Sample Question Paper
Term-I
Subject: Informatics Practices (Code-065)
Class – XI

Time Allowed: 90 minutes　　　　　　　　　　　　　　　　**Maximum Marks: 35**

General Instructions:

o　The paper is divided into 3 Sections- A, B and C.

o　Section A, consists of Question 1 to 25 and student need to attempt 20 questions.

o　Section B, consists of Question number 26 to 49 and student need to attempt 20 questions.

o　Section C, consists of Question number 50 to 55 and student need to attempt 5 questions.

o　All questions carry equal marks.

Section – A
Section A consists of 25 questions, attempt any 20 questions.

1. Which two operators can be used on numeric values in Python?
   A. @　　　　B. %　　　　C. +　　　　D. #
   a) B, D　　　b) B, C　　　c) A, C　　　d) A, D

2. Which among the following used for making comments in python
   a) #　　　　b) ***　　　c) $　　　　d) \\

3. Which among the following mode give immediate output in python
   a) Editor　　b) Interactive　c) Development　　d) Testing

4. _____ produces unintended or undesired output or other behaviour, although it may not immediately be recognized as such
   a) Compile Time Error　　b) Syntax Error　　c) Logical Error　　d) Runtime Error

5. _____ Which among the following is main component of 1st Generation of computers
   a) Transistor　b) Vacuum Tube　　c) Micro Processor　　d) None of the above

6. Which among the following have highest storage capacity
   a) RAM　　b) Cache　　c) ROM　　d) HDD

7. Which of the following is/are applications of block chain?
   a) Digital Currency　b) Identity Management　　c) Voting mechanism　d) All of the above

8. _____ providers can offer different kinds of computing infrastructure, such as servers, virtual machines (VM), storage and backup facility, network components etc.
   a) SaaS　　b) PaaS　　c) IaaS　　d) TaaS

9. Which of the following is not a valid identifier
   a. Am@l　　b. ArUn69　　c. Arjun_VP　d. Anshid

10. Which line of code produces an error?
    a) '1' + 2　　b) "one" + "2"　　c) "one" + 'two'　　d) 1 + 2

11. What is the value of this expression, 3**1**3?
    a) 9　b) 27　c) 1　d) 3

12. Identify the valid declaration of L:
    L = ['Mon', '23', 'hello', '60.5']
    a) list　　b) string　　c) tuple　　d) dictionary

13. The keys of a dictionary must be of types.
    a) mutable　　b) immutable　　c) integer　　d) all of these

14. What data type is the object below?
    L= [1, 23, 'hello', 1]
    a) dictionary　b) array　　c) tuple　　d) list

15. Which one of these is floor division operator?
    a) //　　　b) /　　　c) %　　　d) none of these

16. Which of the following is valid arithmetic operator in Python?

    a) <   b) //   c) and   d) ?

17. The operator tells if an element is present in a sequence or not.

    a) inside   b) exists   c) in   d) into

18. The numbered position of a letter in a string is called .

    a) position   b) location   c) index   d) integer position

19. You have the following code segment:

    print ("Here we have a line of text \n and \n we can do \n newlines!") What is the output of this code?

    a) Here we have a line of text and
       we can do newlines!

    b) Here we have a line of
       text and we can do newlines!

    c) Here we have a line of text
        and
       we can do
       newlines!

    d) Here we have a line of
       text and
       we can do newlines!

20. In Python we do not specify types, it is directly interpreted by the compiler, so consider the following operation to be performed. >>> x = 33 <operator>4 What would you fill in place of <operator>in the above expression so that x has an integer value?

    A. //   B. /   C. %   D. All of these

    a) A, D   b) B, C   c) B, D   d) A, C

21. What is the output of the following expression?

    float(5 + int(4.39 + 2.1)%2)

    a) 8   b) 8.0   c) 5   d) 5.0

22. You have the following code segment:

    String1 = "my"
    String2 = "work"
    print(String1, String2)
    What is the output of this code?

    a) mywork   b) work   c) my   d) my work

23. What is the output of the following expression?

    print(4.00/(2.0 + 2.0))

    a) 1   b) 1.0   c) 1.00   d) Error

24. Which line of code has the correct syntax for the print statement?

    a) print(Its' a rainy day)   b) Print('it's a rainy day')
    c) print('it's\ a rainy day")   d) print('it\'s a rainy day')

25. What will be the output produced by following code?

    >>> grade1 = 80
    >>> grade2 = 90
    >>> average1 = (grade1 + grade2)/2
    >>> average2 = grade1 + grade2/2
    >>> average1, average2

    a) 85.0, 85.0   b) (125.0, 125.0)   c) (125.0, 85.0)   d) 85.0, 125.0

Section – B

Section B consists of 24 Questions (26 to 49). Attempt any 20 questions.

26. Which among the following list of operators has the highest precedence?

    +, -, **, %, /, <>, |

    a) | b) <>   c) %   d) **

27. What data type is the object below?

    L = 1, 23, 'hello', 1

a) list   b) dictionary   c) tuple   d) array

28. How would you write x ^{y} in Python as an expression?
    a) x^y   b) x**y   c) x^^y   d) none of these

29. Which of the following expressions is an example of type casting?
    A. 4.0 + float(6)
    B. 5.3 + 6.3
    C. 5.0 + 3
    D. int(3.1) + 7
    a) B, C   b) A, D   c) A, D   d) A, C

30. Which of these is not a core data type?
    a) Tuples   b) Lists   c) Class   d) Dictionary

31. The expression 8/4/2 will evaluate equivalent to which of the following expressions:
    a) (8/2)/4   b) 8/(4/2)   c) (2/4)/8   d) (8/4)/2

32. What is the value of x?
    x = int(13.25 + 4/2)
    a) 14   b) 15   c) 17   d) 23

33. What is the output of this code?
    >>> int ("3" + "4")
    a) "7"   b) 24   c) "34"   d) 34

34. >>> float('inf') - float('inf')
    a) inf   b) error   c) 0.0   d) nan

35. What is the value of this expression: 22% 3.0 is?
    a) 7   b) 7.0   c) 1.0   d) 1

36. Which of the following expressions results in an error?
    a) int('12')   b) float('12.5') c) int('12.5')   d) float('12')

37. Suppose s is assigned as follows :
    s = 'foobar'
    All of the following expressions produce the same result except one. Which one?
    a) s[: : -5]   b) s[0] + s[-1]   c) s[: : -1][-1] + s[len(s)-1]   d) s[: : -1][: : -5]

38. List AL is defined as follows:
    AL= [1, 2, 3, 4, 5]
    Which of the following statements removes the middle element 3 from it so that the list AL equals [1, 2, 4, 5]?
    A. del a[2]
    B. a[2:3] = [ ]
    C. a[2:2] = [ ]
    D. a[2] = [ ]
    E. a.remove(3)
    a) B, D, E   b) A, C, D   c) C, D, E   d) A, B, E

39. Which operator is used to check whether two variables are the same?
    a) =   b) -   c) | d) ==

40. What is the output of sys.platform [:2] if the code runs on windows operating system?
    a) 'wi'   b) Error   c) 'op'   d) 'sy'

41. What is the output of this expression, 3*1**3?
    a) 1   b) 27   c) 9   d) 3

42. What will be the output of the following expression?
    24//6%3, 24//4//2, 48//3//4
    a) (0, 3, 4)   b) (1, 3, #error)   c) (1, 12, #error)   d) (1, 3, 4)

43. What is the output of following code? bool('False') bool()
    a) False
       True
    b) True
       True
    c) True

False
e) Runtime error

44. Which value type does input() return?
a) Int　　　b) String　　　　　c) Boolean　　d) Float

45. Which of the following is not a keyword?
a) assert　　　b) nonlocal　　　　c) pass　　　　d) eval

46. What will be the output of the following code?
```
tuple_a = 'a', 'b'
tuple_b = ('a', 'b')
print (tuple_a == tuple_b)
```
a) False　　　b) True　　　c) 0　　　　d) 1

47. The following set of commands is executed in shell, what will be the output?
```
>>>str = "hello"
>>>str[:2]
>>>
```
a) hello　　　b) lo　　　c) olleh　　　d) he

48. Which two lines of code are valid strings in Python?
A. This is a string
B. 'This is a string'
C. (This is a string)
D. "This is a string"
a) A, C　　　b) B, D　　　c) A, D　　　d) C, D

49. Which of the following is an invalid statement?
a) a, b, c = 1000, 2000, 3000　　　　b) a = b = c = 1,000,000
c) a b c = 1000 2000 3000　　　　d) abc = 1,000,000

Section - C
Section C, consists of 6 Question (50 to 55). Attempt any 5 questions.

50. A company interested in cloud computing is looking for a provider who offers a set of basic services such as virtual server provisioning and on-demand storage that can be combined into a platform for deploying and running customised applications. What type of cloud computing model fits these requirements?
a) Platform as a Service　　　　　b) Software as a Service
c) Infrastructure as a Service　　　c) Device as a Service

51. Given (x = 1), what will be the value of after we run (x =x+2)?
a)　1　　　b) 2　　　c) 3　　　d) 4

52. What is the result of f"{2+2}+{10%3}"?
a)　'4+1'　　b) 5　　c) 4　　d) None of these

53. Which of the following are valid identifiers-
a)　Data rec,　(b) _data　c) 1 data　d)break

54. What will be the output of the following code:
```
x,y=2,6
x,y=y,x+2
print(x,y)
```
a)　6　4　　　b) 4　6　　　　　c) 5　6　　　d)　7　4

55. What is the average value of the following Python code snippet?
```
>>>grade1 = 80
>>>grade2 = 90
>>>average = (grade1 + grade2) / 2
```
a)85.0　　　　b)85.1
c)95.0　　　　d)95.1

Syllabus: Informatics Practices (Code-065)

Class – XI
Term-I

Unit Wise syllabus

Unit 1: Introduction to Computer System

Introduction to computers and computing: evolution of computing devices, components of a computer system and their interconnections, Input/Output devices.

Computer Memory: Units of memory, types of memory – primary and secondary, data deletion, its recovery and related security concerns.

Software: purpose and types – system and application software, generic and specific purpose software.

Unit 2: Introduction to Python

Basics of Python programming, Python interpreter - interactive and script mode, the structure of a program, indentation, identifiers, keywords, constants, variables, types of operators, precedence of operators, data types, mutable and immutable data types, statements, expressions, evaluation of expressions, comments, input and output statements, data type conversion, debugging,

Control statements: if-else, for loop.