

**B. Tech. SEM -I (Computer Science & Business Systems) (CBCS 2018-
Course) : SUMMER - 2019**

SUBJECT: FUNDAMENTALS OF COMPUTER SCIENCE

Day: Tuesday
Date: 14/05/2019

S-2019-2516

Time: 10.00 AM To 01.00 PM
Max Marks. 60

N.B.

- 1) All questions are **COMPULSORY**
- 2) Figures to right indicate **FULL** marks.
- 3) Draw neat and labelled diagram **WHEREVER** necessary.

Q.1 Define an algorithm? Write an algorithm and draw flowchart to find the largest of the 3 numbers. **(10)**

OR

Explain basic datatypes in C with proper syntax and example.

Q.2 Explain use of goto labels, break and continue with appropriate example. **(10)**

OR

Enlist different types of control structures in C and write a 'C' program for following output

```
1
2 3
4 5 6
7 8 9 10
```

Q.3 Explain following parameter passing mechanism **(10)**

- i) Call by value
- ii) Call by reference

OR

Write a note on following

- i) Extern
- ii) Static
- iii) Register
- iv) Local

Q.4 Define pointers? Write a program for addition of two number using pointers. **(10)**

OR

Explain concept of array? Write a program to find largest number in array.

Q.5 Define structures? Write a program for student management system using structure. **(10)**

OR

Write a short notes on following I/O operations:

- a) getc
- b) putc
- c) fprintf
- d) gets
- e) puts

Q.6 Explain low level I/O operations in UNIX system interface. **(10)**

OR

Explain difference between Macro and function