RAJIV GANDHI UNIVERSITY OF KNOWLEDGE TECHNOLOGIES, BASAR
(A.Y. 2021-2022)
Department: CSE

Subject Name: Operating Systems
Date: 04 /01/2022
Exam: E3S1 EST

Subject Code: CS3101
Time: 60 Min
Max Marks: 30

SECTION – A   Marks: 20*1=20

NOTE:
a) **Each Question carries 1 marks.**
b) **Answer all questions.**

1. Which of the following is not an operating system?
   a) Windows   b) Linux
      c) Oracle   d) DOS

2. What is the mean of the Booting in the operating system?
   a) Restarting computer   b) Install the program
   c) To scan   d) To turn off

3. When does page fault occur?
   a) The page is present in memory.   b) The deadlock occurs.
   c) The page does not present in memory d) The buffering occurs.

4. Banker's algorithm is used?
   a) To prevent deadlock
   b) To deadlock recovery
   c) To solve the deadlock
   d) None of these

5. If the page size increases, the internal fragmentation is also?..?
   a) Decreases
   b) Increases
   c) Remains constant
   d) None of these

6. Which of the following is a condition that causes deadlock?
   a) Mutual exclusion
   b) Hold and wait
   c) Circular wait
   d) No preemption

e) All of these

7. Which of the following is system software?
   a) Operating system
   b) Compiler
   c) Utilities
   d) All of the above

8. Which program runs first after booting the computer and loading the GUI?
   a) Desktop Manager
   b) File Manager
   c) Windows Explorer
   d) Authentication

9. What is an operating system?
   a) interface between the hardware and application programs
   b) collection of programs that manages hardware resources
   c) system service provider to the application programs
   d) all of the mentioned

10. Operating systems
    a) enables the programmer to draw a flow chart
    b) provides a layer, user friendly interface
    c) links a program with subroutine it references
    d) all of these

11. Which of the following Is not a part of the operating system?
    a) Input/output control program
    b) Job control program
    c) Supervisor
    d) Performance monitor

12. FIFO scheduling is
    a) Fair-share scheduling
    b) Deadline scheduling
    c) Non-preemptive scheduling
    d) Preemptive scheduling

13. A Microsoft Windows is a(n)
    a) Operating system
    b) Graphic program
    c) Word Processing
    d) Database program

14. Linux is a(n) ……. operating system
    a) Open source
    b) Microsoft
    c) Windows
    d) Mac

15. .... runs on computer hardware and serves as a platform for other system to run on
    a) Operating system
    b) Application system
    c) System software
    d) All of above

16. .... Is the layer of a computer system between the hardware and the user?
    a) Operating environment
    b) Operating system
    c) System environment
    d) None of these

17. Which of the following requires a device driver?
    a) Register
    b) Cache
    c) Main memory
    d) Disk

18. Piece of code that only one thread can execute at a time is called
    a) Mutual Exclusion
    b) Critical Section
    c) Synchronization
    d) All of them

19. Suppose that a process is in 'BLOCKED' state waiting for some I/O service. When the service is completed, it goes to the
    a) RUNNING state
    b) READY state
    c) SUSPENDED state
    d) TERMINATED state

20. Fragmentation of the file system
    a)   occurs only if the file system is used improperly
    b) can always be prevented
    c)   can be temporarily removed by compaction
    d)   is a characteristic of all file systems

<div align="center">SECTION – B   Marks: 2*5=10</div>

NOTE:
a) Answer any 2 questions.

1. Explain about any 2 scheduling Algorithms.
2. Explain Layered and Monolithic structure of OS.
3. What are the various states and benefits of Threads..
4. Explain Reader's writer's problem with the help of program.

<div align="center">*** ALL The Best ***</div>