(Please Write your Exam Roll No. immediately) Roll No. ……..

END-TERM EXAMINATION

FIRST SEMESTER [MCA] - DECEMBER 2005

Paper Code: MCA-101 **Subject: Introduction to Information Technology**

Time: 3 Hours **(Batch – 2004 & 2005)** **Maximum Marks: 60**

Note: Attempt one question from each section. Q. 9 is compulsory.

Section –A

Q. 1. (a) What is a flow chart? Draw flow chart to find the largest and smallest of three numbers.

(b) How integers are represented in memory. Explain with example.

Q. 2. What are the various components of a computer? Discuss with the help of a block diagram.

Section – B

Q. 3. Explain the following commands of DOS.
(i) COPY
(ii) RENAME
(iii)CD
(iv) MD

Q. 4. What are the various types of operating system? Discuss characteristics of each of them.

Section – C

Q. 5. What are the different types of media used for the data communication? Explain the characteristics of each of them.

Q. 6. What is the architecture of a DBMS? What is the role of a DBA?

Section – D

Q. 7. What are the major components of a Multimedia based system. What are various multimedia compression standards?

Q. 8. What is Internet? What are various applications of Internet?

Section – E

Q. 9. (a) What is a schema and subschema?
(b) What is the need for software on a computer? Explain.
(c)What is a compiler?
(d)What is the need for operating system?
(e) What are the major steps in problem solving and refinement?
(f) What are the various types of software used in computers?
(g)What are the various options with DIR commands?
(h) What is a web browser? Explain.
(i) How does LAN differs from a WAN?
(j) What is the star topology?

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END-TERM EXAMINATION

FIRST SEMESTER [MCA] - DECEMBER 2004

Paper Code: MCA-101 **Subject: Introduction to Information Technology**

Time: 3 Hours **(Batch – 2004 & 2005)** **Maximum Marks: 60**

Note: Q.1 is compulsory. Attempt any two question from each section.

Q. 1. (a) Name any one sequential access data storage device and its principle of working. **3**

(b) What is the difference between the dynamic random access memory (DRAM) and the static random access memory (SRAM). **2**

(c) Distinguish between a compiler and an Interpreter. **3**

(d) Describe the following DOS commands :- **5**

(i) DIR
(ii) RMDIR
(iii) CD
(iv) DISKCOPY
(v) DISKCOMP

(e) Distinguish between Coaxial, STP and UTP cable(s). **3**

(f) Compare and contrast Multimedia and Hypermedia. **2**

(g) What is the transmission speed on CAT1, CAT2, CAT3 and CAT5 cables? **2**

Section -A

Q. 2. (a) Describe the evolution of the computers on the basis of hardware type and processing capacity. **5**

(b) Describe the Institute of Advanced Studies Architecture (Also known as the Von Newman Architecture) of a computer using a block diagram. **5**

Q. 3. (a) Discuss the working principle of an Impact Printer. **5**

(b) Distinguish between:- **5**

(i) A multi-tasking and a multi-user system.
(ii) The network model and the relational model for database system.

Q. 4. (a) Design a flow chart for the merging of two sorted list of names such that the combined list after merging is also sorted. **5**

(b) "All software can be described as a collection of utility programs, therefore any software development if essentially program design. Thus, any person who

can code a utility program of upto 100 lines of code is a good software programmer". Comment. **5**

Section - B

Q. 5. (a) Distinguish between LAN, WAN and MAN on the basis of architecture and geographical area coverage. **5**

(b) Discuss the kernel based model of an operating system using the example of any modern OS. **5**

Q. 6. (a) Describe the design principle of A/D and D/A converters and the usage in communication systems. **5**

(b) Enumerate and describe the different network topologies. **5**

Q. 7. Write short notes on any two :- **10**
(a) Multimedia applications
(b) The Internet and the services available on it
(c) Search Engines
(d) Architecture of a multimedia systems
(e) Distributed Computing
