Roll No. ☐☐☐☐☐☐☐☐☐☐☐☐☐   Total No. of Pages : 02

Total No. of Questions : 09

B.Tech.(ECE)/(ETE) (2011 Onwards) (Sem.–6)
OPERATING SYSTEMS
Subject Code : BTCS-401
Paper ID : [A2314]

Time : 3 Hrs.   Max. Marks : 60

INSTRUCTION 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

Q1 Answer briefly :

a) Write at least two functions of Operating System.

b) Explain the term Process Synchronization.

c) Explain the term Thrashing.

d) Explain the term deadlock.

e) Differentiate between Logical and Physical address space.

f) Why page size is always power of 2?

g) Write at least two differences between UNIX and Windows based operating systems.

h) Differentiate between seek time and rotational latency.

i) Define the term File. List various attributes of a File.

j) Define the term Distributed Operating Systems.

SECTION-B

Q2   What is the need of an Operating System? Explain in brief the different views of an operating system.

Q3   Explain in detail the following CPU scheduling algorithms :

a) Shortest Job First.

b) Multilevel feedback Queue scheduling.

Q4   Explain with an example the concept of shared pages in detail.

Q5   Write a detailed note on Device Management policies.

Q6   Write a brief note on Physical File System.

SECTION-C

Q7   Explain in detail the concept of Multiprocessor Operating Systems.

Q8   a) Explain any five LINUX Operating System commands with example.

b) Explain in brief the functions of Kernel and shell.

Q9   What is the need of Page replacement? Explain any three methods of Page Replacement with example.