09.01.2020   Revision Exam – 1   Marks:70

XII (A-E)   Computer Science   Time: 3 Hrs

I. Choose the correct answer: 15x1=15

1. Which of the following definer what an object can do?

    a. operating system   b. compiler

    c. interface   d. interpreter

2. Which of the following is a compound structure?

    a. pair   b. triplet   c. single   d. quadrat

3. The member that are accessible from within the class and are also available to its sub classes is called _____.

    a. public members   b. protected members

    c. secured members   d. private members

4. Time complexity of bubble sort in best case is ____.

    a. $\theta(n)$ b. $\theta(nlogn)$ c. $\theta(n_2)$ d. $\theta(n(logn)2)$

5. Let list 1 = [2,4,6,8,10] then print (list [-2]) will result in ___.

    a. 10   b. 8   c. 4   d. 6

6. Which of the following class declaration is correct?

    a. class class_name   b. class class_name< >

    c. class class_name: d. class class_name[ ]

7. Who developed ER model?

    a. chen   b. EF codd   c. chend   d. chand

8. Queries can be generated using

    a. SELECT   b. ORDER BY   c. MODIFY   d. ALTER

9. To define a recursive function _____ is used.

    a. let   b. let r   c. let rfn   d. let rec

10. The scope of nested function is _____ scope.

    a. local   b. global   c. enclosed   d. built-in

11. Which search algorithm is called as Half-Interval search algorithm?

    a. Binary   b. Binary tree   c. Hash   d. Linear

12. How many types of functions are needed to facilitate abstraction?

    a. 1   b. 2   c. 3   d. 4

13. Match the following:

1. Constructor	-	(i) def process (self)
2. Destructor	-	(ii) S.x
3. Method	-	(iii) _ _ del _ _ (self)
4. Object	-	(iv) _ _init _ _(self, num)

    a. 1-(i) 2-(ii) 3-(iii) 4-(iv)

    b. 1-(iv) 2(iii) 3-(i) 4-(ii)

    c. 1-(iv) 2-(ii) 3-(i) 4-(iii)

    d. 1-(i) 2-(iii) 3-(iv) 4- (ii)

14. (xy)=(3**2,15%2)

print (x,y) gives the answer

    a. 6 1   b. 6 7   c. 9 1   d. 9 7

15. Hierarchical model was developed by _____.

    a. Apple   b. IBM   c. Microsoft   d. macromedia

II. Answer any 6 from the following question, Q.no:24 compulsory: 6x2=12

16. What is the difference between SQL and MYSQL?

17. Differentiate interface and implementation.

18. What is a pair? Give an example.

19. Define pseudo code.

20. Write the syntax of creating a tuple with n number of elements?

21. What is instantiation?

22. What is the difference between Hierarchical and network data model?

23. List some example of RDBMS?

24. What will be the output of the following code list=[2**x for x in range (5)] print (list)?

III. Answer any 6 question, compulsory Q.no:28:   6x3=18

25. Write any DDL commands.

26. What happens if you modify a variable outside the function? Give an example.

27. Define enclosed scope with example.

28. Write a note on Asymptotic notation?

29. List out the set operations supported by python?

30. What are class members? How do you define it?

31. Write a note on different types of DBMS users?

32. Write a SQL statement using DISTINCT keyword?

33. Explain Cartesian product with a suitable example?

IV. Details: 5x5=25

34.a. What are called parameters and write a note on
 (i) Parameter without type (ii) Parameter with type.

OR

b. How will you access the multi-item. Explain with example.

35.a. Write any 5 characteristics of modules.   OR

b. What is Binary search? Discus with example.

36.a. What are the different ways to insert an element in a list? explain with suitable example.   OR

b. Explain the different operators in relational algebra with suitable examples?

37.a. Write the different types at constraints and their function?

OR

b. Explain the characteristics of DBMS.

38.a. Explain the different set operations supported by python with suitable example.

OR

b. Explain LEGB rule with example.