| Seat No. | |
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**[5459]-141**

**S.E. (Electronics/C & TC) (Second Semester) EXAMINATION, 2018**

**OBJECT ORIENTED PROGRAMMING**

**(2015 PATTERN)**

**Time : Two Hours**                                    **Maximum Marks : 50**

*N.B.* :— (*i*) Answer Q. No. **1** *or* **2**, Q. No. **3** *or* **4**, Q. No. **5** *or* **6**, Q. No. **7** *or* **8**.

    (*ii*) Neat diagrams must be drawn wherever necessary.

    (*iii*) Figures to the right indicate full marks.

    (*iv*) Use of Calculator is allowed.

    (*v*) Assume suitable data, if necessary.

**1.** (*a*) Differentiate between Procedure oriented programming and Object oriented programming. [6]

    (*b*) What is the use of constructor ? State *four* types of constructor. Write a program in C++ for any *one* type. [6]

*Or*

**2.** (*a*) Define inheritance. Explain different types of inheritance. [3]

    (*b*) How is memory allocated to a class and objects in C++ ? [3]

    (*c*) Write a program in C++ to use Scope resolution operator. [6]

P.T.O.

**3.** (*a*) Explain in brief the different data types in Java. [6]

(*b*) Write short notes on : [7]

(*i*) Control Statements in JAVA.

(*ii*) Command line Arguments.

*Or*

**4.** (*a*) What is Recursion ? Write a program to print array elements using Recursion. [6]

(*b*) Explain appropriately the following : [7]

(*i*) The **this** keyword.

(*ii*) Finalize( ).

**5.** (*a*) Describe the various *four* forms of implementing interfaces in JAVA. [6]

(*b*) Write a program in Java to create a player class. Inherit the classes Cricket_player and Football_player from player class. [6]

*Or*

**6.** (*a*) Differentiate between Interface and a Class. [6]

(*b*) What is Package ? How do we add a class or an interface to a package in JAVA ? [6]

**7.** (*a*) Explain Byte stream and Character stream. [6]

(*b*) What is a thread in JAVA ? Explain single threaded and multithreaded program. What is the difference between multiprocessing and multithreading ? [7]

*Or*

**8.** (*a*) Explain the terms : [6]

(*i*) Reading Console inputs.

(*ii*) Writing Console output.

(*b*) What is an applet in JAVA ? Explain a local applet and a remote applet. [7]