BK BIRLA CENTRE FOR EDUCATION
SARALA BIRLA GROUP OF SCHOOLS
SENIOR SECONDARY CO-ED DAY CUM BOYS' RESIDENTIAL SCHOOL
MID-TERM EXAMINATION 2023-24

INFORMATICS PRACTICES (065)

Class : XI SCIENCE/COMMERCE/ARTS　　　　　　　　　　　**Duration : 3 Hrs**
Date　: 13-10-2023　　　　　　　　　　　　　　　　　　　**Max. Marks : 70**
Admission No.:　　　　　　　　　　　　　　　　　　　　　　**Roll No.:**

General Instructions:

1. This question paper contains three sections, Section A to C.

2. All questions are compulsory.

3. Section A has 18 questions of MCQ and 16 Very Short Answer type questions carrying 01 mark each.

4. Section B has 12 Short Answer type questions carrying 02 marks each.

5. Section C has 04 Long Answer type questions carrying 03 marks each.

6. All programming questions are to be answered using Python Language only.

Section-A

1. Which of the following memory types cannot store the data or information permanently ?　1
(a) RAM   (b) Cache   (c) Flash Memory (d) Hard disk

2. The ____ mode of Python gives instant result of typed statement.　1
(a) Interactive mode   (b) Script mode (c) Combination of interactive and script mode
(d) All of these

3. Data items having fixed value are called ____.　1
(a) Identifiers   (b) functions   (c) Keywords   (d) literals

4. Value 0.000615 is equivalent to:　1
(a) 615E3   (b) 615E-3   (c) 0.615E3   (d) 0.615E-3

5. Which python built-in function returns the unique number assigned to an object ?　1
(a) identity()   (b) id()   (c) refnum()   (d) ref()

6. In Python statement x=a + 5 – b, **a** and **b** are _____.　1
(a) Operands   (b) Expression (c) Operators   (d) Equation

7. An empty / null statement in Python is _____.　1
(a) go   (b) pass   (c) over   (d) ;

8. Function range(0, 5, 2) will yield on iterable sequence like　1
(a) [0, 2, 4]   (b) [1 , 3, 5]   (c) [0, 1, 2, 5]   (d) [0, 5, 2]

9. The order of statement execution in the form of top to bottom, is known as ____ construct.　1
(a) selection   (b) repetition   (c) sequence   (d) flow

10. Which of the following will create an empty list ?　1
(a) L=[ ]   (b) L= list()   (c) L=list[ ]   (d) L=list(empty)

11. Which of the following can delete an element from a list, if its value is given ?　1
(a) pop( )   (b) remove( )   (c) del   (d) all of these

12. Repetition of data is called data _____.   1
    (a) Dependency   (b) Redundancy   (c) Inconsistency   (d) Isolation

13. A _____ is an organized collection of structured data.   1
    (a) Information   (b) File   (c) Database   (d) DBMS

14. The query language of a relational database is called _____.   1
    (a) SQL   (b) DDL   (c) DML   (d) TCL

15. Number of attributes in a relation is called _____.   1
    (a) size   (b) degree   (c) cardinality   (d) weight

16. Pool of values from where a column draws its value is called _____.   1
    (a) table   (b) attribute   (c) dataset   (d) domain

17. What will be the output of 87 // 5 ? [**Note:** // is floor division]   1
    (a) 17   (b) 17.4   (c) 17.0   (d) Option b and c

18. What is the binary number of $(154)_{10}$ Decimal system:
    (a) 10011010   (b) 10010010   (c) 100101010   (d) 10110101

19. What is Cache memory ?   1

20. What does a cross platform language mean ?   1

21. What will the following code result into ?   1
    n1, n2 = 5,7
    n3= n1+n2
    n4=n3+2
    print(n1, n2, n3, n4)

22. What will be the output of the following statements ?   1
        list1 = [12,32,65,26,80,10]
        list1.sort()
        print(list1)

23. What will be the output of the following statements ?   1
         list1 =[1,2,3,4,5]
        print(list1[len(list1)-1])

24. If a is [1,2,3,4]   1
    What is the difference between a[1] = 4 and a[-1] = 4 ?

25. Define Primary Key.   1

26. Name few RDBMS that is open source and freeware.   1

27. How many primary keys can be defined in a table ?   1

28. Name the SQL command to open the database.   1

29. Mr. Arpit wants to view all the tables in the database. Which SQL command should he use ?   1

30. Mr. Verma wants to view the structure of a table. Which SQL command should he use ?   1

31. Consider the table with structure as :   1
    Student (ID, name, dept_name, tot_cred)
    In the above table, which attribute will form the primary key ?

Write SQL commands for the following on the basis of given table SPORTS :

Table : SPORTS

StudentNo	Class	Name	Game	Grade
10	7	Sameer	Cricket	B
11	8	Sujit	Tennis	A
12	7	Kamal	Swimming	B
13	7	Venna	Tennis	A
14	9	Archana	Basketball	A
15	10	Arpit	Cricket	A

32.	(i) Display the name of those students who have grade **'A'** .	1
33.	(ii) Display name and class of those students who are game **'Cricket'**.	1
34.	(iii) Display the name of those students whose name starts with a letter **'A'**;	1

Section-B

35.	Differentiate between Proprietary software and Free software.	2
36.	'Python is an interpreted high level language'. What does it mean to you ?	2
37.	"Comments are useful and easy way to enhance readability and understandability of a program." Elaborate with examples.	2
38.	Why are logical errors harder to locate ?	2
39.	Write a program in python that accept three numbers and determine the largest and smallest number.	2
40.	Write a program in python that takes name and age of the user as input and displays a message whether the user is eligible to apply for a driving license or not. **(the eligible age is 18 years).**	2
41.	What is a statement in Python ? What is the significance of an empty statement ?	2
42.	What is the difference between append() and extend() function ? Give example.	2
43.	Write a program in python to create a list of number and then find the sum of elements of the list.	2
44.	How are SQL commands classified ? Give example	2
45.	Differentiate between CHAR and VARCHAR datatype in SQL.	2
46.	Ms Alka wants to add a new column in table **BOOK**. Help her to do the same. The detail is given :column name: ISBN datatype: integer size: 13 Constraint : Not Null	2

Section-C

47.	What are mutable and Immutable types ? List immutable and mutable data types of Python.	3
48.	Write a python program using any loop to display pattern as given below: 1 1 2 1 2 3 1 2 3 4 1 2 3 4 5	3
49.	Create a **MENU driven** program in python where user will have the freedom to create a list of integers and will also be able to add, remove and view all the elements.	3

50. Write a SQL command to create a table of the given structure: 3
Table Name: **STUDENT**

Field Name	Data Type	Size	Constraint
Admno	Integer	7	Primary Key
First Name	Varchar	30	Not Null
Last Name	Varchar	30	Null
Class	Char	3	Not Null
Contact No	Varchar	11	Null

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