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Sl. No.

Question Booklet Code

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21MAT1S1LP

M.Sc. I Semester Degree Examination, April/May - 2023
Skill Enhancement Courses (SEC)

MATHEMATICS

Python Programming

Time : 1 Hour

Maximum Marks : 30

INSTRUCTIONS TO CANDIDATES

1. The Question Paper will be given in the form of a Question Booklet. There will be four/two/one versions of Question Booklets with Question Booklet Code viz. **A, B, C & D / A & B/A**.
2. The Question Booklet Serial Number is printed on the top right margin of the facing sheet. If your Question Booklet is un-numbered, please get it replaced by new Question Booklet with same Code.
3. Immediately after the commencement of the examination, the candidate should check that the Question Booklet supplied to him contains all the 30 questions in serial order. The Question Booklet does not have unprinted or torn or missing pages and if so he/she should bring it to the notice of the Invigilator and get it replaced by a complete booklet with same Code. This is most important.
4. A blank sheet of paper is attached to the Question Booklet. This may be used for Rough Work.
5. **Please read carefully all the instructions on the top of the Answer Sheet before marking your answers.**
6. Each question is provided with four choices **(A), (B), (C)** and **(D)** having one correct answer. Choose the correct answer and darken the bubble corresponding to the question number using **Black Ball-Point Pen** in the OMR Answer Sheet.
7. No candidate will be allowed to leave the examination hall till the end of the session and without handing over his/her Answer Sheet to the Invigilator.
8. Strict compliance of instructions is essential. Any malpractice or attempt to commit any kind of malpractice in the Examination will result in the disqualification of the candidate.
9. First fifteen minutes is provided to fill the general information of the Student. Eg. Student Name, Student ID, etc. in the OMR Answer Sheet.
10. Without the instruction of the Invigilator do not open the Question Paper Booklet Seal.

A



P.T.O.

1. Which keyword is used for function in python language ?
(A) Function (B) Def (C) Fun (D) Define

2. Which type of programming does python support ?
(A) Object Oriented programming (B) Structured programming
(C) Functional programming (D) All of the mentioned

3. What will be the output of the following Python code ?

```
X = 'abcd'
for i in range (len(X)):
print(i)
```


(A) a b c d (B) 0 1 2 3
(C) abcd (D) 1 2 3 4

4. What arithmetic operators cannot be used with strings in python ?
(A) * (B) - (C) + (D) All of the mentioned

5. What will be the output of the following python code ?

```
a={3, 4, 5}
b={5, 6, 7}
a|b
```


(A) Invalid operation (B) {3, 4, 5, 6, 7}
(C) {5} (D) {3, 4, 6, 7}

6. What are the two main types of functions in Python ?
(A) System function
(B) Custom function
(C) Built-in function and user defined function
(D) User function



7. What is the output of this expression, $3*1**3$?

- (A) 27 (B) 9 (C) 3 (D) 1

8. What will be the output of the following python statement ?

```
'a'+''b'+'c'
```

- (A) 'abc' (B) 'a'+''b'+'c'
(C) a+b+c (D) None of the above

9. What will be the output of this code ?

```
import math
```

```
abs(math.sqrt(36))
```

- (A) Error (B) -6 (C) 6 (D) 6.0

10. Which of the following is the truncation division operator in python ?

- (A) % (B) // (C) / (D) |

11. What will be the output of this statement ?

```
def my_function( ):
```

```
print("my world")
```

```
my_function( )
```

- (A) my world (B) Error
(C) "my world" (D) None of the above

12. What will be the output for the following code ? Import numpy as np.

```
a=np.array ([1, 2, 3]) print a
```

- (A) [[1, 2, 3]] (B) 1, 2, 3 (C) [1, 2, 3] (D) Error



13. What will be the output of the following python code ?

```
i = 2
while True :
    if i%3 == 0:
        break
    print(i)
    i += 2
```

- (A) 2 4 6 8 10 ... (B) 2 4 (C) 5 6 (D) error

14. What will be the output of the following python code ?

```
a = {4, 5, 6}
b = {2, 8, 6}
a - b
```

- (A) {4, 5}
(B) {6}
(C) Error as unsupported operand type for set data type
(D) Error as the duplicate item 6 is present in both sets

15. Which of the following character is used to give Single-line comments in Python ?

- (A) // (B) # (C) ! (D) /*

16. Which one of the following is the correct extension of the Python file ?

- (A) .p (B) .python (C) .py (D) None of these

17. Which one of the following is not a keyword in python language ?

- (A) if (B) for (C) while (D) sum

18. Is Python case sensitive when dealing with identifiers ?

- (A) No (B) Yes
(C) Machine dependent (D) None of the mentioned

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19. What does 3^4 evaluate to ?

- (A) 81 (B) 12 (C) 0.75 (D) 7

20. What will be the output of the following python expression if $X=56.236$?

```
print ("%0.2f"%X)
```

- (A) 56.236 (B) 56.23 (C) 56.0000 (D) 56.24

21. What will be the output of the following Python code ?

```
i = 1
```

```
While True :
```

```
    if i% 3 == 0 :
```

```
        break
```

```
    print(i)
```

```
    i += 1
```

- (A) 1 2 3 (B) Error
(C) 1 2 (D) None of the mentioned

22. What will be the output of the following Python code ?

```
d={0:'a',1:'b', 2:'c'}
```

```
for i in d :
```

```
    print (i)
```

- (A) 0 1 2 (B) a b c
(C) 0 a 1 b 2 c (D) None of the mentioned

23. What will be the output of this statement ?

```
for X in range (6) :
```

```
print (x)
```

- (A) 0 1 2 3 4 5 6 (B) 0 1 2 3 4 5
(C) 1 2 3 4 5 6 (D) None of the above



24. What will be the output of the following python statement ?

```
print('new','line')
```

- (A) Error (B) Output equivalent to print 'new\nline'
(C) newline (D) new line

25. In Python language, numpy stands for ?

- (A) Numbering Python (B) Number in Python
(C) Numerical Python (D) None of the above

26. What will be the output of the following python code snippet if $x=1$?

```
x<<2
```

- (A) 8 (B) 2 (C) 1 (D) 4

27. 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`

28. Which of the following functions is a built-in function in python ?

- (A) `seed()` (B) `sqrt()`
(C) `factorial()` (D) `print()`

29. What will be the output of the following python expression ? `round(8.576)`

- (A) 8 (B) 8.6 (C) 9 (D) 8.5

30. Which of the following statements is used to create an empty set in Python ?

- (A) `()` (B) `[]` (C) `Set()` (D) `{}`

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SPACE FOR ROUGH WORK



