322353(22)

B. E. (Third Semester) Examination, April-May 2020

(New Scheme)

(CSE Engg.)

COMPUTATIONAL SCIENCE

Time Allowed : Three hours

Maximum Marks : 80

Minimum Pass Marks : 28

Note : *Part (a) of every question is compulsory. Solve any two from (b), (c) and (d).*

Unit-I

1. (a) What do you mean by flow chart?   2

   (b) Explain about coupling and cohesion in detail.   7

   (c) State the characteristics of programming languages and explain them in brief.   7

(d) Explain the fundamental concepts in software design.   7

Unit-II

2. (a) What do you mean by translator?   2

(b) Explain the terms : $3\frac{1}{2}\times 2=7$

    (i) Virtual computer

    (ii) Binding

(c) Write short note on : $3\frac{1}{2}\times 2=7$

    (i) Compiler

    (ii) Interpreter

(d) What do you mean by data type? Explain it's different types with example.   7

Unit-III

3. (a) What do you mean by Imperative language?   2

(b) Differentiate between functional and imperative programming language.   7

(c) Describe about LISP language is brief.   7

(d) Write short note on any **two** :   7

    (i) ML

    (ii) HASKEL

    (iii) Object Oriented Programming

Unit-IV

4. (a) What do you mean by neuron?   2

(b) Write short note on any **two** :   7

    (i) single layer network

    (ii) Activation network

    (iii) Auto-associative memory

(c) Explain about Artificial Neural Network.   7

(d) Describe supervised and unsupervised learning method.   7

Unit-V

5. (a) What do you mean by fuzzy logic?   2

(b) Explain Fuzzy set theory with operations and laws in brief.   7

(c) Explain crisp set & it's operations.   7

(d) Given 3-set A, B and C. Prove demorgan's law using venn diagram.   7