SN – 290

III Semester B.A./B.Sc. Examination, November/December 2014
(Semester Scheme) (Repeaters)
COMPUTER SCIENCE – III
OOPS Using C++ and DBMS
70 – 2012-13 & Onwards
60 – Prior to 2012-13

Time : 3 Hours
Max. Marks : 70(R 2012–13 Only)
60(R Prior to 12)

Instructions : 1) *Repeaters* ***(2012-13 only)*** *have to answer Section* ***A, B, C, D.***
2) *Repeaters* ***(Prior to 2012-13)*** *have to answer Section* ***A, B, C.***
3) ***70*** *marks for students of* ***2012-13*** *only.*
4) ***60*** *marks for Repeater students prior to* ***2012-13.***

SECTION – A

I. Answer **any 10** questions :
(1×10=10)

1) Define data encapsulation.

2) What is an inline function ?

3) What is late binding ?

4) What are the different storage classes ?

5) What is function overloading ?

6) What is a destructor ?

7) Name the operator that is used for dynamic memory allocation.

8) What is meta data ?

9) Define first normal form.

10) What is a candidate key ?

11) What is SQL ?

12) Define weak entity.

SECTION – B

II. Answer **any 5** questions :
(3×5=15)

13) Discuss default arguments with an example.

14) Explain copy constructor with an example.

15) What is operator overloading ? Explain with syntax. Mention the operators that cannot be overloaded.

16) Explain pure virtual functions with an example.

17) Explain the functions of DBA.

18) What is data independence ? Name the two types of data independence.

19) What is a relationship ? Give an example for one-to-one and one-to-many relationships.

SECTION – C

III. Answer **any 5** questions : (7×5=35)

20) a) Explain all class member visibility modes. 4

    b) Explain static member functions with example. 3

21) Write a C++ program to illustrate function overloading. 7

22) Write notes on :

    a) Base class and derived class. 4

    b) Command line arguments. 3

23) a) Explain constructors with an example. 4

    b) Describe any three manipulators. 3

24) Explain the characteristics of database approach. 7

25) a) What is functional dependency ? Give an example. 4

    b) Explain transitive dependency. 3

26) a) Define E-R model. 2

    b) Discuss the various conventions used in E-R diagram. 5

27) Write short notes on :

    a) Database users. 3

    b) Any two types of join operations. 4

SECTION – D

IV. Answer **any one** question : (10×1=10)

28) What are the different types of inheritance ? Explain with an example. 10

29) a) Explain with a neat diagram the three schema Architecture. 6

    b) Discuss the difference between distributed DBMS and centralised DBMS. 4