

**S.Y.B.SC. (COMPUTER SCIENCE) SEM –III (2014 COURSE) :**

**SUMMER - 2018**

**SUBJECT: OBJECT ORIENTED PROGRAMMING WITH C++**

Day : **Wednesday**

Date : **11/04/2018**

**S-2018-0843**

Time : **12.00 NOON TO 02.00 PM**

Max. Marks : 40

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**N. B. :**

- 1) All questions are **COMPULSORY**.
  - 2) Figures to the right indicate **FULL** marks.
  - 3) Neat diagrams must be drawn **WHEREVER** necessary.
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**Q.1** Answer **Any TWO** of the following : **(10)**

- a) Distinguish between Inheritance and Polymorphism.
- b) How member functions of class are declared? Explain with an example.
- c) What is a friend function? State its properties.

**Q.2** Answer **Any TWO** of the following : **(10)**

- a) What is function overloading? Explain with suitable example.
- b) Distinguish between constructor and destructor.
- c) What are protected members? How they differ from private members?

**Q.3** Answer **Any TWO** of the following : **(10)**

- a) Write a C ++ program to implement multiple inheritance.
- b) Why virtual base class is needed? Explain with example.
- c) Write a C ++ program to overload a binary operator.

**Q.4** Answer **Any FIVE** of the following : **(10)**

- a) What are various file opening modes?
- b) Define encapsulation.
- c) What are C ++ stream classes?
- d) What is 'this' pointer?
- e) What is static data member?
- f) State any two I/O manipulators.
- g) What is pure virtual function?

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