Registration no: | | | | | | | | | | |

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B.Tech
BECS2212

3rd Semester Back Examination 2016-17
C++ AND OBJECT ORIENTED PROGRAMMING

BRANCH(S): BIOMED, BIOTECH, CHEM, CIVIL, EEE, ELECTRICAL, ENV, FASHION, FAT, METTA, MINERAL, MINING, MME, PLASTIC, TEXTILE

Time: 3 Hours
Max Marks: 70
Q.CODE: Y527

Answer Question No.1 which is compulsory and any five from the rest.
The figures in the right hand margin indicate marks.

Q1 **Answer the following questions:** **(2 x 10)**

a) What are the basic concepts of OOPS?
b) What do you mean by dynamic polymorphism?
c) Discuss the mechanism of Inheritance with an example.
d) Differentiate between encapsulation and abstraction.
e) Explain concept of Overriding with example.
f) What is friend function? What is its importance in OOP.
g) What do you mean by persistent ?
h) What do you mean by sealed modifiers?
i) What is composition? Explain purpose of composition.
j) Define manipulators with an example.

Q2 Differentiate between static binding and dynamic binding? Explain each mechanism with a suitable example. **(2+8)**

Q3 **a)** What are the various ways a method can be overloaded. Explain with example. **(5)**

b) What is composition? Explain the purpose of it. **(5)**

Q4 **a)** Why abstraction is important in OOP? Discus its importance with a suitable example. **(5)**

b) What are the features that are provided to make a programming modular? **(5)**

Q5 **a)** Write a program to show the inheritance shown in a class. **(5)**

b) Write the syntax for object oriented method call. **(5)**

Q6 **a)** Explain the mechanism of dynamic binding with example. **(5)**

b) Differentiate between aggregation and composition. **(5)**

Q7 Explain what are the methods used to create changes in subclasses. Discuss with suitable example. **(10)**

Q8 **Write short answer on any TWO:** **(5 x 2)**

a) Encapsulation

b) Object Identity

c) Constructor

d) Inline Function