Roll No.

Total No. of Pages: 2

2E3207

B.Tech. II Sem. (Main) Examination, July - 2022 2FY3-06 Programming for problem Solving

Time: 3 Hours

Maximum Marks: 70

Attempt all Ten questions from Part A, Five questions out of Seven questions from Part B and Three questions out of Five questions from Part C.

Schematic diagrams must be shown wherever necessary. Any data you feel missing suitably be assumed and stated clearly. Units of quantities used/calculated must be stated clearly.

Use of following supporting material is permitted during examination. (Mentioned in form No. 205).

PART - A

(Answer shold be given upto 25 words only)

All questions are compulsory.

 $(10 \times 2 = 20)$

- What are the basic operations performed by a computer system? 1.
- What are the different kinds of main memory? 2.
- 3. What is flow chart?
- 4. Explain the working of control unit.
- 5. What is pseudo code?
- Explain the basic input-output statements in c programming. 6.
- 7. What is compiler?
- Explain the basic components of computer architecture. 8.
- Differentiate between assembler and interpreter. 9.
- 10. What are ASCII Codes?

PART - B

(Analytical/Problem solving questions)

Attempt any Five questions.

 $(5 \times 4 = 20)$

- 1. Differentiate between High-level, assembly and low-level languages.
- 2. What are operators in c? Explain its types in detail.
- 3. Explain the followings with suitable example:
 - a) Binary addition
 - b) Binary subtraction
- 4. What are Random, direct and sequential access methods?
- 5. Write a program in c language to identify greatest number among any three numbers.
- **6.** Explain switch statement with a suitable example.
- 7. What is file handling? Explain different modes of file handing.

PART - C

(Describptive/Analytical/Problem Solving/Design question)

Attempt any three questions.

 $(3 \times 10 = 30)$

- 1. Differentiate between 'Call by value' and 'call by reference'.
- 2. What are pointers? Also explain the concept of 'Recursion'.
- 3. What are data types? Explain the different data types in detail.
- **4.** What are loops? Explain different loops with suitable example.
- **5.** Write short note on (Any 2)
 - a) r's and (r-1)'s complement
 - b) Array
 - c) Functions