

Roll No. _____

Total No. of Pages : 02

Total No. of Questions : 18

B.Tech. (ECE) (2012 to 2017) (Sem.-6)

OPERATING SYSTEMS

Subject Code : BTCS-401

M.Code : 71120

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.
3. SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.

SECTION-A

Write briefly :

- 1) What is dual mode operation?
- 2) What is spooling?
- 3) Why page size is always power of 2?
- 4) Differentiate between kernel and shell.
- 5) What are semaphores?
- 6) Define Safe State.
- 7) Draw resource allocation graph.
- 8) What do you mean by best fit and first fit?
- 9) What is directory?
- 10) What are multiprocessor systems?

SECTION-B

- 11) What is file system? What are the various attributes of files?
- 12) How paging and segmentation are associated?
- 13) Discuss the effect of time quantum on the performance of Round robin scheme.
- 14) Write short notes on Pipes?
- 15) Differentiate between internal and external fragmentation? Which one occurs in paging system?

SECTION-C

- 16) What are the recent trends in operating system?
- 17) What is a process? Explain different states of a process with diagram. Also explain in detail the contents of PCB of a process.
- 18) What do you mean by Page Replacement? Explain various Page Replacement algorithms with example of each.

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.