## KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY COLLEGE OF ENGINEERING

**Department of Computer Engineering** BSc (Engineering) End of Semester Examination, 2010/2011

## COE 354 OPERATING SYSTEMS

APRIL/MAY 2011

THREE HOURS

Index No:

**SECTION A:** Answer ALL questions. Circle one letter corresponding to your choice (circle two in #13).

- 1. A static partitioned memory management system has a total of six partitions. If one is allocated to the operating system, this will allow a total of
  - five user jobs
  - b. six user jobs
  - c. thirty-two user jobs
  - d. thirty-six user jobs
  - e. sixty-four user jobs
- 2. Given memory partitions of 100K, 500K, 200K, 300K and 600K (in order) and processes of 212K, 417K, 112K, and 426K (in order), using the first-fit algorithm in which partition would the process requiring 426K be placed?
  - a. 100K
  - b. 500K
  - c. 200K
  - d. 300K
  - e. 600K
- 3. A page fault means that we referenced a page
  - a. outside the memory boundaries
  - b. with an incorrect I/O request
  - c. that was not in secondary storage
  - d. that was not in main memory
- 4. Which of the following information bits used by the various page replacement policies indicates if the page has been called lately?
  - a. Locality bit
  - b. Status bit
  - Referenced bit
  - d. Modified bit
- 5. The simplest way to break a deadlock is to
  - a. preempt a resource
  - b. rollback
  - c. kill one of the processes
  - d. lock one of the processes