

MASTER OF SCIENCE (COMPUTER SCIENCE) (CBCS-2018 COURSE)
M.Sc. (Computer Science) Sem-I : WINTER- 2022
SUBJECT : PARADIGM OF PROGRAMMING LANGUAGES

Day : Friday

Time : 02:00 PM-05:00 PM

Date : 6/1/2023

W-20034-2022

Max. Marks : 60

N.B.

- 1) All questions are **COMPULSORY**.
 - 2) Figures to the **RIGHT** indicate **FULL** marks.
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Q.1 What is object oriented programming? Explain different types of inheritance with suitable example. **(15)**

OR

Define Programming Language. Explain features and types of programming languages.

Q.2 A) Answer **ANY ONE** of the following: **(08)**

- a) Describe architecture of computer with different units.
- b) Explain following terms :
 - i) variable ii) constant iii) derived iv) abstract data types.

B) Answer **ANY ONE** of the following: **(07)**

- a) Illustrate the while and for loop with suitable example.
- b) Describe referencing environment in procedural language.

Q.3 Answer **ANY THREE** of the following. **(15)**

- a) Explain various features of object oriented programming.
- b) Describe block structured paradigm with suitable example.
- c) Explain characteristics of functional programming.
- d) Describe classification of data types.
- e) Explain call-by-value and call-by-reference with suitable example.

Q.4 Write short notes on **ANY THREE** of the following. **(15)**

- a) Proof, facts and queries
- b) Effects of environments on languages
- c) Database language paradigm
- d) Lexical analysis
- e) Event driven programming

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