

END TERM EXAMINATION

FIRST SEMESTER [MCA] DECEMBER 2015-JANUARY 2016

Paper Code: MCA 101

Subject: Fundamentals of Information Technology
(Batch: 2015)

Time : 3 Hours

Maximum Marks :75

Note: Attempt any five questions including Q.no.1 which is compulsory.
Select one question from each unit.

- Q1. a) Define CISC & RISC processor. (2.5x10=25)
 b) Explain evolution of Computer.
 c) What about virtual device?
 d) Describe the job scheduling.
 e) What is interrupt Vector?
 f) Write the advantages of synchronous modes of data transmission.
 g) Discuss symbolical file system.
 h) What is the role of modem?
 i) What is the function of storage device?
 j) Explain the Digital Signature and Logic gates.

Unit-I

- Q2. a) What is a Microprocessor? Describe its role and architecture. (7.5)
 b) Explain the operation of 8085 Microprocessor. (5)
- Q3. a) Explain 2's complement arithmetic? (5)
b) Explain Logic Gates (4)
c) What is hexadecimal number systems. (3.5)

Unit-II

- Q4. a) Explain the Software Development activities. How to licenced a software for implementation? (7.5)
 b) What are the high level languages? (5)
- Q5. Write the short notes on the following: (12.5)
a) External Storage Device, b) Plotter
c) Plasma Display, d) Compiler e) Digitizing Camera

Unit-III

- Q6. a) What is an Operating System Structure? Explain its different components. (6.25)
 b) Discuss process management. What is the role of threads in processing? (6.25)
- Q7. a) Explain the Data Base Management System. (5)
b) What is synchronization? (3.5)
c) Write down the five commands of DOS. (4)

Unit-IV

- Q8. a) Explain the communication protocol. (5)
b) Difference between Digital and Analog Transmission? (4)
c) Explain internetworking tools. (3.5)
- Q9. a) Differentiate LAN, MAN and WAN with an appropriate example. (5)
 b) Write short notes on the following: (3.5)
i) Network Topologies (4)
ii) Data transmission Media