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 duration for which a variable is alive is ……………….. (a) Scale (b) Life time (c) Static (d) Function	1
2	………………. describes the lower bound of an algorithm. (a) Big Ω (b) Big Θ (c) Big O (d) Big $\otimes$	1
3	How many types of operators are there? (a) 2 (b) 3	1

	(c) 4 (d) 5	
4	The keys in python, dictionary is specified by …………….. (a) = (b) ; (c) + (d) :	1
5	…………….. is used to access an element in a list. (a) Element (b) i (c) Index (d) Tuple	1
6	The command to delete a table is ……………….. (a) Drop (b) Delete (c) Delete all (d) Alter table	1
7	'skipinitialspace' is used for removing ……………….. after delimiter. (a) White spaces (b) Double quotes (c) Comma (d) Colon	1
8	List literals are written using ……………… (a) [ ] (b) ( ) (c) { } (d) <>	1
9	What does ……………… name ………………. contains? (a) C++ file name (b) Main ( ) name (c) Python file name (d) OS module name	1
10	Which of the following clause avoid the duplicates? (a) Distinct (b) Remove (c) Where (d) Group by	1

11	Which function returns the smallest value of the selected columns? (a) Min ( ) (b) Minimum ( ) (c) Small ( ) (d) Least ( )	1
12	Which is a python package used for 2D graphics? (a) Matplotlib.pyplot (b) Matplotlib.pip (c) Matplotlib.numpy (d) Matplotlib.plt	1
13	Skipping of first row heading in CSV file is given by ……………… (a) Skip (b) Next (c) Forward (d) More	1
14	Which mode is used when dealing with non-text files like images or exe files? (a) Text (b) Word (c) Binary (d) Exe	1
15	In python _ del _ ( ) method is used as …………… (a) Delete (b) Drop (c) Truncate (d) Destructor	1

Part – II
Answer any six questions.
Question No. 21 is compulsory. [6 x 2 = 12]

16	Who is an Algorist?	2
17	What is a repeating operator?	2
18	Write note on dictionary comprehensions?	2
19	What is the output of the following snippet? T=1 while T: print(True) break	2

	(a) False (b) True (c) 0 (d) No output	
20	List the control structures in python?	2
21	Pick the correct one to execute the given statement successfully, if_: print(x, " is a leap year") (a) x % 2 = 0 (b) x % 4 = = 0 (c) x/4 = 0 (d) x % 4 = 0	2
22	What are the 4 types of function arguments?	2
23	Find output: C = 65 Print (chr (C))	2
24	Give the positive and negative index for list [10, 23, 41]	2

Part – III
Answer any six questions.
Question No. 29 is compulsory. [6 × 3 = 18]

25	Write a python program to check smallest of 3 numbers?	3
26	Write a note on count ( ) function?	3
27	What are the advantages of user – defined functions?	3
28	Write note on min ( ), max ( ), sum ( ) functions?	3
29	What is the use of append ( ) and extend ( ) functions in python?	3
30	Define Nested list, give example for it.	3
31	Define list. How will you represent rational numbers with list?	3
32	Define memoization?	3
33	Mention any 6 keywords?	3

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

34	(a) Explain the pseudo code to do Binary search. [OR] (b) Give the pseudo code for insertion sort.	5
35	(a) Explain input function with example. [OR] (b) Explain various types of Relationships in DBMS.	5
36	(a) Write a menu driven program that keeps record of books available in school library	5

	[OR] (b) Write a program to accept a string and print the number of upper case, vowels, consonants and spaces in the giving string?	
37	(a) Explain python getopt module. [OR] (b) Write a sql code using where clause to display the different grades scored by male students from student table.	5
38	(a) Write a program that accept data using python input ( ) command and write it in the Table called person. [OR] (b) Write a CSV file with a line terminator.	5