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Total No. of Pages : 02

Total No. of Questions : 18

**B.Tech. (CSE) (2018 Batch) (Sem.-3)**  
**OBJECT ORIENTED PROGRAMMING**  
**Subject Code : BTCS-302-18**  
**M.Code : 76437**

Time : 3 Hrs.

Max. Marks : 60

**INSTRUCTIONS TO CANDIDATES :**

1. **SECTION-A** is **COMPULSORY** consisting of **TEN** questions carrying **TWO** marks each.
2. **SECTION-B** contains **FIVE** questions carrying **FIVE** marks each and students have to attempt any **FOUR** questions.
3. **SECTION-C** contains **THREE** questions carrying **TEN** marks each and students have to attempt any **TWO** questions.

**SECTION-A**

**Write briefly :**

1. Define inheritance. Name various types of inheritance.
2. What is a pure virtual function?
3. What is Data hiding? How it is achieved in C++?
4. What do you understand by array of class objects? Discuss with example.
5. What is function overloading? Give example.
6. Discuss the declaration and usage of static data members.
7. What are basic data types supported by C++?
8. Compare private, protected and public visibility modes.
9. Discuss C++ stream classes.
10. What are recursive functions? Give example.

## SECTION-B

11. What is a friend function? Explain its importance with an example.
12. What do you mean by Multi level Inheritance? Explain with the help of an example.
13. Explain various types of constructor with examples.
14. Explain the declaration, accessing and usage of static data members with the help of suitable examples.
15. Show and explain how to open, close, read and write a file?

## SECTION-C

16. Explain various control statements of C++ with suitable examples.
17. Define Polymorphism. Explain its types. How polymorphism is implemented in C++? Give suitable examples.
18. What do you mean by exception handling in C++? Write a program that throws an arithmetic exception as and when a number input is a negative number.

**NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.**