

VidyaVikasMandal's
RamacrisnaMadevaSalgaocar Higher Secondary School
Margao Goa

Preliminary Exam, December, 2024

Std: XII Computer Technique
Maximum Marks : 50

Sub: SOFTWARE TECHNOLOGY

No. of Question : 26

Date 20/12/2024

Duration: 2 hours.

Instructions :

- i. All questions are compulsory
 - ii. There are four sections in this question paper(A,B,C&D)
 - iii. In section A there are ten questions of 1 mark each.
 - iv. Section B contains ten questions of 2 marks each.
 - v. Section C contains four questions of 3 marks each. Internal choice is provided for Q24.
 - vi. Section D contains two questions of 4 marks each. Internal choice is provided for Q26.
 - vii. Write the number of each question clearly on the answer book.
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Section A

Question numbers from 1 to 10 carry 1 mark each.

1. Which keyword is used to declare a function in python?
2. Which string method returns true if string contains only letters and digits.
3. Given list mylist = [11,12,13,14,15], what is the output for the python code print(len(mylist))?
4. for i in range(1,6,2): , how many times the for loop will run?
5. Name the set of rules or procedures for transmitting data between electronic devices, such as computers.
6. Name the topology in which every device is directly connected to every other device?
7. Name the signal that is in continuous wave form and changes smoothly over a time .
8. Which Data Transmission mode supports two-way traffic but in only one direction at a time ?

9. Which dictionary function is used to remove all the items from the dictionary?
10. In which type of Inheritance, the derived class becomes the base of another class?

Section B

Question numbers from 11 to 20 carry 2 marks each.

11. Explain with example items() and keys() build-in dictionary methods..
12. What is computer network? State two advantages of computer network.
13. State two features of Client Server Network.
14. Write the python code to create a tuple using build in function and add five customers name to it.
15. Briefly explain Operator overloading in Polymorphism.
16. Write two differences between object oriented programming and Procedural Oriented Programming.
17. Explain data abstraction in Object Oriented Programming.
18. State different types of namespaces and explain any one.
19. What are class attributes ? Explain with example.
20. Briefly explain the concept of inheritance in python .

Section C

Question numbers from 21 to 24 carry 3 marks each.

21. With a neat labelled diagram describe Star Topology.
22. Explain wired and wireless network.
23. Explain three advantages of object oriented programming.
24. Write a python code to add nstudents rollno and marks scored out of 100 to a students dictionary and output list of all students who have scored marks more than 60.

OR

- 24 Explain giving example method to add a single element to an existing dictionary and also to join two dictionaries into one.

Section D

Question numbers from 25 to 26 carry 4 marks each.

25. Write a Python code to add 'n' Employee ID and their names to a dictionary and print the dictionary. Input any Employee ID and display its name.

26 Write a python program to separate the given tuple in the following manner.

Example

Given Tuple T= (11,22,33,44,55,66,77)

Output

T1 = (11,33,55,77)

T2 = (22,33,44)

T3 = (77,66,55,44,33,22,11)

Also output the lowest value from the given tuple.

OR

26 .Write program in python to input two tuples , concatenate these tuples and sort the combined tuple.