

MODEL QUESTION PAPER

COMPUTER SCIENCE

12th Standard (State Board)

Time: 3 Hours

Maximum Marks: 70

General Instructions:

1. The question paper comprises of four parts.
2. You are to attempt all the parts. An internal choice of questions is provided wherever applicable.
3. All questions of Part I, II, III and IV are to be attempted separately.
4. Question numbers 1 to 15 in Part I are Multiple Choice Questions of one mark each. These are to be answered by choosing the most suitable answer from the given four alternatives and writing the option code and the corresponding answer
5. Question numbers 16 to 24 in Part II are two-mark questions. These are to be answered in about one or two sentences.
6. Question numbers 25 to 33 in Part III are three-mark questions. These are to be answered in about three to five short sentences.
7. Question numbers 34 to 38 in Part IV are five-mark questions. These are to be answered in detail Draw diagrams wherever necessary.

Part – I

Choose the correct answer.

Answer all the questions: [15 × 1 = 15]

1	The members that are accessible from within the class and are also available to its subclasses is called..... (a) public (b) protected (c) secured (d) private	1
2	Built in scopes are called as scope. (a) private (b) public (c) protected (d) module	1
3	The complexity of Bubble sort is..... (a) $\theta(n^2)$ (b) $\theta(n(\log n)^2)$ (c) $\theta(n)$ (d) $\theta(2n)$	1

4	How many integer data types are there? (a) 2 (b) 3 (c) 4 (d) 5	1
5	Branching statements are otherwise called as..... (a) alternative (b) Iterative (c) loop (d) sequential	1
6 functions are anonymous un-named functions. (a) User defined (b) Built-in (c) Lambda (d) Recursive	1
7	The code block always comes after..... (a) ; (b) + (c) = (d) :	1
8	Which one of the following is the membership operator? (a) is (b) at (c) to (d) in	1
9	Which operator is used to join two tuples? (a) – (b) _ (c) + (d) +:	1
10	A table is otherwise called as..... (a) tuple (b) relation (c) attribute (d) degree	1
11	Who developed ER model? (a) Chen (b) E F Codd (c) Chend (d) Chand	1
12	The latest SQL was released in..... (a) 1987 (b) 1992	1

	(c) 2008 (d) 2012	
13	How many ways are there to read the CSV files? (a) 2 (b) 1 (c) 3 (d) 4	1
14	CSV files cannot be opened with..... (A) notepad (b) MS Excel (c) Open office (d) html	1
15	getopt mode is given by..... (a) ; (b) = (c) # (d) :	1

Part – II

Answer any six questions.

Question No. 21 is compulsory. [6 x 2 = 12]

16	List the characteristics of an algorithm.	2
17	What are the escape sequences for Backslash, Newline, Tab, Single quotes.	2
18	Define composition.	2
19	Name the different types of functions.	2
20	Write note on center function, center (width, fillchar)	2
21	Write a program to create a list of numbers in the range 1 to 20. Then delete all the numbers from the list that are divisible by 3.	2
22	Write note on dictionary comprehensions.	2
23	What is data consistency?	2
24	Define database.	2

Part – III

Answer any six questions.

Question No. 29 is compulsory. [6 × 3 = 18]

25	Define constructors and selectors functions.	3
26	What are the steps to do Dynamic programming?	3

27	Write note on delimiters.	3
28	Write note on Nested loop structure.	3
29	Write a program to display the sum of natural numbers upto n.	3
30	Differentiate list and dictionary.	3
31	Explain the commands which comes under TCL.	3
32	Differentiate Python from C++.	3
33	Give the Pseudo code for Bubble sort algorithm.	3

Part – IV

Answer all the following questions. [5 × 5 = 25]

34	(a) Explain the rules to be followed to format data in a CSV file.. [OR] (b) Write a program to add a prefix text to all the lines in a string.	5
35	(a) Explain the purpose of range with an example. [OR] (b) Explain the various processing skills of SQL.	5
36	(a) Explain various set operations. [OR] (b) Write a program that accept a string from the user and display the same after removing vowels from it.	5
37	(a) Write a program to display all records using fetchall(). [OR] (b) Write a C++ program using user defined function to find cube of a number..	5
38	(a) Explain reverse Indexing in list using python program. [OR] (b) Explain sort function in list with examples.	5