Roll No. ....

BE-205

B. E. (First Semester) EXAMINATION, Dec., 2010

(Grading System)

(Common for all Branches)

BASIC COMPUTER ENGINEERING

Time : Three Hours

Maximum Marks : 70

Minimum Pass Marks : 22 (D Grade)

Note : Attempt *one* question from each Unit. All questions carry equal marks.

Unit—I

1. (a) Explain the difference between four generations of computers and in what way each generation was better than earlier.

   (b) What are the different types of memories ? How the size of memory is specified ? Define the access time of memory.

Or

2. (a) Why do computers have internal memory as part of the CPU and the internal bulk memory separately ?

   (b) What is the difference between random access and sequential access ?

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(c) Differentiate between address bus, data bus and control lines.

(d) Explain the application of computer in multimedia and animation.

Unit – II

3. (a) What is an operating system ? Explain the services provided by an operating system.

(b) What is the main drawback of structured programming ? How does OOP address this issue ?

Or

4. (a) What is inheritance ? Explain its various types.

(b) Explain how operating system performs file management functions.

Unit – III

5. Explain the following :

(a) Objects as function arguments

(b) Classes and objects

(c) Dynamic initialization of objects

(d) Copy constructor

Or

6. (a) Write a program which generates series of prime numbers.

(b) Explain the following :

(i) Pass by value

(ii) Pass by address

(iii) Pass by reference

Unit — IV

7. (a) What is the need for evaluation of a DBMS ? List the technical criteria that are to be considered during the evaluation process.

   (b) Explain DDL and DML operations in database system.

Or

8. (a) Explain the architecture of database system.

   (b) What is a database model ? Explain any *two* types of data models with an example for each.

Unit — V

9. (a) What are the services provided by network layer to transport layer ? Explain.

   (b) Explain the architecture of www as on client/server application.

Or

10. (a) Explain TCP/IP reference model in detail.

    (b) What is e-Commerce ? Explain the role of networking in e-Commerce.

    (c) What are the various networking devices ? Explain briefly.

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