2024

COMPUTER APPLICATION

Paper: COA0100404

(Fundamentals of Computer Programming)

Full Marks: 45

Time: 2 hours

The figures in the margin indicate full marks for the questions.

- 1. Answer the following questions: $1 \times 5 = 5$
 - (i) What is pointer?
 - (ii) What is the use of size of operator?
 - (iii) What is the full form of 5 Mps?
 - (iv) Write the 1's complement form of 11001.
 - (v) What is algorithm?

- 2. Answer **any five** questions from the following: 2×5=10
 - (i) What is cache memory and virtual memory?
 - (ii) What is FAT file system?
 - (iii) What is BCD and grey code?
 - (iv) What is compiler?
 - (v) What is L-value and R-value?
 - (vi) Write the use of 'break' and 'continue' statements.
 - (vii) What is recursive function?
 - (viii) What is the use of strcmp() and strlen
 () functions in C?
 - (ix) Mention different storage classes available in C.
 - (x) What is the precedence and associativity of operators?
- 3. Answer **any four** questions from the following: 5×4=20

2

(i) Write about different secondary storage devices used in a computer system.

- (ii) Write about the following terms:
 - (a) CD-ROM
 - (b) DVD-ROM
 - (c) BIOS
 - (d) Operating System
 - (e) Disk Cleanup
- (iii) (a) Convert the binary number 10010011 into decimal number.
 - (b) Convert the decimal number 102753 into binary number.
- (iv) Draw a flowchart to check whether an input number is prime or not.
- (v) What is variable? Briefly explain scope and lifetime of a variable in C.
- (vi) What is function? Write different ways to passing parameters to a function in C.
- (vii) What is structure in C? How is it different from an array in C? Write a structure to store the information (i.e., roll no, name, age, class) of 50 students.

. . ;

- 4. Answer **any one** questions from the following: 10×1=10
 - (i) Write about different conditions and iterative statements used in C.
 - (ii) Write about different basic data types used in C. Also write about different operations (i.e., arithmetic, assignment and relations, logical and bitwise) used in C.
 - (iii) Write a program in C to find the summation of all the numbers present in an array of N numbers.
 - (iv) Write a function in C to find the largest of N input numbers.