

Roll No. ....

**3088**

**B. Tech. 4th Semester (CSE)**

**Examination – July, 2021**

**OBJECT ORIENTED PROGRAMMING**

**Paper : PCC-CSE-208-G**

*Time : Three hours ]*

*[ Maximum Marks : 75*

*Before answering the questions, candidates should ensure that they have been supplied the correct and complete question paper. No complaint in this regard, will be entertained after examination.*

**Note :** Attempt *five* questions in all, selecting *one* question from each unit and question no. 1 is *compulsory*.

**1.** Write a short note on :

- (a) What is abstraction ? Explain with example. 2.5
- (b) How we can define a class ? How we can access class members ? 2.5
- (c) What do you mean by dynamic binding ? Explain. 2.5
- (d) What is dynamic memory management ? 2.5
- (e) How constructor is differed from destructor ? Explain. 2.5
- (f) Explain exception handling mechanism. 2.5

## UNIT – I

2. What are object oriented programming languages ?  
How it is differed from procedural languages ?  
Explain. 15
3. Explain the following with example : 15
  - (a) Static members
  - (b) Abstract classes
  - (c) Access specifiers

## UNIT – II

4. What is inheritance ? What are different forms of inheritance ? Explain in detail. 15
5. (a) How we declare and initialize pointer ? Explain with example program. 7.5
- (b) Explain dynamic memory management using new and delete operators. 7.5

## UNIT – III

6. What is constructor ? Explain various types of constructors in detail. 15
7. What is operator overloading ? Write a program in C++ to overload + operator using friend function. 15

## UNIT – IV

8. Explain the following concept related to Exception Handling : 15
  - (a) Catch Throw mechanism
  - (b) Rethrowing an exception
9. What are function templates ? Explain class template with the help of program. 15