Persistent Sample Paper

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Company	:	Persistent
Date	:	2004
College	:	

1-> operating system

1 . if there r n proceses and each process waits p time in waiting state then cpu utilization is-:
   a) n(1-p)
   b) n*p

2. a string of pages were given and no of page faults have to be found in LRU algorithm

3. there is a file server which provides locking for mutual exclusion . if any procees locks the file and abruptly terminated this will result in indefinitely locking .The solution they found is to implement a timer for locking of file i.e. if time outs then server assumes that file is indefinitely locked and terminate the process –
   a) this solution is perfect for mutual exclausion
   b) this will solve indefinite locking
   c) this will result in interleaving of file between processes
   d)

4.a critical section is –
ans a set of instruction which is shared by many proceeses

5.

OTHERS

6. there was a question on automata
ans – the resultant string will have even no of c

7.CFG was given

S -> 1 S 1
S-> 0 S 0
S -> 1 1
S -> 0 0
Find out the string

8 One singly circular ordered list is there if M elements are ti be inserted what will be the complexity of time
    a) O(M*N)
    b) O(M*(M+N))
    c) O ((M+N) * log(M+N))
    d)

9. find postfix and prefix of
A + B * (C + D) / E + F

10. Find out shortest path from A to B

	A	B	C	D	E		
A	0			m			
B	m	0	2	2	m		
C			0	5			
D				0	6		
E				0			

Where m is infinity

11 from the following when 43 will not be found by binary search
(a series was given with last element 43 in each)

12. from 100 – 999 find the prob. Of getting 3 digit no with no 7 in any of its digit
    a) 18/25
    b) 10/25
    c) 729/1000
    d)

13. from the set {a,b,c,d,e,f} find no of arrangements for 3 alphabet with no data repeated

14. To save space which option is better
    a) write all join operation than select than project
    b) ---------,,-----------------than project----select
    c) ----------,,-----------------in b/w select and project
    d)

Employee = { e_no , salary, fname, lname}
Works_On = {e_no, p_no, hrs}
Project = {p_no, p_name}

15.select e_no from Employee where salary = salary
   a) query invalid
   b)

16. select fname ,lname from Employee where e_no in (select e_no from works_on where p_no =(select * from project))
   a) name of Employee who works on all project
   b)
   c)
   d)

17. B tree is different from other
   a) has fixed index file size
   b) is better for queries like < <= >   >=
   c) searching will be easy
   d)

18.func(char *s1,char * s2)
{
char *t;
t=s1;
s1=s2;
s2=t;
}

void main()
{
char *s1="jack", *s2="jill";
func(s1,s2);
printf("%s %s ",s1,s2);
}

OUTPUT jack jill

19. void main()
{
    int a[5] ={1,2,3,4,5},i,j=2;

    for (i =0;i<5;i++)
    func(j,a[i]);

```
        for (i =0;i<5;i++ )
        printf("%d",a[i]);

}

func(int j,int *a)
{
j=j+1;
a=a+j;
}
```

```
20   oid main()
{
  for (a=1;a<=100;a++)
   for(b=a;b<=100;b++)
foo();
}

foo()
{  }
```

how many times foo will be called.
a) 5050
b) 1010
c)
d)

21.a hash table has a sie of 11 and data filled in its position like{3,5,7,9,6}
how many comparisons have to be made if data is not found in the list in worst case
   a) 2
   b) 6
   c) 11
   d)

22packet switching is better than circuit switching coz
      a) it takes less time
      b) it takes less bandwidth
      c)
      d)

23.addition of two sparse matrix in 3 tuple notation ---time 30 min
24a tree has 1000000 nodes than how many search r required to search a node
   a) 25

b)
c)
d)

25.some objective on recursion

26 a prgrm to arrange a string in order of occurrence of the character
i.e. the character which is coming max. in string should come first and so on
time –1hr.