

BACHELOR OF TECHNOLOGY (C.B.C.S.) (2021-COURSE)
B. Tech. Sem - II IT :SUMMER- 2022
SUBJECT : PROGRAMMING PARADIGMS

Day : Friday
Date : 5/8/2022

S-24115-2022

Time : 10:00 AM-01:00 PM
Max. Marks : 60

N.B.

- 1) All questions are **COMPULSORY**.
- 2) Figures to the **RIGHT** indicate **FULL** marks.
- 3) Use of **non-programmable calculator** is allowed.
- 4) Assume suitable data **WHEREVER** necessary.
- 5) Draw neat diagram **WHEREVER** necessary.

Q.1 What is the role of programming languages? Also explain characteristics of programming language. (10)

OR

Q.1 What is the nature of programming languages? Explain two of them in details with example. (10)

Q.2 Describe functional programming. Also explain different parameter passing methods with example. (10)

OR

Q.2 Explain function and subprogram. Also describe the terms with example : (10)
i) Lifetime of variables
ii) Recursion.

Q.3 Explain the terms with example : (10)
i) Object
ii) Class
iii) Encapsulation
iv) Polymorphism.

OR

Q.3 What is inheritance? Explain types of inheritance with example. (10)

Q.4 Describe predicate calculus and proving theorem in detail. (10)

OR

Q.4 What is logic programming? Explain origins of Prolog and elements of prolog in detail. (10)

Q.5 What is system programming? Explain types and functions of system programs in detail. (10)

OR

Q.5 Describe the terms in details : (10)
i) Assembler
ii) Linker
iii) Loader
iv) Interpreter .

Q.6 Describe database programming design principles in detail with example. (10)

OR

Q.6 What is socket programming in Java? Describe windows programming in brief. (10)
