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MCS-402/DCA-102

Introduction to Computing

P.G.Diploma in Computer Application (PGDCA-20/DCA)

1ST Semester, Examination June 2022

Time : 2 Hours **Max. Marks:80**

Note : This paper is of eighty (80) 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 Twenty (20) marks each. Learners are required to answer any two (02) questions only.

(2 x 20=40)

Q.1. a) Define Computer. What are the basic operations of Computer?

b) What is the difference between an algorithm and a procedure ?

Q.2 Explain Growth of Computing Power.

P.T.O.

Q.3 Explain Recursive Transition Network with the help of an example.

Q.4 Define programming languages. Why Natural Languages cannot be used as programming languages?

Q.5 What is a composite procedures? Explain with the help of diagram.

Section-B

(Short Answer-type questions)

Note: Section 'B' contains Eight (08) short-answer-type questions of Ten (10) marks each. Learners are required to answer any four (04) questions only.

(4 x 10=40)

Q.1 What is Data and Information? Explain with the help of example.

Q.2 What is a complier? How it is different from an interpreter?

Q.3 Explain the following terms:

a) Define data abstraction.

b) Brute-force approach

P.T.O.

Q.4 Explain the History of Computing Machines.

Q.5 What is Halting Problem? Explain.

Q.6 What is Universal Turing Machine? Explain.

Q.7 Define the following terms:

a) Parser
b) Interpreter
c) Lazy evaluation
d) Instance variables

Q.8 Define a class. Explain the concept of subclass and superclass in OOPs.

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