

SECTION – D

8. What is ant colony optimization technique ? Write various type of algorithm is ant colony optimization ? What do you do with an ant hill ? Differentiate ant colony optimization vs particle swarm optimization. 15
9. (a) Why is hybridization ? What is role of hybridization in swarm ? How hybridization calculated using swarm techniques discuss it with suitable example. 7
- (b) Discuss various Application of Swarm Techniques in Different Domains and Real-World Problems with suitable example. 8

Roll No.

3535

**B. Tech. (CSE) - Professional
Elective - IV 7th Semester
Examination – February, 2022**

WEB MINING

Paper : PEC-CSE-405-G

Time : Three Hours]

[Maximum Marks : 75

Before answering the questions, candidates should ensure that they have been supplied the correct and complete question paper. No complaint in this regard, will be entertained after examination.

Note : Attempt *five* questions in all, selecting *one* question from each Section. Question No. 1 is **compulsory**. All questions carry equal marks.

1. (a) Define mining.
- (b) Define web Spamming.
- (c) Define intelligence.
- (d) Differentiate Discrete and Continuous Optimization.

- (e) Write any *two* characteristics of Artificial Bees.
- (f) Discuss principle of Evolutionary Computation Theory.
- (g) Discuss term Information Extraction.
- (h) What are the searching techniques that are commonly used in web Search ? 15

SECTION - A

- 2. (a) How to discover knowledge from hypertext data ? Discuss in detail with suitable example. 8
- (b) Write down the difference between data mining and web mining. 7
- 3. (a) What do you mean by web mining ? what are Its; types ? What are the key issues in web mining ? 8
- (b) What is web mining subtasks ? Discuss in detail with suitable example. What are the key challenges in web mining ? 7

SECTION - B

- 4. (a) What is information retrieval in Web mining ? What is the reason for having information retrieval model ? What are the steps of information retrieval process ? What type of model is used for text retrieval ? 8

- (b) What is Clustering in web mining ? What is the function of classification and clustering ? How clustering is different from classification ? What are the challenges in clustering of web ? 7

- 5. What is latent semantic indexing and where can it be applied ? How does latent semantic analysis work ? How to Use Latent Semantic Indexing Keywords to Boost Your SEO explain with suitable example. When we analyze a document using latent semantic analysis LSA What are we trying to find ? . 15

SECTION - C

- 6. What is computational intelligence and where is it going ? What are the various components of computational intelligence ? Discuss its computational models in detail with suitable example. What is the difference between computational intelligence and artificial intelligence ? 15
- 7. (a) What is the classification of optimization ? What are the types of optimization algorithms ? How to choose the right optimization algorithm ? 7.5
- (b) What is swarm intelligence and why is it used ? How does swarm intelligence work ? What type of multi agent learning is swarm intelligence ? 7.5