MANIPAL INSTITUTE OF TECHNOLOGY
MANIPAL
(A constituent unit of MAHE, Manipal)

First Semester M. Tech. End Semester Examination November 2018

SUBJECT: RESEARCH METHODOLOGY AND TECHNICAL

COMMUNICATION [HUM 5101]

Date of Exam: **29/11/2018**   Time of Exam: **2 pm to 4 pm**   Max. Marks: 30

Instructions to Candidates:

❖ Answer ALL the questions and missing data may be suitably assumed.

1A. Explain the criteria considered in selecting the research problem. **3**

1B. Explain the need for constructing a hypothesis. **3**

1C. Differentiate between probability sampling and non-probability sampling with examples. **4**

2A. 'Intellectual Property Rights is the need of the hour for the researcher.' Discuss this statement with relevance to patents, copyrights and trademarks. **5**

2B. Sketch and Explain the eight-step of the research process. **5**

3A. In the city of Komatsu, a retail store is operating from last one decade. From about a year and a half, the sales of the store are decreasing in spite of a giant advertisement. The store manager opines of this fall due to a change in purchasing pattern of consumers. Hence he decides to conduct a study on change in purchase pattern of consumers. Help the store manager to develop the study objectives and suggest a suitable methodology to meet out the objectives. **2**

3B. *Write the correct referencing as per IEEE style.* **3**

i). Arendt, J.D. 1997. Adaptive intrinsic growth rates: an integration across taxa. Q. Rev. Biol. 72(2): 149–177.

ii). The paper titled "Evaluation of alternative hypotheses to explain temperature-induced life history shifts in Daphnia." Published by the authors-Weetman, D. and Atkinson, D. (2004), in the Journal titled as Journal of Plant Research. In the hardcopy located in 26 (55): 107-116.

Write the correct referencing as per APA style.

iii). S C. Linden, M. C., Jackson, L. Subramanian, C. Wolf, P. Green, D. Healy, and D.E. J. Linden. Emotion-cognition interactions in schizophrenia: Implicit and explicit effects of facial expression. 2008; Neuropsychologia. Advance online publication. doi:10.1016/j.neuropsychologia.2009.11.023.

3C. Assume a suitable research problem of social relevance and write   5

   i). Define the Problem

   ii) Research Objective(s)

   iii) Research Question(s) map the research objective with the question

   iv) Methodology

   v) Sampling method and data collection procedure.

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