

(Paper) DRDO Placement Paper (Technical)

 **Paper: DRDO Placement Paper**

1. if 100ns is Memory Access Time & 125 microsecond is 1frame period. The no. of line that can be supported in a Time Division Switch is
 - a) 125 Lines
 - b) 625 Lines
 - c) 525 Lines
 - d) 465 Lines

2. The no. of edges in disjoint Hamilton circuit in a complex graph with 17 edges is
 - a) 8
 - b) 9
 - c) 136
 - d) 17^2

3. 15 persons in a club sit every day in a dinner table such that every member has different neighbor. This arrangement will last for how many days.

4. Assume a system has 16MB cache mean Disk Access Time & cache Access time is 76.5 ns & 1.5 overall mean Access time us 465ms for each tripling the memory the miss rate is halved. The memory required to bring down the mean Access time to 24ns is
 - a) 16 MB
 - b) 24 MB
 - c) 32 MB
 - d) 48 MB

5. Average transfer speed of a i/p serial line is minimum 25,000 Bytes & maximum 60000 Bytes. Polling Strategy adopted takes 4microsec (whether there is any i/p byte or not). It is assured that byte that retrieved from controller before next byte arrives are lost. Then the maximum safe polling interval is
 - a) 12
 - b) 12.33
 - c) 12.67
 - d) 32

6. A hard disk has a rotation speed of 4500RPM. then the latency time is
 - a) .4
 - b) .6
 - c) .7
 - d) .9

7. Suppose all elements above the principal diagonal of $n \times n$ matrix A are zero. If non zero elements of the lower triangular Matrix is stored in an array B with $A[1][1]$ stored at $B[1]$. The addressing formula to the nonzero element in $A[i][j]=?$
 - a) $A[i][j]$

- b) $i(j-1)/2 + i$
- c) $j(i-1)/2 + i$
- d) $i(i-1)/2 + j$

8. The minimum number of comparisons required to find the second smallest element in a 1000 element array is

- a) 1008
- b) 1010
- c) 1999
- d) 2000

9. The internal path length of a Binary Tree with 10 nodes is 25. The external path length is

- a) 25
- b) 35
- c) 40
- d) 45

10. Average No. of Comparisons required to sort 3 elements is

- a) 2
- b) 2.33
- c) 2.67
- d) 3

11. In a switch the mean arrival rate of packets is 800 Packets/sec and the mean service rate is 925 Packets/sec

- a) .008 Sec
- b) .08 sec
- c) .8 sec
- d) 1.1 sec

12. What is Interface Control Information?

13. The minimum no. of Multiplications needed to compute x^{768} is

- a) 9
- b) 10
- c) 425
- d) 767

14. Find values for a, b, c, d

c 1 1 1

0 a 1 b

1 0 d 0

$$(967)_{\text{base } x} = 321_{\text{base } 9}$$

15. The area of red planet where the Mars Rover Landed?

16. In Which Day world Telecom Day Celebrated?

17. Laser is used for what?

- a) Treatment of Cancer
- b) Treatment of Eyes
- c) Treatment of Heart
- d) Treatment of Kidney

18. Which country is not a Member of SAARC

- a) Bangladesh
- b) Myanmar
- c) Maldives
- d) Nepal

19. The New Biotechnology Software introduced by TCS is?

20. What is Wi Fi?

21. Which is the fastest Cruise Missile