

(20518)

Roll No.

BCA-II Sem.

18006

B. C. A. Examination, May 2018

C Programming

(BCA-202)

(New)

Time : Three Hours]

[Maximum Marks : 75

Note : Attempt questions from all Sections as per instructions.

Section-A

(Very Short Answer Questions)

Attempt all the *five* questions. Each question carries 3 marks. Very short answer is required not exceeding 75 words. 3×5=15

1. Differentiate between string and character array. 3
2. What is generic pointer ? How can it be converted to a specific type of pointer ? 3

3. What is the output ? 3

```
#include <stdio.h>
int func (int);
main( )
{
int a = 2;
printf ("%", func(a));
return 0;
}
int func(int a)
{
if (a > 1)
return func (-- a) + 10;
else
return 0;
}
```

4. Explain the difference between malloc () and calloc () function. 3
5. Explain the importance of the # define preprocessor directive. 3

Section-B

(Short Answer Questions)

Attempt any *two* questions out of the following three questions. Each question carries 7½ marks. Short answer is required not exceeding 200 words.

7½×2=15

6. Write a program to sort an array. $7\frac{1}{2}$
7. Write a C program to find the reverse of each word of a string (how are you : output : woh era uoy). $7\frac{1}{2}$
8. Differentiate between `rewind()` and `fseek()`. Can `fseek()` work as an alternative to `rewind()`. If yes, why? $7\frac{1}{2}$

Section-C

(Detailed Answer Questions)

Attempt any *three* questions out of the following five questions. Each question carries 15 marks. Answer is required in detail. $15 \times 3 = 45$

9. (a) Why are arrays needed? Write a program to calculate the number of duplicate entries in an array. $7\frac{1}{2}$
- (b) With the help of an example, explain how pointers can be used to dynamically allocate space for two-dimensional array. $7\frac{1}{2}$
10. (a) What do you understand by EOF? Write a program to read a text file, convert all the lower case characters into upper case. $7\frac{1}{2}$
- (b) What is string? Explain any five library functions of string. $7\frac{1}{2}$

11. (a) Create a Structure **BANK** to maintain the records of a bank customers. It has the following fields **CUST-ID, NAME, ACC-TYPE, BALANCE**.
- (i) A new record is added when a customer open an account
- (ii) A existing record is updated when user deposits or withdraw an amount.
- Create Menu-Driven Program. $7\frac{1}{2}$
- (b) What do you understand by pointers? Write a program to count the number of characters, words and lines in the text using pointer. $7\frac{1}{2}$
12. (a) What is macro? Explain the difference between object macro and function macro with example. 5
- (b) Write a program to swap two numbers using pointer with structure. 10
13. (a) Explain the use of bitwise operators in programming with suitable example. $7\frac{1}{2}$
- (b) Write a program that reads a binary file that stores employees records and prints on the screen the number of records that are stored in the file. $7\frac{1}{2}$