

Class: XI Session: 2025-26
Computer Science (083)
Annual Exam Practice Paper

Time Allowed: 3 hours

Maximum Marks:70

General Instructions:

- Please check this question paper contains 37 questions
- This paper is divided into 5 sections, A, B, C, D and E.
- All questions are compulsory.
- Section A consists of 21 questions (1 to 21). Each question carries 1 mark.
- Section B consists of 7 questions (22 to 28). Each question carries 2 marks.
- Section C consists of 3 questions (29 to 31). Each question carries 3 marks.
- Section D consists of 4 questions (32 to 35). Each question carries 4 marks.
- Section E consists of 2 questions (36 to 37). Each question carries 5 marks.
- All programming questions are to be answered using Python Language only.

Q. No.	Question	Marks
SECTION A		
1.	State True or False. “Python identifiers must begin with an alphabet or an underscore”	1
2.	Which of the following is an immutable data type in Python? a) List b) Dictionary c) Tuple d) None of these	1
3.	What will be the output of the following code: <pre>print('hELLo'.capitalize())</pre> a) Hello b) HeLlO c) hELLO d) hElLo	1
4.	What is the output of the following code: <pre>x,y = 5,2 print(x // y)</pre> a) 2.5 b) 2 c) 3 d) Error	1

13.	The operator is checks for _____. a) Equality of value b) Identity (same object in memory) c) Membership in a list d) Assignment	1
14.	Logical errors are detected _____. a) At compile time b) At runtime c) Before execution d) During testing (give wrong output)	1
15.	What will be the output of "Hello" + "World"? a) HelloWorld b) Hello World c) "Hello" + "World" d) Error	1
16.	not((True or False)and(False)) evaluates to: a) False b) True c) Error d) not	1
17.	Which of the following can increase your digital footprint? a) Posting photos on social media b) Browsing privately c) Clearing cookies regularly d) Using incognito mode	1
18.	What will be the output of the following python code: <pre> a=10 while True: a=a+1 break print(a-1) </pre> a) 10 b) 11 c) 9 d) ValueError	1

23.	Write a Python program to take two numbers as input. If both numbers are greater than 10, print their average. Otherwise, print the maximum of the two numbers.	2
24.	What will be the output of following statement: $7-3//8+9**1-6$ OR What does the following code print? <pre>if not False: print("Earth") else: print("Mars")</pre>	2
25.	Fill in the blanks: (a) $(73)_{10} = (\quad)_2$ (b) $(\quad)_8 = (ABC)_{16}$	$1 \times 2 = 2$
26.	Differentiate between Trademark and Patent.	2
27.	Write a program in python that takes a number as an input from the user and check whether the number is positive, negative or zero. OR Write a program in python that takes a string as an input from the user and check whether it's a palindrome or not.	2
28.	You receive an email that looks like it's from your bank, asking for your password and ATM PIN. Which type of cybercrime is this? OR A hacker secretly listens to private video calls between two people. Which cybercrime is this?	2

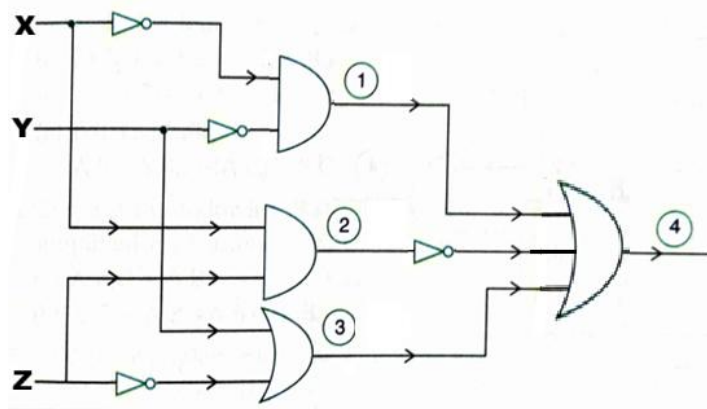
SECTION C

29.	Write a program in python to print the following pattern using a loop: <pre> A BC CDE DEFG EFGHI </pre> OR Write a program in python to print the following pattern using a loop: <pre> 54321 4321 321 21 1 </pre>	3
30.	a) Your computer becomes slow, and many unwanted pop-up ads start appearing. Which type of malware could be causing this? b) Ravi copies paragraphs from a website and pastes them into his school project without mentioning the source. Which law or principle is being violated? OR Meena downloads a song from a website and uses it as background music in her YouTube video without permission from the original artist. a) What kind of IPR violation has Meena committed? b) How could she have used the song legally?	$1 + 2 = 3$

31.	What will be the output of following python code: <pre> N=50 for i in range(10,N+1): a=str(i) if a==a[::-1]: print(i, end=",") </pre> OR How many time the loop will iterate? (i) for i in range(30,20): (ii) for i in range(-6,5,-2): (iii) while 10:	1 x 3 = 3
SECTION D		
32.	(i) Differentiate between continue and break keyword. (ii) Write a Python program to count the frequency of each word in a given sentence using a dictionary. Ex: Input = “Python is fun and Python is easy” Output = {Python: 2, is: 2, fun: 1, and: 1, easy: 1} OR Fill in the blanks: (i) The slicing s[2:5] returns characters from index _____ to _____. (ii) The function used to add an element at the end of a list is _____. (iii) To remove the last item from a list, we use _____. (iv) The function _____ is used to convert all characters in a string to uppercase.	1 + 3 = 4

33.	a) Write a Python program to remove duplicates from a list given as an input by the user. b) Write a Python program that accepts a year as an input from the user and checks whether it is a leap year or not. Note: If a year is divisible by 400 then it's a leap year. If it's not, then it must be divisible by 4 but not by 100 to be a leap year.	$2 + 2 = 4$
34.	Write a program in python that takes a tuple T of integers as an input from the user and perform the following tasks: (i) Display the tuple in descending order. (ii) Display the sum and average. (iii) Update the last element of tuple to 78. (iv) Display the total number of elements in the tuple.	$1 \times 4 = 4$
35.	Answer the following questions in one word/line. (i) Rohan uses public Wi-Fi to do online shopping and banking transactions. Which cyber safety rule is he ignoring and what could happen? (ii) Creating fake accounts to insult someone is an example of cyber trolling. (True/False) (iii) A local business uses the Nike logo for its shoes. Which IPR has been violated? (iv) Deleting a post from social media completely removes it from the internet forever. (True/False)	$1 \times 4 = 4$

SECTION E

36.	Write a program in Python that takes a sentence as an input from the user and performs the following analyses: - Calculate and print the total number of words in the sentence. - Calculate and print the number of uppercase letters (A-Z) in the sentence. - Calculate and print the number of digits (0-9) in the sentence. - Print all the lines that starts with a vowel and ends with a consonant.	$1 + 1 + 1 + 2 = 5$
37.	John, a student of class 11 is designing a circuit diagram. Help him to get the output out of it at different stages.  (i) What will be the output at 1? (ii) What will be the output at 2? (iii) What will be the output at 3? (iv) What will be the output at 4? (v) What will be the final output of the circuit if input at X, Y and Z is 0.	$1 \times 5 = 5$