

**B.Tech. 2nd Semester F-Scheme
(Common for All Branches) Examination,
May-2019**

**FUNDAMENTALS OF COMPUTER &
PROGRAMMING IN "C"**

Paper-CSE-101-F

Time allowed : 3 hours]

[Maximum marks : 100

*Note : Students are required to attempt any five questions,
selecting at least one question from each section.*

Question No. 1 is compulsory

1. Write short notes on following : 20
- (a) Microprocessor
 - (b) Multiprocessor operating system
 - (c) Compiler
 - (d) Topology
 - (e) Character arrays and strings

Section-A

2. (a) What are different components of a computer ?
Explain briefly with the help of a suitable block
diagram. 10
- (b) What is the use of Input Device ? Explain any
four input devices briefly. 10

3. (a) What is the role of operating system ? Discuss main functions of operating system. Also discuss different types of operating systems briefly. 20

Section-B

4. (a) Explain different categories of High-level languages. Differentiate between Compiler and Interpreter. 10
- (b) Write short notes on Loader and Linker. 10
5. What is OSI model ? Discuss layers of OSI model. Also differentiate between OSI and TCP/IP model. 20

Section-C

6. (a) Write a C program to swap two numbers using function. <https://www.haryanapapers.com> 10
- (b) What is an Array ? How 1-D array is different from 2-D array ? Explain with the help of an example. 10
7. (a) Differentiate between Structure and Union with suitable examples. 10
- (b) Write short note on Array of structure. 10

Section-D

8. (a) Differentiate between Array of pointer and pointer to an array with the help of an example. 10
- (b) What are pointers? How a variable is declared as pointer variable ? Explain with the help of an example. 10
9. (a) What do you mean by dynamic memory allocation ? 10
- (b) Write down 'different operations that can be performed on Random access files in "C". 10

