

R09**Code: 9A05505****B.Tech III Year I Semester (R09) Supplementary Examinations June 2016****OPERATING SYSTEMS**

(Common to IT, ECC and CSE)

Time: 3 hours

Max Marks: 70

Answer any FIVE questions

All questions carry equal marks

- 1 (a) Explain with an example how system calls are used.
(b) With a neat diagram, explain the structure of traditional UNIX operating system.
- 2 (a) Give the queueing diagram representation of process scheduling and explain.
(b) Explain in detail about multilevel feedback-queue scheduling.
- 3 (a) What is race condition? Explain with an example.
(b) Explain Log-based recovery in detail.
- 4 (a) What is relocation? Explain dynamic relocation using a relocation register.
(b) Explain the concept of virtual memory.
- 5 (a) How deadlock is detected?
(b) Discuss the deadlock recovery techniques in detail.
- 6 (a) What is distributed file system? How file sharing is achieved in distributed file system?
(b) What are the problems associated with file sharing?
- 7 (a) Explain with a neat diagram the typical life cycle of a blocking read request.
(b) Explain about network-attached storage device. What is its drawback?
- 8 What is encryption? What are the components of an encryption? How do you classify encryption algorithms?
