

Roll No \_\_\_\_\_

ID: 180831/170831/120831/030831

Semester: 3<sup>rd</sup>

Branch: Computer, IT, GE

Subject Name: Operating System

Time Allowed: 3Hrs

M.M. 100

**Section-A**

**Note: Multiple choice questions. All questions are compulsory.**

**10X1=10**

Q1 Name of deadlock avoidance algorithm?

- a) Banker's algorithm
- b) Round-robin algorithm
- c) First come first serve algorithm
- d) None of the above

Q2 The Situation where two or more process are reading or writing some shared data and the final results depends on the order of usage of the shared data, are called

- a) Race Condition
- b) Critical section
- c) Mutual Exclusion
- d) Dead Locks

Q3 Which command is used to create password of your linux system?

- a) Pwd command
- b) Passwd command
- c) Uid command
- d) Gid command

Q4 To access the service of the operating system, the interface is provided by the \_\_\_\_\_.

- a) Library
- b) System calls
- c) Assembly instruction
- d) API

Q5 A system is in the safe state if \_\_\_\_\_.

- a) The system can allocate resources to each process in some order and still avoid a deadlock
- b) There exist a safe sequence
- c) All of the mentioned
- d) None of the mentioned

Q6 The interval from the time of submission of a process to the time of completion is termed as \_\_\_\_\_.

- a) Waiting time
- b) Turnaround time
- c) Response time
- d) Throughput

Q7 How many states of a process are there?

- a) 6
- b) 4
- c) 2
- d) Unlimited

Q8 Who developed linux software?

- a) Dennis M. Ritchie
- b) Linus torvalds
- c) Bjarne stroustrup
- d) Grace Murray Hopper

Q9 Memory management technique in which system stores and retrieves data from secondary storage for use in main memory is called

- a) Fragmentation
- b) Paging
- c) Mapping
- d) None of the above

Q10 Which command is used to make the directory in DOS?

- a) Del\*.\*
- b) MD
- c) RD
- d) Erase

### **Section-B**

**Note: Objective type questions. All questions are compulsory.**

**10X1=10**

- Q11 CMOS stands for.
- Q12 \_\_\_\_\_ is an example of multi user operating system.
- Q13 What is operating system?
- Q14 Give name of any two operating system software's.
- Q15 Linux is a command line interpreter (True/False)
- Q16 Mouse is \_\_\_\_\_ device.
- Q17 Define schedulers?
- Q18 Mutual Exclusion is a condition for deadlock. (True/False)
- Q19 What is Virtual Memory?
- Q20 What is the difference between process and programs?

### **Section-C**

**Note: Short Answer type questions. Attempt any twelve questions out of fifteen questions.**

**12X5=60**

- Q21 What is process control block?
- Q22 What are the advantages of partitioning?
- Q23 Explain types and use of scanner.
- Q24 What is a multitasking operating system?
- Q25 What is a dead lock?
- Q26 What is fragmentation?
- Q27 What is a dot matrix printer?
- Q28 What is a buffer?
- Q29 What is difference between preemptive and non-preemptive scheduling?
- Q30 What are the differences between Network operating system and Distributed operating system?
- Q31 Define shortest Job First (SJF) Scheduling algorithm.
- Q32 What is interrupt? How it is handled by OS.
- Q33 Differentiate between Shortest Job first (SJF) scheduling and shortest Remaining Time Next (SRTN) scheduling.
- Q34 What is Preemptive CPU scheduling? How it is different from Non Preemptive CPU scheduling.
- Q35 Define Memory mapped I/O.

### **Section-D**

**Note: Long Answer type questions. Attempt any two questions out of three questions.**

**2X10=20**

- Q36 Explain structure of Linux and also explain history of Linux.
- Q37 What is scheduler? Explain various types of scheduler in detail.
- Q38 What are deadlocks? How deadlocks can be avoided.