



Delhi Public School, Howrah

PERIODIC TEST – III (2024-2025)

CLASS – XI

Care must be taken not to write anything on the question paper. All the questions must be attempted in the correct sequence.

SUBJECT: INFORMATICS PRACTICES (065)

THEORY EXAMINATION

Time Allowed:- 3 Hours

F.M.-70

General Instructions:

- This question paper contains 37 questions.
- All questions are compulsory. However, internal choices have been provided in some questions. Attempt only one of the choices in such questions.
- The paper is divided into 5 Sections- A, B, C, D and E.
- Section A consists of 21 questions (1 to 21). Each question carries 1 Mark.
- Section B consists of 7 questions (22 to 28). Each question carries 2 Marks.
- Section C consists of 3 questions (29 to 31). Each question carries 3 Marks.
- Section D consists of 4 questions (32 to 35). Each question carries 4 Marks.
- Section E consists of 2 questions (36 to 37). Each question carries 5 Marks.
- All programming questions are to be answered using Python Language only.
- In case of MCQ, text of the correct answer should also be written.

SECTION - A

1.	The primary memory (also called main memory) of a personal computer consists of _____. (a) RAM only (b) ROM only (c) both RAM and ROM (d) Cache memory	(1)
2.	_____ refers to a logical structure of a computer describing how its components are connected to one another. (a) Functional system (b) Operational system (c) Utility system (d) Computer organization	(1)
3.	The functions of all the physical components of a computer system are guided by a set of instructions or programs collectively known as _____ software. (a) utility (b) application (c) system (d) driver	(1)
4.	Which of the following is not a core data type in Python programming? (a) Tuples (b) Class (c) Lists (d) Dictionary	(1)
5.	Which operator is used to validate a value from a specified list of values? (a) like (b) in (c) between (d) if	(1)
6.	What will be the output of the following snippet? x, y = 2, 6 x, y = y, x + 2 print (x, y) (a) 6 6 (b) 4 4 (c) 4 6 (d) 6 4	(1)
7.	Identifier name cannot be composed of special characters other than _____. (a) # (b) Underscore () (c) \$ (d) Hyphen (-)	(1)
8.	Identify the data type of the given Python literal: "False" (a) String (b) Boolean (c) None (d) varchar()	(1)
9.	Which of the following is not a decision making statement/block? (a) if-elif (b) if-else (c) for (d) if	(1)
10.	What will be the output of the following? x = ["ab", "cd"] for i in x:	(1)

	<p>i.upper() print (x) (a) ["ab", "cd"] (b) ["AB", "CD"] (c) AB CD (d) "ab" "cd"</p>	
11.	<p>Data _____ refers to maintaining and assuring the accuracy and consistency of data over its entire life cycle. (a) integrity (b) redundancy (c) security (d) exploration</p>	(1)
12.	<p>_____ command helps to open the database for use. (a) open (b) select (c) use (d) fetch</p>	(1)
13.	<p>Which SQL operator performs pattern matching? (a) BETWEEN (b) LIKE (c) EXISTS (d) =</p>	(1)
14.	<p>The CHANGE clause of Alter command can be used to modify a column as well as _____ it too. (a) rename (b) update (c) reindex (d) restructure</p>	(1)
15.	<p>A _____ is a text that is not executed. (a) Statement (b) Query (c) clause (d) comment</p>	(1)
16.	<p>What is a database? (a) Organized collection of information that cannot be accessed, updated and merged (b) Collection of data or information without organizing (c) Organized collection of data or information that can be accessed and updated with effective redundancy removal (d) Organized collection of data where data is inconsistent</p>	(1)
17.	<p>It is a set of one or more attributes/ fields which uniquely identifies a tuple or row. Identify the key. (a) Primary (b) Candidate (c) Foreign (d) Alternate</p>	(1)
18.	<p>In _____ model of DBMS, data is organized in two-dimensional tables called relations. (a) hierarchical (b) network (c) relational (d) flat-file</p>	(1)
19.	<p>A _____ is a set of characters which is used together to represent specific data elements. (a) relation (b) field (c) record (d) database</p>	(1)
<p>Q20 and Q21 are ASSERTION (A) AND REASONING (R) 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 but R is not the correct explanation for A. (c) A is true but R is false. (d) A is false but R is true.</p>		
20.	<p>Assertion (A): Items in dictionaries are unordered. Reason (R): We may not get back the data in the same order in which you had entered the data initially in the dictionary.</p>	(1)
21.	<p>Assertion (A): A database constraint can be added or removed any time in/from the database tables. Reason (R): Alter table command is used to change the structure of the table.</p>	(1)
<p>SECTION - B (2 X 7 = 14 Marks)</p>		
22.	<p>Sarwar has purchased a desktop PC for his office work and he wants to keep the computer properly functional by installing necessary and genuine softwares so that he can compute hassle free. He studied the basics of software over the internet and came to know about the types of application softwares based on the purposes of work. Explain to him the difference between General Purpose Application software and Specific Purpose Application software with examples.</p>	(2)
23.	<p>Nilesh, a new Python learner is going through a program code and is trying to identify the tokens present in the code. What are tokens in Python? Name and define any two types of tokens to Nilesh that are allowed in Python. Give examples for each.</p>	(2)
24.	<p>a. Predict the output of the following: <pre>x = 3 if x>2 or x<5 and x==6: print ("OK") else: print ("No output")</pre> <p style="text-align: center;">OR</p> <p>b. Write the output of the following:</p> </p>	(2)

```
x = 2
y = 3
for i in range (y*2-x):
    print (i, end= " ")
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25. Find the errors in the following code and correct it by rewriting the code and underlining the corrections.
 x = int(input("Enter value for x: "))
 for i in range [0,11]:
 if x = y
 print x+y
 else:
 Print x – y

26. Consider the list L = ["abc", [6, 7, 8], 3, "mouse"]
 Predict and write the sliced lists for the following statements:
 (i) L[3:] (ii) L[: : 2] (iii) L[1 : 2] (iv) L[1][1]

27. Differentiate between append() and insert() functions of lists with appropriate examples.
 OR
 Differentiate between sort() and sorted() functions of lists with suitable examples.

28. The record of a student (Name, Roll No, Marks in five subjects and percentage of marks) is stored in the following list:
 stRecord = ["Raman", "A-36", [56, 98, 99, 72, 69], 78.8]
 Write suitable Python statements to retrieve the following information from the list stRecord:
 i. Percentage of the student ii. Marks in the fifth subject
 iii. Maximum marks of the student iv. Change the name of the student from "Raman" to "Raghav"
 OR
 Consider the dictionary DR1 = {"Name": "Riya", "Age": 7, "Class": "second"}
 Write suitable Python statement(s) using dictionary elements accessing method to print the statement – Riya from second standard is aged 7.

SECTION - C (3 X 3 = 9 Marks)

29. (a) Consider the table, MATCH_DETAILS: (3)

TABLE: MATCH_DETAILS

Match_ID	Match_Date	Team1_ID	Team2_ID	Team1_Score	Team2_Score
M1	2018-07-17	1	2	90	86
M2	2018-07-18	3	4	45	48
M3	2018-07-19	1	3	78	56
M4	2018-07-19	2	4	56	67
M5	2018-07-20	1	4	32	87
M6	2018-07-21	2	3	67	51

Write the outputs for the following SQL queries.

- (i) SELECT MATCH_ID FROM MATCH_DETAILS WHERE TEAM2_SCORE BETWEEN 40 AND 60;
- (ii) SELECT TEAM_SCORE + 1 FROM MATCH_DETAILS WHERE TEAM_ID = 1;
- (iii) SELECT TEAM1_ID, TEAM2_ID FROM MATCH_DETAILS WHERE TEAM1_SCORE<70 AND TEAM2_SCORE<70;

OR

(b) Consider the table STUDENT given below and write answer for (i) and SQL commands for (i) to (iii)

Table Name: STUDENT

Student_no	Class	Name	Game	G_Grade	Section	Marks
01	7	Rahul	Swimming	B	A	99
02	8	Sameer	Tennis	A	B	20
03	10	Dushyant	Football	C	C	87
04	12	Kapil	Tennis	D	C	90
05	6	Ravinder	Cricket	A	B	97

- i. Write SQL query to display those records whose G_Grade is either B or D.
- ii. Display Game and Marks for those students whose name starts with an alphabet 'D'.
- iii. Display the details of "Cricket" and "Swimming" students from the table.

Table Name: College_Students

NO	NAME	FEE	GENDER	C_ID	JOINYEAR
11	Jeevan	30000	M	A01	2012
12	Rohit	25000	M	A02	2009
13	Ekant	30000	M	A02	2011
14	Arunava	30000	M	A03	2009
15	Geeta	40000	F	A02	NULL
16	Ekta	40000	F	A05	2010

- To display NAME, FEE, GENDER, JOINYEAR about the college students, who have joined before 2010.
- To display the names of College Students, who are paying Fee more than 30000.
- To display the names of all College Students in ascending order of their join year.
- To display the NAME and FEE of Male college students.

35. Consider the following list mylist. What will be the elements of mylist after each of the following operation?
mylist = [10, 20, 30, 40]
(i) mylist.append([50,60])
(ii) mylist.extend([50,60])
(iii) mylist.insert(2,45)
(iv) print (mylist[-1: : -1])

SECTION - E (5 X 2 = 10 Marks)

36. Agnibha has been assigned an IP project that will be able to input names of 'n' employees and their salary details like basic salary, house rent and conveyance allowance. Help Agnibha to write a Python script to calculate the total salary and assign the names of the employees as key and the corresponding total salary as the value in a dictionary.

37. Consider the table given below, write commands in SQL for (i) to (v)

Table Name: ABC

PID	Name	Gender	City	Pincode	Basic_Salary
1	Geet	F	Udhamwara	132141	50000
2	Surinder	M	Kupwara Nagar	193421	75000
3	Peter	M	Bhawanti	434341	45000
4	Thomas	M	Ahmed Nagar	390021	50000
5	Garima	F	New Delhi	182141	35000
6	Simi	F	Udhamwara	110021	42000

- Display the number of Females from ABC table.
- Display the PID, City, and Pincode of ABC in descending order of Names.
- Display the name and city of all the males getting Basic Salary above 45000.
- Display Name and Basic Salary of all the persons whose Name ends with 'S'.
- a) Display the details of those persons who live in New Delhi and are earning more than 30000.

OR

- Display the details of those persons whose basic salary ranges between 30000 and 60000.