g) For a 5 point likert scale, 5 being most favourable and 1 being the least, and 20 statements a score of 65 would be infavourable. True or false.? Why ?
- (h) What is Central Limit Theorem ?
- (i) Distinguish between validity and reliability in research work.
- (j) Distinguish parameter from statistic.

UNIT-I

- 2. What is experimental research design ? How you will make it effective ? Explain with the help of an example. [10]
- 3. Literature survey helps you avoid reinventing the wheel How? [10]

UNIT-II

- 4. What are the Canons of scientific research ? Explain the role of parsimony in scientific research. [10]
- 5. Non-probability sampling is easy, inexpensive but not scientific and robust Why ? Describe briefly one method of probability sampling. [10]

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UNIT-III

- 6. (a) If the average age of IMS faculty is 40 years with standard deviation as 4.5 assuming 95% confidence level, find the range in which IMS faculty age falls. (Given standard variate Z for 95% confidence level is 1.96). [5]
- (b) Explain the rules for cross tabulation of data. [5]
- 7. For an infinite population, number of FMCG customers for examples, calculate the sample size for acceptable error as plus minus 2, standard deviation of population 4.8 (1.96 can be considered as standard variate for 95% confidence level). [10]

UNIT-IV

- 8. In what situation Chi-square test is recommended ? Why Chi-square is called non parametric test ?
- As number of freedoms increase what is the change in the shape of chi-square distribution ?
- A die is thrown 132 times with the following results :

Score	Frequency
1	16
2	20
3	25
4	14
5	29
6	28

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