

# GULF SAHODAYA(SAUDI CHAPTER) EXAMINATION – 2021

**SUBJECT: COMPUTER SCIENCE NEW(083)**

**MAX. MARKS: 70**

**CLASS : XI**

**TIME : 3 HRS**

## **General Instructions:**

1. This question paper contains two parts A and B. Each part is compulsory.
2. Part-A has 2 sections:
  - a. Section-I is short answer questions of 1 mark each, to be answered in one word or one line.
  - b. Section-II has two case studies questions. Each case study has 4 case-based sub-parts of 1 mark each.
3. Part-B has three sections.
  - a. Section-I is short answer questions of 2 marks each in which two questions have internal options.
  - b. Section-II is long answer questions of 3 marks each in which two questions have internal options.
  - c. Section-III is very long answer questions of 5 marks each in which one question has internal option.

## **Part - A**

### **Section – I**

**[Attempt any 15 questions from questions 1 to 21]**

**1x15=15 Marks**

1. The ALU performs \_\_\_\_\_ and \_\_\_\_\_ operations.
2. Which of the following are input devices?  
(i) Keyboard    (ii) Microphone    (iii) Projector    (iv) Monitor
3. 1 KB is equivalent to \_\_\_\_\_ bytes.
4. The software that controls the internal computer operation is called \_\_\_\_\_.
5. Draw logic circuit diagram for the following Boolean expression:  
 $(A+B)C$
6. Convert  $(110101)_2$  to decimal.
7. Which symbol is used to insert a comment line in python?
8. Identify the operator(s) which is not an arithmetic operator.  
(i) %    (ii) =    (iii) ==    (iv) \*\*
9. The absence of value in python is indicated by \_\_\_\_\_.
10. Which method is used to find the number of items in a list?
11. The identity operators in python are \_\_\_\_\_ and \_\_\_\_\_.

12. Name the python library modules which need to be imported to invoke the following functions.  
(i) `sin()` (ii) `randint()`
13. What are the mutable data types of python?
14. What is the value of the expression?  
`5-2**5//10`
15. Give any two practices to ensure confidentiality of information.
16. Which term is used to describe derogatory messages or comments posted online targeting people?
17. Name any two open source operating system.
18. Any fraudulent business practice that extracts money from an unsuspecting, ignorant person is \_\_\_\_\_.
19. \_\_\_\_\_ refers to methods used for interpretation of computer media for digital evidence.
20. What is plagiarism?
21. \_\_\_\_\_ are the rights of the owner of information to decide how much information is to be exchanged, shared or distributed.

## Section - II

**[Both case study based questions 23 & 24 are compulsory]**

22. Consider the following dictionary **Marks** and answer the questions from (i) to (iv).  
`Marks={"Lina":80, "Fatima":75, "Priya":82}`
  - (i) Ms. Shoba wants to change the name Lina to Linda. Is it allowed in python?  
If no, state the reason. 1
  - (ii) Help her to select the command to get all the marks from the dictionary. 1
    - a) `Marks.value()`
    - b) `Marks.values()`
    - c) `Marks.items()`
  - (iii) She needs to change the mark of Priya to 87. Help her choose the command to do so. 1
    - a) `Marks.update[Priya:87]`
    - b) `Marks[Priya]=87`
    - c) `Marks["Priya"]=87`
  - (iv) She wanted to add a new student "Nithya" with marks 66 . she used the

- following command and got error. 1  
 Marks.append[“Nithya”]=66  
 Help her to write the correct command.
- 23.(i) Using someone else’s twitter handle to post something will be termed as \_\_\_\_\_. 1  
 (ii) Akash wanted to buy a camera. So he searched online. But after that every time he goes online, his web browser shows him advertisements about cameras.  
 a) Why is this happening? 1  
 b) How could have Akash avoided them? 1  
 c) How can Akash get rid of this now? 1

## Part – B Section - I

24. Differentiate between Compiler and interpreter. 2
25. What are the functions of an operating system? 2  
 OR  
 What is utility software? Give two examples.
26. State DeMorgan’s laws. Prove any one law using truth table. 2
27. Identify the type of token. 2  
 (i) D\_O\_B (ii) False (iii) % (iv) if
28. What is the difference between = and == operator. 2  
 OR  
 What is dynamic typing in python? Explain with an example.
29. Given two lists: L1=[10,12,14] and L2=[20,22,24] 2  
 What does each of the following expressions evaluate to?  
 (i) L1+L2 (ii) L1\*2 (iii) L1<L2 (iv) L1[ : :-1]
30. Find the errors in the following code(if any) and correct the code by rewriting it and underlining the corrections. 2
- ```

x=int(“Enter the value for x:”)
for y in range(0,11):
    if x=y
        print(x+y)
    else
        Print(x-y)

```

31. Find the output: 2  
`A=[11, 22, 33, 44, 55]`  
`B=len(A)`  
`for I in range(0,B,2):`  
`print(i)`
32. Rewrite the following code using while loop. 2  
`A=int(input("Enter a number:"))`  
`S=1`  
`for I in range(A):`  
`S*=A`  
`print(S)`
33. Give any four rules that you should follow while using a social networking site. 2

## Section-II

34. Find the output: 3  
 (i) `x,y=5,10`  
`x,y=y,x+2`  
`print(x,y)`  
 (ii) `for j in "absolute":`  
`if j>="t":`  
`break`  
`print(j, end="")`
- 35.(i) Give the types of errors: 3  
 a) `a+2=x`  
 b) `while x<10`  
`print(x)`  
 (ii) What is logical error?
36. Write python program to calculate the grade of a student after entering the average marks as per the following criteria: 3

| Average Mark         | Grade |
|----------------------|-------|
| $\geq 90$            | A     |
| $\geq 75$ and $< 90$ | B     |
| $\geq 50$ and $< 75$ | C     |
| $< 50$               | F     |

OR

Write a program in python to print the first 'n' multiples of a given number.

37. What is a virus? How are Trojans different from worms? 3

OR

What are the benefits of e-waste recycling?

### Section-III

38. (i) Which of the following are valid identifiers? 5

a) my.data b) \_Data1 c) Data\_rec1 d) 1Data

(ii) Write a python program that reads a string and checks whether it is a palindrome string or not.

39.(i) Differentiate between append() and extend() methods of list. 5

(ii) Write a python program to find the mean of a given list of numbers.

40.(i) Write a python program that inputs two tuples and creates a third that contains all the elements of the first followed by all the elements of the second. 5

(ii) Write a python program to create a dictionary to store names and marks of N number of students.

OR

What would the following expressions return?

a) "wonder".rstrip("red")

b) "123ABC".isdigit()

c) "Computer".partition("put")

d) "Hello".find("l")

e) "computer science".title()