

Section-I GROUP – “A”

1. Configuration of an UART in serial communication has
a. clock signal b. baud rate, stop bit, data length c. both d. none
2. Deadlock happens when two processes waiting for the resources used by each other; in this condition
a. both processes know that they are waiting for each other
b. one process knows that other is waiting
c. both a and b
d. none
3. Physical memory location in running program is resolved by
a. linker b. compiler c. loader d. none
4. Task switching is switching between
a. processes b. threads c. concurrent part in same program d. all
5. In 2-pass compiler
a. identifier can be used without its declaration
b. identifier should be declared before its first use
c. both
d. none
6. The difference between functional/ordinary SDLC and object-oriented SDLC is
a. in functional SDLC, the development time is more than design time
b. in object oriented SDLC, design time is more than development time.
c. both
d. none
7. Which of the following is not a bus-interface for a microprocessor?
a. ISA b. AGP c. PCI d. ICE
8. Which of the following statements is true for structure?
a. a structure can contain a pointer to itself.
b. structure can be compared
c. both
d. none
9. Which is not defined as codd's rule of RDBMS?
a. comprehensive data sub-language rule b. view updates
c. physical data dependency d. integrity dependency
10. Encryption means
a. text to cipher b. cipher to text c. both d. none
11. In micro-processor, over clocking will result in
a. overheating b. malfunctioning c. both d. none
12. Caché is
a. ROM b. RAM c. PROM d. EPROM
13. Unix os implements two types of pipes, one is formatted and the other is
a. low level pipes b. high level pipes c. middle level pipes d. none
14. Which of the following remains in memory temporarily?
a. Resident portion of COMMAND.COM b. Transient portion of COMMAND.COM
c. API d. Disk BIOS
15. If the time quantum is too large, Round Robin scheduling degenerates to
a. Shortest Job First Scheduling b. Multi-level Queue Scheduling
c. FCFS d. None of the above
16. Transponders are used for which of the following purposes?
a. Uplinking b. Downlinking c. Both (a) and (b) d. None of the above
17. The format specifier "%d" is used for which purpose in C?
a. Left justifying a string b. Right justifying a string
c. Removing a string from the console d. Used for the scope specification of a char[] variable
18. Virtual functions allow you to
a. Create an array of type pointer-to-base-class that can hold pointers to derived classes
b. Create functions that have no body
c. Group objects of different classes so they can all be accessed by the same function code
d. Use the same function call to execute member functions to objects from different classes
19. A sorting algorithm which can prove to be a best time algorithm in one case and a worst time algorithm in worst case is
a. Quick Sort b. Heap Sort c. Merge Sort d. Insert Sort
20. Banker's algorithm for resource allocation deals with
a. Deadlock prevention b. Deadlock avoidance c. Deadlock recovery d. None of these
21. Which of the following communications lines is best suited to interactive processing applications?
a. Narrowband channels b. Simplex channels c. Full-duplex channels d. Mixedband channels
22. What is the main function of a data link content monitor?
a. To detect problems in protocols
b. To determine the type of transmission used in a data link
c. To determine the type of switching used in a data link
d. To determine the flow of data
23. Which of the following memories has the shortest access time?
a. Caché memory b. Magnetic bubble memory c. Magnetic core memory d. RAM
24. In which of the following page replacement policies, Balady's anomaly occurs?
a. FIFO b. LRU c. LFU d. NRU
25. After execution of CMP, a instruction in Intel 8085 microprocessor
a. ZF is set and CY is reset. b. ZF is set CY is unchanged
c. ZF is reset, CY is set d. ZF is reset, CY is unchanged
26. In a certain society, there are two marriage groups, red and brown. No marriage is permitted within a group. On marriage, males become part of their wives groups; women remain in their own group. Children belong to the same group as their parents. Widowers and divorced males revert to the group of their birth. Marriage to more than one person at the same time and marriage to a direct descendant are forbidden
A male born into the brown group may have
a. An uncle in either group b. A brown daughter
c. A brown son d. A son-in-law born into red group
27. A parallel plate air-filled capacitor has plate area of 10^{-4} m^2 and plate separation of 10^{-3} m . It is connected to a 0.5 V, 3.6 GHz source. The magnitude of the displacement current is ($\epsilon_0 = 1/36\pi \times 10^{-9} \text{ F/m}$)
a. 10 mA b. 100 mA c. 10 A d. 1.59 mA
28. The phase velocity of an electromagnetic wave propagating in a hollow metallic rectangular waveguide in the TE_{10} mode is
a. equal to its group velocity b. less than the velocity of light in free space
c. equal to the velocity of light in free space d. greater than the velocity of light in free space
29. Noise with uniform power spectral density of $N_0 \text{ W/Hz}$ is passed through a filter $H(\omega) = 2 \exp(-j\omega t_d)$ followed by an ideal low pass filter of bandwidth B Hz. The output noise power in Watts is
a. $2N_0B$ b. $4N_0B$ c. eN_0B d. $16 N_0B$
30. The cascade amplifier is a multi-stage configuration of
a. CC-CB b. CE-CB c. CB-CC d. CE-CC