**C**

## Question Paper Code: 53204

B.E./B.Tech. DEGREE EXAMINATION, NOV 2018

Third Semester

Computer Science Engineering

15UCS304 - OBJECT ORIENTED PROGRAMMING WITH C++

(Regulation 2015)

Duration: Three hours                                      Maximum: 100 Marks

Answer ALL Questions

PART A - (5 x 1 = 5 Marks)

1. Which operator is used for accessing global variables if local variable          CO1- R
   of same name exists in code?

   (a) Unary scope resolution operator          (b) Accessing resolution operator

   (c) Ternary resolution operator              (d) None of them

2. In case of binary operator overloading with member function, which          CO2- R
   of following statement should be taken into consideration?

   (a) Right hand operand must be object          (b) Left hand operand must be object

   (c) Both the operands must be objects          (d) All of these should be considered

3. A pure virtual function is initialized by                                          CO3-R

   (a) 0                (b) 1                (c) 2                (d) 3

4. What is meant by exception specification?                                          CO4-R

   (a) A function is limited to throwing only a specified list of exceptions

   (b) A catch can catch all types of exceptions

   (c) A function can throw any type of exceptions

   (d) None of the mentioned

5.  What is a File Descriptor?                                              CO5-R

    (a) A handle for machine specific structure of an open file

    (b) A handle for program specific structure of an open file

    (c) A handle for compiler specific structure of an open file

    (d) A handle for representing device files structure

## PART – B (5 x 3= 15 Marks)

6.  What is Static Class Data ?                                             CO1- R

7.  State some special characteristics of constructor.                     CO2- R

8.  State the types of inheritances and explain any two with diagrammatic   CO3- R
    representation.

9.  Write down the syntax of rethrowing of exceptions.                      CO4- R

10. State and explain the differences  between the types of file supported by C++.   CO5- R

## PART – C (5 x 16= 80 Marks)

11. (a)  Write short notes on abstraction and encapsulation in c++ with a    CO1- U    (16)
         neat example.

                                   Or

    (b)  State and explain types of member function with a neat example.    CO1-U    (16)

12. (a)  (i) List the types of constructor and with a neat example.         CO2- U    (8)

         (ii) Explain the concept of copy constructor.                      CO2- U    (8)

                                   Or

    (b)  Write short notes on binary operator overloading, overloading  CO2-U    (16)
         assignment operator with examples.

13. (a)  Discuss virtual base class with a neat example                     CO3-U    (16)

                                   Or

    (b)  Differentiate between runtime and compile time  polymorphism       CO3-U    (16)

14. (a)  Why exception handling is necessary and write a short program to  CO4-U    (16)
         catch multiple exceptions.

                                   Or

    (b)  Elucidate with a suitable example on Rethrowing an exception.      CO4-U    (16)

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15. (a) Write short I/O manipulators with a neat example     CO5- U    (16)

<div align="center">Or</div>

(b) Explain the concept File handling in c++ with suitable example    CO5- U    (16)

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