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CIS 403

**First Semester M.Com. (IBM) Degree Examination, December 2018
(CBCS)**

**COMMERCE
Business Research Methods**

Time : 3 Hours

Max. Marks : 70

SECTION – A

Note : Answer **any four** questions out of seven questions. **Each** question carries **10** marks. Answer to **each** question should **not** exceed **4** pages. **(10×4=40)**

1. What do you mean by research ? What are its objectives ? Explain different approaches to research.
2. What do you mean by good research design ? Explain its characteristic features.
3. Define secondary data. What are its sources ? Explain the precautions to be taken while using secondary data.
4. Explain the various types of research reports. Briefly explain the contents of a research report.
5. Calculate the standard error of mean from the following data :
Mid value : 39 49 59 69 79 89 99
Frequency : 1 2 7 10 15 13 2
6. The mean life of a sample of 100 bulbs produced by a company is 4800 hours with a standard deviation of 400 hours. The company claims that the average life of the bulbs is 5,000 hours. Is the claim acceptable @5% significance level.
7. A researcher has collected data of 100 shops in a particular region.

	Shops	
	In Town	In Village
Run by Men	40	30
Run by Women	10	20

Can it be inferred that most of the shops are run by men ? Test level of significance by applying χ^2 test.

P.T.O.



SECTION – B

Note : Answer **any two** questions out of three questions. **Each** question carries **15** marks. Answer to **each** question should **not** exceed **7** pages. **(15×2=30)**

8. Distinguish between census and sampling enumeration. Discuss their relative merits and demerits.
9. A firm found with the help of a sample survey of a city (size of sample 900) that $\frac{3}{4}$ ths of the population consumes things produced by them. The firm then advertised the goods in paper and radio. After one year, a sample size of 1,000 reveals that proportions of consumers of the goods produced by the firm is $\frac{4}{5}$ ths. Is this rise significant to indicate that the advertisement was effective ? Test the hypothesis at 5% significance level.
10. Goodwill Company has purchased three new machines of different makes and wishes to determine whether one of them is faster than the other in producing a certain product. Production figures for 5 hours are observed at random from each machine and the results are as follows :

Machine	Hourly production (Units)				
A	27	29	35	40	29
B	29	38	41	42	40
C	25	29	27	28	31

On the basis of the above information, can we conclude that the machines are significantly different in their mean speed at 5% significance level.
