



Name :

Roll No. :

Invigilator's Signature :

CS/B.TECH(ECE)/SEP.SUPPLE/SEM-7/EC-704A/2012

2012

SYSTEM PROGRAMMING AND OPERATING SYSTEM

Time Allotted : 3 Hours

Full Marks : 70

The figures in the margin indicate full marks.

*Candidates are required to give their answers in their own words
as far as practicable.*

GROUP – A
(Multiple Choice Type Questions)

1. Choose the correct alternatives for the following : $10 \times 1 = 10$

i) Assembler requires passes.

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|------|-------|
| a) 3 | b) 2 |
| c) 4 | d) 5. |

ii) In a process state after Ready state if Scheduler dispatch occurs then state occurs.

- | | |
|---------------|------------|
| a) Terminated | b) Waiting |
| c) Running | d) New. |

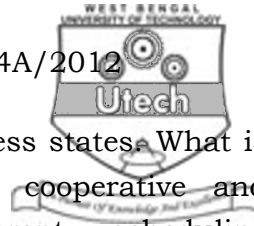
iii) Shortest Job First is

- | | |
|----------------------|-------------------------|
| a) Process Algorithm | b) Scheduling Algorithm |
| c) Memory Algorithm | d) all of these. |



- iv) Fork means
 - a) creating a process b) terminating a process
 - c) transferring a process d) none of these.
- v) Kernel is
 - a) full operating system
 - b) important part of operating system
 - c) part of process
 - d) part of thread.
- vi) Boot Strap Loader resides in
 - a) Primary Memory
 - b) ROM
 - c) Hard Disk Drive
 - d) none of these.
- vii) Page table resides in
 - a) Primary Memory b) Registers
 - c) Cache memory d) Hard Disk Drive.
- viii) Deadlock Prevention Technique are 1. Mutual Exclusion, 2. Hold & Wait, 3. Hold and wait 4th condition is
 - a) Circular wait b) Queue wait
 - c) Stack wait d) No wait.

- [Turn over



9. What is meant by process ? Explain process states. What is context switch ? Differentiate between cooperative and competitive processes. Explain different scheduling algorithms with examples. $1 + 3 + 2 + 3 + 6$
10. What is page fault ? With example explain paging technique. What is segmentation ? How is it different from paging ? What is fragmentation ? How can this problem be overcome ? $2 + 6 + 2 + 2 + 2 + 1$
11. Write short notes on any *three* of the following : 3×5
- a) Macro assembler
 - b) Loaders
 - c) Compilers
 - d) Projection policies and mechanism
 - e) Demand paging and Page replacement algorithms.

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