BRIKS AQCADEMY PADMANABHANAGARA 23-24 MODEL PAPER

II PUC MODEL PAPER - 4

Time: 3:15mins.   Subject: COMPUTER SCIENCE   Max. Marks: 70

PART – A

Answer all the question. Each question carries one mark.

I. Select the correct answer from the choices given   1 X 20 = 20

1. _____ has to be refreshed continuously to store information.
   a)SRAM   b)primary memory   c) DRAM   d)registers
2. The expression Y = (A+B)(B+C)(C+A) shows the _____ operation.
   a) POS   b)SOP   c)NAND   d)NOR
3. The only gate that has only one input and one output
   a)NOT   b) X-NOR   c) AND   d)OR
4. Which condition indicates queue is empty?
   a)rear = null   b)front = rear   c)front = null   d)front = n-1
5. Class body is enclosed in pair of ____.
   a)()   b)[]   c){}   d)<>
6. Function can be overloaded when_____.
   a) Function names are same   b) the data types of parameters are different
   b) c)number of parameters are different   d)all the above.
7. _____ constructors are used to return object as function values.
   a)copy   b)default   c)parameterized   d)none of the above
8. _____operator shows the derivation from the base class in inheritance.
   a)::   b):   c);   d) "
9. _____ is the built in pointer that holds the address of the object defined for a class.
   a)new   b)delete   c)this pointer   d)none of the above
10. The features of database system are_____.
    a) enforcing data integrity   b)data security   c) data sharing   d) all of the above
11. Consider following SQL statement, what type of statement is this?
    Select * from employee.
    a)DDL   b)DML   c)DCL   d)DQL
12. What is the protocol used when the main server sends mail to another mail server?
    a)MIME   b) FTP   c)TCP/IP   d)SMTP
13. The arrangement where all data pass through a central computer is known as__.
    a)ring topology   b)star topology   c)mesh topology   d)bus topology
14. _____ is a set of protocols that allows to access any document on the net through URLs.
    a)WWW   b)HTTP   c)FTP   d)TCP/IP
15. The tag which links the address___.
    a) <a>   b)<anchor>   c)<address>   d)<href>

II Fill in the blanks choosing the appropriate word/words from those given in brackets.(Repeated answer will not be considered)

(random access,end users,DBA,ISAM,database designers)

16. _____ is responsible for authorization access to the database.
17. _____ are responsible for identifying the data to be stored in the database.

18. _____ are querying, updating and generating reports in database.
19. ____ file organization allow immediate direct access to individual records on the file.
20. The records with in the file are stored sequentially but direct access to individual records is possible through_____.

<center>**PART – B**</center>

III. Answer any FOUR of the following.   2 x 4 = 8

21. Explain types of motherboard:
22. Construct a truth table for three variables x,y,z that will have output 1, when xyz=100, xyz=110, xyz=111. Write Boolean expression for logic network in SOP form
23. Define tautology and fallacy.
24. What is queue? Mention different operations performed on queue.
25. What is entity and attribute?
26. Classify and explain servers.
27. List the services of e-commerce.
28. What is tellg() and tellp().

<center>**PART - C**</center>

IV. Answer any FOUR of the following.   3 x 4 = 12

29. Write about opening a file using constructors .
30. Write a note on URL .
31. Explain the use of new and delete operator in C++ with syntax and example?
32. State and prove De-Morgan's laws algebraically.
33. State and prove absorption law.
34. What is a bus? Explain the types of bus.
35. Explain free software and open source software.
36. Explain memory representation of one dimensional array.

<center>**PART – D**</center>

V. Answer any SIX of the following.   5 x 6 = 30

37. Differentiate between OOP and POP.
38. Write an algorithm to perform PUSH and POP operation on a stack.
39. Explain class definition and class declaration with syntax and example.
40. What is visibility mode? Explain types.
41. Explain default constructor with syntax and example.
42. State and prove associative laws using truth table.
43. What are virus? Mention the characteristics/symptoms of virus.
44. Write the applications of stacks.

<center>**PART –E**</center>

VI Answer any two questions.Each question carries FIVE marks.   5 x 2 = 10

45. Given the Boolean function f(X,Y,Z)=∑(0,2,4,5,6), reduce using K-MAP and also draw the logical diagram for reduced expression
46. Explain SQL built-in functions.
47. What is function overloading? Explain with suitable example.