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MANIPAL INSTITUTE OF TECHNOLOGY
Manipal University, Manipal – 576 104



I SEM. M.TECH (ALL BRANCHES) NOVEMBER 2014
SUBJECT: RESEARCH METHODOLOGY & TECHNICAL COMMUNICATION
(HSS-501)
REVISED CREDIT SYSTEM
(29/11/2014)

Time: 2 Hours.

MAX.MARKS: 40

Instructions to Candidates:

- ❖ Answer **ANY THREE FULL** questions from **PART-A**.
- ❖ **PART-B** is compulsory

PART-A

- 1A)** a) Amazon.com requires a researcher to conduct a survey on the payment modes made by their customers in and around Udupi. Through the study they have found out that their customer base is 38,975 with a gender (Male : Female) ratio 3:2. Which type of sampling technique would you prefer to get a more realistic answer if the sample size calculated is 300? **(03)**
- b) A simple random sample has been drawn from a population of 2,000 items. If a researcher desires to estimate the percentage defective items with 1.5 percent of the true value with 95 percent probability, how large a sample needs to be drawn? **(03)**
- 1B)** Explain the following in context of research design: **(04)**
- a) Extraneous variables
 - b) Confounded relationship
 - c) Research hypothesis
 - d) Experimental & Control groups
- 2A)** Distinguish between patent, copyright and trademark with suitable examples. **(06)**
- 2B)** "Research design in exploratory studies must be flexible but in descriptive studies, it must minimize bias and maximize reliability." Justify your answer. **(04)**
- 3A)** Sketch and explain the flowchart for hypothesis testing. **(03)**
- 3B)** Explain the concept of 95% confidence level in hypothesis testing with suitable example. **(03)**
- 3C)** Explain the advantages and disadvantages of primary and secondary data sources. **(04)**

4A) In a research work, the research scholar has referred the following sources of information for writing a report. Cite the same as references as per Harvard referencing techniques. **(06)**

- a. Journal paper titled “Campus response to a student gunman” authored by K.J, ASMUSSEN AND, J, W, Creswell in the Journal of Higher Education 1995. Issue number 9, page number 445 to 53. Volume Number 5.
- b. Book titled Human Resource Management Theory and Practice: John Bratton and Jeffrey Gold, New York, (2008). 3rd Edition, Palgrave Macmillan Publication.
- c. Cite an in-text reference for the paragraph given below from the above mentioned book “Human Resource Management Theory and Practice” (see Q.4 A, b)

“The strength of the model is, however, that it expresses the coherence of internal HR policies and the importance of ‘matching’ internal HR policies and practices to the organization’s external business strategy. The weakness of Fombrun model lies in its apparently prescriptive nature, with its focus on four HR practices. It also ignores different stakeholder interests; situational factors and the notion of management’s strategic choice”.

4B) Discuss with the help of a suitable example all the four key levels of measurement scale in a research. **(04)**

PART-B (COMPULSORY)

- 5)** Select an innovative hypothetical research problem of your choice and answer the following: **(10)**
- a. Identify the problem
 - b. Write the problem statement
 - c. Frame the research questions
 - d. Define the objectives of the research
 - e. Develop a conceptual model and frame the hypotheses