

M.Sc. I Semester Degree Examination, April/May - 2024

MATHEMATICS

SEC 1 : Python Programming

(NEP)

Time : 1 Hour

Maximum Marks : 30

Note : Answer **all** the questions.

1. What are python files containing python definitions and statements called ? 1
(A) Flowcharts (B) Algorithms (C) Modules (D) Sequences
2. Which of the following is an invalid variable ? 1
(A) my_string-1 (B) 1st_string (C) foo (D) _
3. Which is the correct command to install matplotlib ? 1
(A) pip install matplotlib (B) pip install matplotlib.pz
(C) pip install matplotlib.* (D) All of the above
4. What is a variable defined inside a function referred to as ? 1
(A) A static variable (B) A global variable
(C) A local variable (D) An automatic variable
5. Which argument keyword can be used to change the style of the plotted lines ? 1
(A) Line (B) Lines (C) Line styles (D) Line style
6. Which of the following is **not** a keyword ? 1
(A) Eval (B) assert (C) Non local (D) pass
7. Which one of these is floor division ? 1
(A) / (B) // (C) % (D) >>
8. Which of the following operators is the correct option for power (ab) ? 1
(A) a^b (B) a**b (C) a^^b (D) a^*b
9. What is the output of this expression, 222%3 ? 1
(A) 7 (B) 1 (C) 0 (D) 5

- 10.** Which one of the following has the highest precedence in the expression ? **1**
 (A) Exponential (B) Additional
 (C) Multiplication (D) parantheses
- 11.** What will be the output of the following python statement ? **1**
`>>"a"+"bc"`
 (A) bc (B) abc (C) a (D) bca
- 12.** What are the values of the following python expressions ? **1**
`2**(3**2)`
`(2**3)**2`
`2**3**2`
 (A) 512, 64, 512 (B) 512, 512, 512
 (C) 64, 512, 64 (D) 64, 64, 64
- 13.** What is the output of the following code ? **1**
`import numpy as np`
`a=np. arange (10)`
`print (a[2 : 5])`
 (A) [2, 3, 4] (B) [0, 1, 2] (C) [5, 6, 7] (D) [2, 4, 6]
- 14.** Amongst which of the following is/are the method of list ? **1**
 (A) Append () (B) Extend () (C) Insert () (D) All the above
- 15.** What is the output of the following python function ? **1**
`len (["hello", 2, 4, 6])`
 (A) Error (B) 6 (C) 4 (D) 3
- 16.** What will be the output of the following python code ? **1**
`i=0`
`While i<5 :`
`print (i)`
`i+=1`
`if i==3 :`
`break`
`else :`
`print (o)`
 (A) 0 1 2 0 (B) 0 1 2 (C) Error (D) 0 0 1 2
- 17.** To add a new element to a list we use which python command : **1**
 (A) list 1. add End (5) (B) list 1. add last (5)
 (C) list 1. append (5) (D) list 1. add (5)



18. Which of the following is a python tuple ? 1
(A) {1, 2, 3} (B) {} (C) [1, 2, 3] (D) (1, 2, 3)
19. What will be the value of the following expression ? 1
8/4/2, 8/(4/2)
(A) (1.0, 4.0) (B) (1.0, 1.0) (C) (4.0, 1.0) (D) (4.0, 4.0)
20. What of the following operators has list associativity from right to left ? 1
(A) + (B) // (C) % (D) **
21. Which is the average value of the following python code snippet ? 1
>>>grade 1=80
>>>grade 2=90
>>>average=(grade1+grade 2)/2
(A) 85.0 (B) 85.1 (C) 95.0 (D) 95.1
22. What will be the output of the following python code ? 1
>> > str="hello"
>>> str[: 2]
>>>
(A) he (B) lo (C) olleh (D) hello
23. What is the return type of function id ? 1
(A) int (B) float (C) bool (D) dict
24. What will be the value of X in the following python expression ? 1
X=int (43.55+2/2)
(A) 43 (B) 44 (C) 22 (D) 23
25. What will be the output of the following python code ? 1
X=['ab', 'cd']
for i in X :
i. upper ()
print (X)
(A) ['ab', 'cd'] (B) ['AB', 'CD'] (C) [None, None] (D) ['aB, 'cD']
26. Which of the following results in a Syntax Error ? 1
(A) "once upon a time...". She said.'
(B) "He Said, 'Yes!'"
(C) '3\
(D) "That's okay"



27. What is it called when a function is defined inside a class ? 1
(A) Module (B) Class
(C) Another function (D) Method
28. Which of the following symbol is used to end an 'if' statement in python ? 1
(A) (,) (B) (:) (C) (;) (D) (" ")
29. What will be the output of the following python function ? 1
complex (1+2j)
(A) Error (B) 1 (C) 2j (D) 1+2j
30. Which of the following will run without errors ? 1
(A) round (45.8) (B) round ()
(C) round (6352.898, 2, 5) (D) round (7463.123, 2, 1)

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