

R09**Code: 9A05505**

B.Tech IV Year I Semester (R09) Supplementary Examinations June 2017

OPERATING SYSTEMS

(Common to ECE, EIE & E.Con.E)

Time: 3 hours

Max. Marks: 70

Answer any FIVE questions

All questions carry equal marks

- 1 (a) Explain how the networks are characterized based on the distance between their nodes.
(b) Explain in detail about protection and security offered by operating system in a computer system.
- 2 (a) What are the different buffering techniques used in the process of communication among processes?
(b) Explain RR scheduling algorithm with an example.
- 3 (a) What is the need for process synchronization and coordination? Explain with an example.
(b) Explain the concept of check-points to reduce the overhead of log-based recovery.
- 4 (a) With a neat diagram, explain paging hardware with TLB.
(b) Explain memory management in UNIX.
- 5 (a) What is a deadlock? What are the necessary conditions for the deadlock to occur?
(b) Explain the use of resource allocation graph in detecting deadlocks? Give examples.
- 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 How does LOOK scheduling differ from SCAN and C-SCAN scheduling algorithms? Explain with an example.
- 8 (a) What are the ways of realizing a domain?
(b) Explain domain switching in the context of protection.
