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Question Paper Code : 85514

M.B.A. DEGREE EXAMINATION, FEBRUARY 2012.

Second Semester

DBA 1657 — RESEARCH METHODS IN BUSINESS

(Regulation 2007/2009)

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. Define research process.
2. Explain the types of hypothesis.
3. Distinguish between nominal scale and ordinal scale.
4. Define interval scale and give an example.
5. Distinguish between primary data and secondary data.
6. Distinguish between open ended question and close ended question. Also, give any two examples of each.
7. What is factor rotation? List its types.
8. Distinguish between regression and correlation.
9. Define synopsis and discuss its scope.
10. What are the types of charts used in research reports?

PART B — (5 × 16 = 80 marks)

11. (a) List and explain different types of research. (16)

Or

- (b) An automobile company presently buys connecting rods from Vendor X. But the quality manager is desiring to consider the supply of connecting rods from Vendor Y to meet the extra demand, provided the new vendor can supply the connecting rods with good precision on its length on par with that of the Vendor X. If the length is more than the necessity, it will lead to excessive filing time while assembling. Hence, it should be avoided. The length of the connecting rods supplied by Vendor X as well as Vendor Y follows normal distribution with variances of 9 mm and 12 mm, respectively.

He has selected 81 connecting rods from the Vendor X and found that the mean length of the sample is 450 mm. Similarly, he selected 64 connecting rods from the Vendor Y and found that the mean length of the sample is 455 mm. Check whether the quality manager can consider the supply from the Vendor Y at a significance level of 0.05. (16)

12. (a) Explain the steps of construction of Thurstone's Case-V scale model. (16)

Or

- (b) Illustrate the steps of Osgood's semantic differential scale with an example. (16)

13. (a) Explain the types of personal interview with an illustrations. (16)

Or

- (b) (i) Distinguish between stratified sampling and cluster sampling by giving suitable examples. (8)
- (ii) The axial length of pistons produced follows normal distribution with the variance of 64 mm. Determine the sample size such that the mean length of pistons is within plus or minus 2 mm with a confidence level of 95%. (8)

14. (a) The results of a survey on the sales of a product(Y) as a function of time period (X) are summarized below.

	X	Y
Mean	40	125
Standard deviation	2.5	16
Correlation coefficient (r)	0.85	

- (i) Fit the regression line of Y on X and estimate the value of Y when X is 45. (8)
- (ii) Fit the regression line of X on Y and estimate the value of X when Y is 135. (8)

Or

- (b) Explain different hierarchical clustering methods. (16)

15. (a) What are the items in a survey based research report? Explain them in brief. (16)

Or

- (b) (i) Discuss the guidelines for preparing bibliography. (12)
- (ii) Give a sample cover page of a research report. (4)