

S-754

Total Pages : 3

Roll No. -----

MIT(CS)-301

Introduction to Computing

Master of Science (Cyber Security)

3rd Semester, Examination 2022(Dec.)

Time: 2 Hours

Max. Marks: 70

Note : This paper is of Seventy (70) marks divided into two (02) Sections A and B. Attempt the questions contained in these sections according to the detailed instructions given therein.

Section – A

(Long Answer – type questions)

Note: Section 'A' contains Five (05) long-answer-type questions of Nineteen (19) marks each. Learners are required to answer any two (02) questions only.

[2 x 19 = 38]

P.T.O.

- Q.1. What are the various works a computer can do? How the power of computer is measured. Explain the way by which computing Power can be increased.
- Q.2. Explain Recursive Problem Solving with the help of an example.
- Q.3. Why Natural Languages cannot be used as programming languages? Draw a parse tree for the scheme expression $(+100(*5(+55)))$ and show how it is evaluated.
- Q.4. Define defensive programming. Define data abstraction.
- Q.5. What is sorting? How it is performed?

Section – B

(Short-answer-type questions)

Note: Section 'B' contains Eight (08) short-answer-type questions of Eight (08) marks each. Learners are required to answer any Four (04) questions only.

[4 x 8 = 32]

- Q.1. What is mutator? Define global environment.
- Q.2. Explain Object-Oriented Programming. What is inheritance in OOP?
- Q.3. What is an Interpreter? Define an order of precedence for parsing expressions.
- Q.4. Explain Godel's Incompleteness Theorem.
- Q.5. What is Universal Programming Language?
- Q.6. Define a procedure for finding the longest word in a document. Analyze the running time of your procedure.
- Q.7. List Selected Scheme Primitive Procedures. Explain them also.
- Q.8. Define Turing Machine.
