Directorate of Education, GNCT of Delhi
Mid Term Examination Practice Paper
Session: 2025-26
CLASS-XI
Informatics Practices (065)

Time allowed: 3 Hours **Maximum Marks: 70**

General Instructions:

1. All questions are compulsory.
2. This question paper contains five sections, Section A to E.
3. Section A has 21 questions (1 mark each).
4. Section B has 7 questions (2 marks each).
5. Section C has 4 questions (3 marks each).
6. Section D has 2 questions (4 marks each).
7. Section E has 3 questions (5 marks each).
8. All programming questions are to be answered using Python Language only.

Section A (1 mark each)

1. True/False: ROM is a non-volatile memory.

2. Which of the following is an example of application software?
   a) Linux
   b) MySQL
   c) Device Driver
   d) BIOS

3. The storage device with the fastest access time is:
   a) Hard Disk
   b) Cache Memory
   c) CD-ROM
   d) DVD

4. Which of the following is a primary memory?
   a) Pen Drive
   b) RAM
   c) Blu-ray Disk
   d) SSD

5. Aarav is confused about operator precedence in Python. Which has the lowest precedence?
   a) **
   b) +
   c) //
   d) and

6. In Python, the % operator is used for:
   a) Modulus
   b) Exponent
   c) Floor Division
   d) Division

7. Which loop is suitable when iterations are not known in advance?
   a) for loop
   b) while loop
   c) do-while loop
   d) if loop

8. In a Python dictionary, keys must be:
   a) Mutable
   b) Immutable
   c) Numeric only
   d) List

9. True/False: insert() method adds an element at the end of a list.

10. The mode used to execute a Python file saved on disk is:
    a) Script mode
    b) Interactive mode
    c) Debug mode
    d) Compile mode

11. Which of the following evaluates to True?
    a) 4 in [1, 2, 3]
    b) 'p' not in 'apple'
    c) 'z' in ('a','b','c')
    d) 10 in (5,10,15)

12. Arrange in increasing order of memory size:
    a) TB < KB < MB < GB
    b) KB < MB < GB < TB
    c) MB < GB < KB < TB
    d) GB < MB < KB < TB

13. What will be the output of:

```
while False:
    print('Hello World')
```

    a) Prints once
    b) Infinite loop
    c) Nothing
    d) Error

14. In Python, lines beginning with # are called:
    a) Functions
    b) Comments
    c) Operators
    d) Variables

15. Utility software is used to:
    a) Perform user-specific tasks
    b) Manage system hardware
    c) Provide antivirus, backup
    d) Boot OS

16. What will be the data type of:

```
x = 17 // 5
```

    a) int
    b) float
    c) bool
    d) str

17. Which type of memory is directly accessible by CPU?
    a) Hard Disk
    b) SSD
    c) RAM
    d) Optical Disk

18. What is the output of:

```
len('Python')
```

a) 5
b) 6
c) 7
d) Error

19. Pandas library in Python is used for:
a) Data analysis
b) Graphics
c) Web development
d) Text editing

Q-20 and Q-21 are ASSERTION AND REASONING based questions. Mark the correct choice as
a. Both A and R are True and R is the correct explanation for A
b. Both A and R are True and R is not the correct explanation for A
c. A is True but R is False
d. A is False but R is True

20. Assertion (A): In Python, indentation defines a block of code.
Reason (R): Indentation improves readability but does not affect execution.

21. Assertion (A): Tuples are immutable in Python.
Reason (R): This makes them faster than lists for iteration.

Section B (2 marks each)

22. Predict output:

```
print('CS' + '2026')
print(4 * 'Python')
```

OR

Explain concatenation and replication with examples.

23. Find and correct the error:

```
num = int(input('Enter number: ')
if num%2=0:
   print('Even')
else
   print('Odd)
```

24. Differentiate between == and is operators in Python with examples.

25. Kriti is confused between extend() and append(). Explain with examples.

OR

Remove 'blue' from list: colors = ['red','green','blue','yellow']

26. Write output:

```
data = [5,15,25,35]
data.append(45)
print(data)
data.remove(25)
print(data)
```

27. Evaluate:

a) 28 % 6
b) 3 ** 3
c) 25/4
d) 25//4

OR

Evaluate:

a) 8+2*5
b) 20-6/3
c) 9<12 and 4>7
d) not(6!=6)

28. Classify as mutable/immutable:

a) Set
b) String
c) List
d) Tuple

Section C (3 marks each)

29. Kabir installed an antivirus and spreadsheet software. Explain difference between system and application software with examples.

OR

Nisha purchased PC, connected scanner and speakers. Differentiate input/output devices and classify scanner, speakers, mouse, monitor.

30. Explain two modes of executing Python programs with one difference.

31. NumPy program:
- Create array [2,4,6,8]
- Find minimum and mean

OR

Create NumPy array [10,20,30], multiply elements by 3, print updated array.

32. Write output:

```
names=['Ravi','Maya','Kiran','Asha']
deleted=names.pop(1)
names.sort()
print(names)
print('Deleted:',deleted)
```

Section D (4 marks each)

33. Meena deleted photos and later restored with recovery tool.
a) Why able to recover? (2)
b) Define data recovery. (1)
c) Suggest one permanent delete method. (1)

34. State True/False:
i) Python supports numeric and non-numeric data types.
ii) A list cannot contain another list.
iii) Identifiers are case-sensitive.
iv) remove() deletes by index.

OR

i) input() returns string.
ii) Python is case-insensitive.
iii) for is a keyword.
iv) print(2+'2') runs successfully.

Section E (5 marks each)

35. Ajay typed notes, saved them, mailed via Internet. Explain with diagram how four units of computer help.

36. Predict output:

```
print('Welcome'[0:3])
print('12'*3+'34')
```

```
print('Check:',7>=5,2==3)
print('X','Y',sep='@',end='!')
print('Z\nP\tQ')
```

37. Fill in blanks:

```
nums=[2,4,6,8]
nums._________ #a add 10 at end
nums._________ #b remove 4
print(_________) #c count
student={'id':101,'name':'Simran'}
student._________ #d add ('grade','A')
print(student._________) #e get name
```

OR

```
cities=['Agra','Delhi','Goa']
cities._________ #a add Jaipur
cities._________ #b remove Delhi
print(_________) #c count
info={'roll':21,'class':'11A'}
info._________ #d add ('marks',88)
print(info._________) #e get class
```