University of Buea
Faculty of Engineering and Technology

Department of Computer Engineering

Course Code : CEF 311
Course Title : Operating Systems
Course Master: Simon T. Obenofunde

1st Semester 2012 Examination

Instructions: Answer any four questions. Marks (points) are allocated as shown and are an indication to the extent to which questions are to be answered.

1. What is a process, its characteristics and 5-state model? How does the OS manage processes?   20 marks

2. What is processor scheduling and how can it be classified? What policies are used to ensure processor scheduling?   20 marks

3. What is real-time scheduling, its characteristics and features that ensure real-time system stability?   20 marks

4. What is memory management and its requirements? Briefly give the techniques used in memory management.   20 marks

5. a) Classify I/O devices. In what aspects do these devices differ?
                                                                              10 marks

   b) Briefly give the meaning of the following

   i. programmed I/O   2 marks
   ii. DMA   2 marks
   iii. I/O Buffering   2 marks
   iv. Interrupt-driven I/O   2 marks
   v. RAID   2 marks