

(4)

TBS-101

5. (a) What is file ? Write C program to copy the contents of one file into another file.(CO5)
- (b) What is string ? Explain any five library functions of string with suitable example.
(CO5)
- (c) Write short notes on the following : (CO5)
- (i) fseek()
 - (ii) ftell()
 - (iii) rewind()

TBS-101

60

H

Roll No.

TBS-101

B. SC. (CS) (HONS.)
(FIRST SEMESTER) END SEMESTER
EXAMINATION, Jan., 2023
COMPUTER FUNDAMENTALS AND
PROGRAMMING CONCEPTS USING C
LANGUAGE
Time : Three Hours
Maximum Marks : 100

- Note :** (i) All questions are compulsory.
- (ii) Answer any *two* sub-questions among (a), (b) and (c) in each main question.
- (iii) Total marks in each main question are **twenty**.
- (iv) Each sub-question carries 10 marks.

1. (a) What is software ? Explain the types of software in brief. (CO1)

P. T. O.

(2)

TBS-101

- (b) Write the algorithm and flowchart to find all the prime numbers between 1 to 100.

(CO1)

- (c) What is Computer Network ? Explain various types of networks in detail. (CO1)

2. (a) What is the significance of storage classes in C ? (CO2)

- (b) Write a C program to print the following pattern : (CO2)

12

123

1234

12345

- (c) Write a C program to find the sum of digits of a number (take input from user).

(CO2)

3. (a) What are operators in C. Explain the types of operators with suitable example. (CO3)

- (b) Explain the following with example :

(CO3)

(i) continue

(ii) break

(iii) Switch

(3)

TBS-101

- (c) Find the output of the following code :

(CO3)

(i) `int a = 20;`

`int main()`

`{`

`int a = 10;`

`printf("value of a is %d",a);`

`return 0;`

`}`

(ii) `int main()`

`{`

`int i = 5;`

`printf("%d %d %d", i++, i++, i++);`

`return 0;`

`}`

4. (a) Explain the difference between call by value and call by reference with example.

(CO4)

- (b) What is an array ? WAP to find the sum of the corresponding elements of two input arrays into third array. (CO4)

- (c) Write a program to find the factorial of a given number using recursion. (CO4)

P. T. O.