

O. P. JINDAL SCHOOL, SAVITRI NAGAR**Annual Examination (2023 – 2024)****Set - B****Class: XI****Subject: Informatics Practices (065)****MM: 70****Time: 3 Hrs.****(Fifteen Minutes Extra will be given for reading the Question Paper)****General Instructions:**

- This question paper has 07 pages.
- This question paper contains five sections, Section A to E.
- All questions are compulsory.
- Section A has 18 Multiple Choice questions carrying 01 mark each.
- Section B has 07 Very Short Answer questions carrying 02 marks each.
- Section C has 05 Short Answer type questions carrying 03 marks each.
- Section D has 03 Long Answer type questions carrying 05 marks each.
- Section E has 02 Questions carrying 04 marks each. One internal choice is given in Q35.
- All programming questions are to be answered in Python Language only.

Section –A

1 Which among the following is an important circuitry in a computer system that directs the operation of the processor?

- | | |
|----------------|-----------------|
| a) Memory | c) ALU |
| b) Address Bus | d) Control Unit |

2 1 ZB = _____

- | | |
|------------|------------|
| a) 1024 MB | c) 1024 PB |
| b) 1024 GB | d) 1024 EB |

3 It is used to produce large drawings or images such as construction plans, blueprints for mechanical objects etc.

- | | |
|-------------|---------|
| a) Printer | c) MICR |
| b) Plotters | d) OCR |

4 _____ acts as temporary high speed holding area between the memory and the CPU thereby improving processing capabilities

- | | |
|-----------------|-----------------|
| a) ROM | c) RAM |
| b) Flash memory | d) Cache memory |

5 Aniket is working in python interactive mode. He noticed this symbol - >>> but forgot what it is called? Select an appropriate option for him out of these?

- | | |
|------------------|-----------------------|
| a) Python Shell | c) Python prompt |
| b) Python Script | d) Python Interpreter |

- 6 Which of the following is a python built-in editor popularly used to write scripts?
- a) Jupyter Notebook
 - b) PyCharm IDE
 - c) Spyder IDE
 - d) CPython IDLE
- 7 Which of the following statement is not correct about python keywords?
- a) Keywords defined by user
 - b) Keywords cannot be used as an identifier
 - c) Keywords convey a special meaning to python interpreter
 - d) Keywords are case-sensitive
- 8 Which of the following statement is used to iterate over a range of values or sequence?
- a) if
 - b) if-else
 - c) if-elif-else
 - d) for
- 9 Which of the following is invalid method for lists?
- a) list()
 - b) append()
 - c) setdefault()
 - d) extend()
- 10 Which following methods are correct to add element into the dictionary object d?
- d={1:'Virat',2:'Rahul',3:'Surya' }
- a) d[4]='Hardik'
 - b) d.setdefault(4,'Hardik')
 - c) Both a) and b)
 - d) None of these
- 11 Which of the following is not RBDMS software?
- a) Oracle
 - b) MS Excel
 - c) MySQL
 - d) MS Access
- 12 The design of data is known as
- a) Database Schema
 - b) Data Constraint
 - c) Data Dictionary
 - d) Database Instance
- 13 The SQL statements ends with
- a) ,
 - b) :
 - c) ;
 - d) “
- 14 Aman wants to see the table structure in MySQL. Select an appropriate command to help him.
- a) use
 - b) show
 - c) desc
 - d) display
- 15 Saanvi wants to delete a primary key constraint from the table. Select an appropriate command which help him.
- a) Create
 - b) Alter
 - c) Drop
 - d) Delete

16 Rajveer wants to rename column in display result for his query. He has given the following queries, select correct query for him:

- a) select ename, salary*12 Annual Salary from emp;
- b) select ename, salary*12 rename "Annual Salary" from emp;
- c) select ename, salary * 12 change "Annual Salary" from emp;
- d) select ename, salary*12 as "Annual Salary" from emp;

Q17 and Q18 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

17 **Assertion(A):** An intelligent machine is supposed to imitate some of the cognitive functions of humans like learning, decision making and problem solving.

Reasoning(R): In order to make machines perform tasks with minimum human intervention, they are programmed to create a knowledge base and make decisions based on it.

18 **Assertion(A):** Robots were initially conceptualised for doing repetitive industrial tasks that are boring or stressful for humans or were labour-intensive.

Reasoning(R): Algorithms are one of the prime components of a robot.

Section – B

19 Write any four applications of RDBMS.

20 Rohit has written following code into python but he is not able to get the correct output.

```
n=int("Enter number")
```

```
triple=n**3
```

```
Print("Number three times:",n)
```

Identify the syntax and logical errors and write the correct code. Underline each correction.

OR

Do as directed:

- i. Assign 5 to a variable x.
- ii. Write statement to compute the square of given number.

21 What do you mean by system bus? Explain in detail.

22 Define the following:

i. Tuple

ii. Degree

23 Differentiate between volatile and non-volatile memory.

OR

Explain the following elements of SQL commands in one line each:

i. Keywords

ii. Statements

iii. Clauses

iv. Arguments

24 Dhruvee has given the following table structure and asked to create a table in MySQL.

Help her by writing create table command to accomplish her task.

Table Name: players

ColumnName	datatype	size
jersey_no	int	2
player_name	varchar	20
Matches_played	int	3
Runs	int	5

3 Enlist any four basic MySQL elements and explain any one in detail.

Section – C

4 Priyam is Class XI student. She is learning some basic commands. Suggest some SQL commands to her to do the following tasks:

i. To show the lists of existing databases

ii. Select a database to work

iii. Create a new database named Annual_Exam

OR

Observe the following table and write answers for the below given questions:

Table Name: Movie

Movie_id	Movie_name	Category	releasedate	Director
M0001	Ghandhi Godse	History	2023-01-26	Rajkumar Santoshi
M0002	Faraaz	Action	2023-02-03	Hansal Mehta
M0003	Shehzada	Drama	2023-02-10	Rohit Dhawan
M0004	Bawaal	Null	2023-04-07	Nitesh Tiwari

i) Write command to add movie_id as primary key.

ii) Write command to change the size of category column to 50 characters.

iii) Write command to delete column releasedate

- 5 Differentiate between Augmented Reality and Virtual Reality.
- 6 Write any three advantages of DBMS over flat file system.
- 7 Define following:
- i) Database Schema ii) Database Instance iii) Database Engine
- 8 Explain the range() function with its parameters and example.

OR

Write python program to find sum of odd numbers from 1 to 10.

Section – D

- 31 Given a list l=[13,14,15,112,125.7,[12,11,10,15],188], answer the following questions:
- a) Write code to print [14,112,[12,11,10,15]]
- b) Write code to print [13,15,125.7,188]
- c) Write code to print [14,125.7]
- d) Write code to print [12,11,10,15]
- e) Write code to print [188,125.7,15,13]

OR

Write a program to accept n number of elements into the list and print only palindrome numbers from the list.

- 32 Consider the following dictionary:

```
od={1:'One',3:'Three',5:'Five',7:'Seven',9:'Nine' }
```

Perform the below mentioned operations in the dictionary:

- i) Write command to traverse a dictionary and print key value in this manner
- 1 – One
3 – Three
5 – Five
7 – Seven
9 - Nine
- ii) Write command to print only keys of dictionary
- iii) Write command to print only the values which doesn't contain 'n'
- iv) Write command to print the corresponding value to the key 7
- v) Write command to delete the last element of dictionary

OR

Write a program to create a dictionary with rollno, name and marks of n no. of students and display names of students who have scored more than 90 marks in any subject.

33 Explain the following with example with respect to MySQL:

- i) Putting text into query output
- ii) Using column aliases
- iii) Perform simple computation in query results
- iv) Handling null values
- v) Pattern matching

OR

Consider the below given table and write queries for (i) to (iii) and output of (iv) – (vii):

Table Name: Pet

Name	Owner	Species	Gender	Age
Monty	Aditya	Dog	M	4
Badal	Dev	Horse	M	4
Moti	Motisingh	Dog	M	3
Mittu	Harsh	Parrot	M	2
Pinky	Kartvya	Cat	F	1
Sweety	Vyas	Cat	F	2

- i) Display name, owner and gender for all dogs.
- ii) Display Name, owner and age of all pets whose age is more 2 years.
- iii) Display name, owner, gender, and age in double for all pets.
- iv) select name, owner from pet where owner name like '%ya';
- v) select name, age from pet where species = dog and age between 1 and 3;
- vi) select * from pets where species in ('horse', 'parrot');
- vii) select name, owner, species from pets where gender = 'M' or gender = 'F'

Section - E

34 Kunal is writing a code to compute area of circle. He is not able to complete the code hence the impartial code he has written looks like following. Fill in the given blanks and complete the code:

```
import _____ # Write module name
r= _____ # Write function name to accept value of radius
area= _____ # Write formula of area of circle with respect to python# Write
_____ message like – “Area of Circle is:”, _____
```

35 Convert the following into kilobytes:

a) 30 MB

b) 40 GB

c) 1.5 TB or 2048 Bytes

OR

What are literals in Python? How many types of literals are allowed in Python?

①