Roll No. ☐☐☐☐☐☐☐☐☐☐☐☐☐   **Total No. of Pages : 02**

Total No. of Questions : 18

B.Tech.(CSE) (2012 to 2017 E-III)   (Sem.–7,8)
SOFT COMPUTING
Subject Code : BTCS-911
M.Code : 71903

Time : 3 Hrs.   **Max. Marks : 60**

INSTRUCTION TO CANDIDATES :
1. **SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.**
2. **SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.**
3. **SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.**

SECTION-A

Write briefly :

1. Explain various constituents of soft computing.

2. What is hard computing?

3. What is a neural network?

4. What is pattern recognition system?

5. Explain perceptron learning.

6. What is adaptive resonance architecture?

7. What is a regression tree?

8. Explain intelligence with respect to flocks of birds.

9. Explain fuzzy relations.

10. Define Soft Computing.

SECTION-B

11. Explain building block hypothesis and schema theorem.

12. Differentiate between 'supervised learning' and 'unsupervised learning'.

13. Explain various applications of neural networks in soft computing.

14. Discuss generation gap with respect to soft computing.

15. Explain swarm intelligence in detail.

SECTION-C

16. Explain the different learning rules with examples.

17. What is the use of genetic algorithm?

18. Explain in detail particle swarm optimization.

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.