 CATTERPILLER PLACEMENT PAPER 1         
  Paper :  DRDO Placement   Paper Pattern Part - 3             
       
1.  if 100ns is Memory Access Time &   125 microsec is 1frame period. The no. of line that can be supported in a Time   Divison Switch is  
  a)125 Lines  
  b)625 Lines  
  c)525 Lines  
  d)465 Lines  
          
  2. The no. of edjes 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   ina dinner table such that every member has different neighbour.  
  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 retrived from controller   before next byte arrives are lost. Then the maximum safe polling  
  interveal is  
  a) 12  
  b) 12.33  
  c) 12.67  
  d) 32  
          
 6. A harddisk 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 od n x n matix A are zero.   
  If non zero elementsof 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 minumum number of comparisons   requied 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 Bonary   Tree with 10nodes 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 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 minumum 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)basex = 321base9  
          
         
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   intorduced by TCS is?  
          
  20. What is Wi Fi?  
        Which is the fastest Cruise Missile