B. Tech. (CSE) 7th Semester (G-Scheme)
Examination, November–2023
NEURAL NETWORKS
Paper–PCC-CSE-401-G

Time allowed : 3 hours]　　　　　[Maximum marks : 75

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

1. Write a short note on:　　　　　　　$6×2.5=15$

   (a) Differentiate between Feedforward and Feedback Networks.

   (b) What are Separability limitations in unsupervised Learning?

   (c) Define Activation function and its different types.

   (d) Reinforcement Learning

   (e) Unsupervised Learning

   (f) Backpropagation Network

Section– A

2. Describe the following:　　　　　　　15

   (a) Auto Associative Memory

   (b) Hetro Associative Memory

4. How biological neural is different from the artificial neural networks? Explain architecture of biological neural network.　　　　　15

Section–B

4. What do you mean by Gradient Descent algorithm? Explain with example. 15

5. Explain the following: 15

   (a) Application of Artificial Neural Network

   (b) McCulloch Pitts Model

Section–C

6. Explain the architecture of associative memory in detail. Also discuss its retrieval algorithm. 15

7. In which manner multilayer perceptron model differ from single layer Perceptron Model? Explain the reasons for emergence of multilayer perceptron model. 15

Section–D

8. Explain Hebbian Model and implement logic 'AND' function using Hebb Network. 15

9. What do you mean by Generalized Delta rule? Explain in detail. 15

B. Tech. (CSE)- Professional (Elective-IV)
7th Semester Examination, November–2023
SOFTWARE PROJECT MANAGEMENT
Paper–PEC-CSE-401-G / PEC-IT-407-G

Time allowed : 3 hours]   [Maximum marks : 75

Note: *Question No. 1 is compulsory. Attempt **five** questions in total selecting **one** question from each unit.*

1. Write short note on:-   6×2.5=15

    (a) Categorizing software projects

    (b) Cash flow forecasting

    (c) Sequencing and scheduling of activities

    (d) The nature of resources

    (e) Maslow's hierarchy of needs

    (f) Capability Maturity Models (CMM)

Unit-I

2. (a) Explain certain characteristics which make software projects different from other types of projects.   8

    (b) Explain the terms used to describe well-defined objectives.   7

3. Outline and explain the step wise planning activities in details.   15

Unit-II

4. (a) Explain Spiral Model of SDLC. 8

   (b) What are lagged activities? How to representation of lagged activities in precedence network? 7

5. Evaluate risk to the schedule by applying PERT technique with suitable example. 15

Unit-III

6. Explain Cost scheduling and the scheduling sequence in SPM. 15

7. Explain different methods of visualizing progress while monitoring the project. 15

Unit-IV

8. Explain different techniques to help enhance software quality. 15

9. Explain the following:

   (a) The importance of software quality 7

   (b) ISO 15504 Process assessment 8

B. Tech. 7th Semester (CSE) Professional Elective-V (G-Scheme) Examination, November–2023

NETWORK SECURITY & CRYPTOGRAPHY

Paper–PEC-CSE-4U-G

Time allowed : 3 hours]   [Maximum marks : 75

Note: *Question no. 1 is compulsory. Answer any **one** question from each of the remaining **four** units. All questions carry equal marks.*

1. Briefly explain the following: -   6×2.5= 15

   (i)   Cipher Text

   (ii) Drawbacks of symmetric cryptography

   (iii) E-mail Security

   (iv) Single Sign-on approach

   (v)   CIA triad

   (vi) Certificate based authentication

Unit-I

2. Explain the basic concepts of Encryption and Decryption techniques with suitable examples.   15

3. Describe substitution ciphers. Also define how their working is different than the transposition ciphers.   15

Unit-II

4. What do you mean by Digital Signatures? How do they act as a medium of trust between communicating parties? 15

5. (a) Differentiate between symmetric and asymmetric encryption approach. 6

(b) RSA Algorithm 9

Unit-III

6. What is SSL? Detail the events that are required for a successful SET transaction. 15

7. Explain the Secure HTTP protocol and how does it provide better security than HTTP? Also discuss the vital features of TSP. 15

Unit-IV

8. Describe in detail the Kerberos authentication service. Also highlight its chief drawbacks. 15

9. (a) Security Handshake Pitfalls 7

(b) Key Distribution Centre 8

B. Tech. 7th Semester (CSE) Open Elective-1
(G-Scheme) Examination, November–2023
FUNDAMENTALS OF MANAGEMENT
Paper–HSMC-08-G

Time allowed : 3 hours]   [Maximum marks : 75

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

1. Write short notes in 40 -50 words: 6×2.5=15

    (i)   Definition of Management

    (ii) Production Management

    (iii) Types of Training

    (iv) Define Marketing Research

    (v)   Various sources of finance

    (vi) Objectives of Marketing Management

Unit–I

2. What do you mean by Personnel management? Also explain various function of personnel management.

15

3. Define management. Explain various principles of management.
15

Unit–II

4. What is meant by production management? Explain various objectives and functions of production management. 15

5. Define Inventory control. Also explain various methods of inventory control. 15

Unit–III

6. Explain the term Marketing. Explain various objectives and functions of marketing management. 15

7. What do you mean by Advertising? Explain its objectives and functions. 15

Unit-IV

8. Define Financial Management. Explain the objectives and functions of financial management. 15

9. What is capital structure? Explain various short term and long term sources of finance. 15