

C 17331

Name.....

Reg. No.....

**SECOND SEMESTER M.C.A. DEGREE EXAMINATION, AUGUST 2006**

**MCA 2K 205—INTRODUCTION TO SYSTEMS PROGRAMMING**

(New Scheme)

Time : Three Hours

Maximum : 100 Marks

*Answer any five questions.  
All questions carry equal marks.*

1. (a) What are the functions of an assembler ? (8 marks)  
(b) What do you understand by the term assembler directive ? Give any four examples. (12 marks)
2. (a) Explain the features of the AIX assembler. (12 marks)  
(b) Discuss the use of literals with an example. (8 marks)
3. (a) Explain with an example how a macro is defined and expanded. (10 marks)  
(b) Explain the implementation of conditional macro expansion. (10 marks)
4. (a) Explain the working of a bootstrap loader. (10 marks)  
(b) What are the advantages of a relocating loader ? (10 marks)
5. (a) What is an operating system ? Discuss the services provided by an operating system. (10 marks)  
(b) Write a note on virtual machines. (10 marks)
6. (a) Explain the use of system call, giving examples of system calls. (10 marks)  
(b) Explain the hierarchy of storage devices. (10 marks)
7. (a) Explain the life-cycle of a process in UNIX. (10 marks)  
(b) Explain how interrupts are handled in UNIX. (10 marks)