

RESEARCH METHODOLOGY  
(Held in April 2010)

Time : Three hours

Maximum : 100 marks

Answer any FIVE questions.  
All questions carry equal marks.

1. (a) What are the objectives of research?  
(b) Compare research methods and research techniques.  
(c) Discuss the points to be considered by a researcher in selecting a research problem or a subject for research.
2. (a) Describe the different steps in a research process.  
(b) Explain the important concepts relating to research design.
3. (a) Why Interpretation is necessary? Discuss on oral presentation.  
(b) What is a technical report? Give the general outline of a technical report.
4. (a) Discuss the role of a computer in research.  
(b) Describe the applications and uses of computer.

5. (a) What is a binary tree? Explain the properties of binary trees.  
(b) Discuss on the following :  
(i) Priority queue  
(ii) ISAM.
6. (a) Discuss how deletion and insertion are performed in a Heap.  
(b) Write a short note on AVL tree.
7. (a) What do you mean by distributed databases? Discuss the advantages of distributed databases.  
(b) Write a short note on multidimensional data and databases.
8. (a) What are key elements of parallel processing? Discuss.  
(b) What is sparse data? Discuss.
9. (a) Explain perception training algorithm.  
(b) Discuss on generalized delta rule.
10. Discuss on the following :  
(a) Kohonen learning network  
(b) Supervised Hebbian learning.

