

**S.D.E.**

**M.C.A. SEM - III : WINTER - 2017**  
**SUBJECT: OBJECT ORIENTED OPROGRAMMING**

Day: **Thursday**  
Date: **21/12/2017**

Time: **10.00 A.M. TO 1.00 P.M.**  
Max Marks: 80

**W-2017-4424**

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**N.B:**

- 1) Attempt any **FIVE** questions from Section-I and any **TWO** from Section-II.
  - 2) Both the sections should be written in **SEPARATE** answer books.
  - 3) Figures to the right indicate **FULL** marks.
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**SECTION-I**

- Q.1** Explain important characteristics of object oriented programming languages. (10)
- Q.2** Discuss 'class' and 'object'. Explain how they are created and used with suitable example. (10)
- Q.3** Explain 'method overloading' and 'method overriding' with example. (10)
- Q.4** What are different types of inheritances supported in C++? (10)
- Q.5** Explain constructors and destructors? How they are used. (10)
- Q.6** Discuss major similarities and difference in C++ & java. (10)
- Q.7** Write short notes on (**ANY TWO**) (10)
- a) Inline function
  - b) Loops in C++
  - c) Packages in java

**SECTION-II**

- Q.8** Write a programme to overload 'area' constructor for calculating area of circle, square and rectangle. (15)
- Q.9** Write a program to overload binary '+' operator using friend function in C++. (15)
- Q.10** Write a C++ or java program to implement all operations on stack using class. (15)

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