Half Yearly Examination 2024 – 2025

Time: 3:00 Hrs.

M.M. 70

General Instructions:

- Please check this question paper contains 35 questions.
- The paper is divided into 4 Sections- A, B, C, D and E.
- Section A, consists of 18 questions (1 to 18). Each question carries 1 Mark.
- Section B, consists of 7 questions (19 to 25). Each question carries 2 Marks.
- Section C, consists of 5 questions (26 to 30). Each question carries 3 Marks.
- Section D, consists of 2 questions (31 to 32). Each question carries 4 Marks.
- Section E, consists of 3 questions (33 to 35). Each question carries 5 Marks.
- All programming questions are to be answered using Python Language only

Section – A

Q.1 Is Python case sensitive when dealing with identifiers?

(a) yes   (b) no   (c) machine dependent   (d) none of the mentioned

Q.2 Which of the following is an invalid variable?

(a) my_string_1   (b) 1st_string   (c) foo   (d) _

Q.3 Which of the following is an invalid statement?

(a) abc = 1,000,000   (b) a b c = 1000 2000 3000

(c) a,b,c = 1000, 2000, 3000   (d) a_b_c = 1,000,000

Q.4 Which one of these is floor division?

(a) /   (b) //   (c) %   (d) None of the mentioned

Q.5 What is answer of this expression, 22 % 3 is?

(a) 7   (b) 1   (c) 0   (d) 5

Q.6 What is the output of this expression, 3*1**3?

(a) 27   (b) 9   (c) 3   (d) 1

Q.7 Following set of commands are executed in shell, what will be the output?

```
>>>str="hello"
>>>str[:2]
```

(a) he   (b) lo   (c) olleh   (d) hello

Q.8 Study the following code :

St= "computer science" for St in range (2, 10, 2) ; Paint (St) :

(a) mue   (b) muec   (c) muece   (d) omput

Q.9 In order to store values in terms of key and value we use what core data type.

(a) list   (b) tuple   (c) class   (d) dictionary

Q.10 Which is the correct operator for power(x,y)?

(a) x^y   (b) x**y   (c) x^^y   (d) None of the mentioned

Q.11 Who developed the Python language?

(a)Zim Den   (b) Guido van Rossum   (c) Niene Stom   (d) Wick van Rossum

Q.12 Study the following program :

```
i = 0
while i < 3:
        print(i)
        i += 1
else:
        print(0)
```

What will be the output of this statement?

(a) 0 1   (b) 0 1 2   (c) 0 1 2 0   (d) 0 1 2 3

Q.13 Which of the following character is used to give single-line comments in Python?

(a) //   (b) #   (c) !   (d) /*

Q.14 To add a new element to a list we use which Python command?

(a) list1.addEnd(5)   (b) list1.addLast(5)   (c) list1.append(5)   (d) list1.add(5)

Q.15 Which of the following is a Python tuple?

(a) {1, 2, 3}   (b) {}   (c) [1, 2, 3]   (d) (1, 2, 3)

Q.16 What will be the output of the following Python statement?

```
>>>"a"+"bc"
```

(a) a   (b) bc   (c) bca   (d) abc

Q.17 Which of the following statements is used to create an empty List in Python?

(a) ( )   (b) [ ]   (c) { }   (d) set()0

Q.18 Which of these is the definition for packages in Python?

(a) A set of main modules

(b) A folder of python modules

(c) A number of files containing Python definitions and statements

(d) A set of programs making use of Python modules

Section – B

Q.19 List the names of two components of CPU?

Q.20 What is an I-P-O cycle?

Q.21 What is the output of following code:

```
>>a="computer science"
>>type(a)
```

Q.22 What is the error in the following code: z p=6

Q.23 What are variables?

Q.24 What is the output of following code:

```
for z in range(1,100,10):
        print(z )
```

Q.25 What is nested loop?

Section – C

Q.26 What is the syntax of if- elif statement in Python?

Q.27 What are data types? What are Python's built-in core data types?

Q.28 What is the difference between a compiler and an interpreter ?

OR

What is the need for secondary memory?

Q.29 What is the difference between a keyword and an identifier?

Q.30 What are loops in Python? How many types of loop are there in Python?

OR

What is the base of Decimal, Binary, Octal and Hexadecimal number systems?

Section – D

Q.31 Explain Binary and decimal number ?

OR

Give the output of the following code:

```
x=30
if x>25:
    print("ok marks")
if x > 60 :
    print ("good marks ")
elif x>30:
        print ("average marks")
else:
    print ("no output")
```

Q.32 WAP to test if given number is Ever or odd?

OR

WAP to create a calendar by using calendar() ?

Section – E

Q.33 Distinguish between internal and external memory?

OR

What is the difference between RAM and ROM?

Q.34 WAP to take the 5 students marks and display their sum , percentage and average ?

OR

What is python ?Explain some salient features of python.

Q.35 Name the input or output device used to do the following:

(a) To output audio   (b) To enter textual data
(c) To make hard copy of a text file   (d) To display the data or information
(e) To enter audio-based command

OR

Convert the following :
(i) $(1110001)_2 = (\ )_{10}$ (ii) $(10011001100)_2 = (\ )_{16}$
(iii) $(1010101010111)_2 = (\ )_8$ (iv) $(11111)_2 = (\ )_{10}$
(v) $(11111110001)_2 = (\ )_{16}$

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