Class: XII No. Printed Pages : 8

POST MID TERM EXAM 2024-25

Subject: INFORMATION TECHNOLOGY

SET -A

Time Allowed : 3 Hrs **Max. Marks: 60**

General Instructions:

1. Please read the instructions carefully
2. This Question Paper consists of 24 questions in two sections – Section A & Section B.
3. **Section A has Objective type questions whereas Section B contains Subjective type questions.**
4. **Out of the given (6 + 18 =) 24 questions, a candidate has to answer (6 + 11 = 17) questions in the allotted (maximum) time of 3 hours.**
5. All questions of a particular section must be attempted in the correct order
6. **SECTION A - OBJECTIVE TYPE QUESTIONS (30 MARKS):**

i. This section has 06 questions.

ii. There is no negative marking.

iii. Do as per the instructions given.

iv. Marks allotted are mentioned against each question/part.

7. **SECTION B – SUBJECTIVE TYPE QUESTIONS (30 MARKS):**

i. This section contains 18 questions.

ii. A candidate has to do 11 questions.

iii. Do as per the instructions given.

iv. Marks allotted are mentioned against each question/part.

SECTION A: OBJECTIVE TYPE QUESTIONS

Multiple Choice Questions on Employability Skills (1 x 4 = 4 marks)

Q1	**Answer any 4 out of the given 6 questions on Employability Skills (1 x4=4)**	
1	_____ is important in communication as it helps in knowing whether the receiver has understood the message or not.	1
2	_____personality disorder is characterised by distrust for others, including friends, family members and partners. People with such a disorder mostly hold grudges against others.	1
3	In the acronym SMART to set goals, 'S' stands for _____.	1
4	What is the shortcut key to underline text in a spreadsheet? a) Ctrl+b b) Ctrl+i c) Ctrl+l d) Ctrl+u	1
5	_____is the ability to take charge and act in a situation before others.	1
6	A _____ worker is one who is employed in the environmental sectors of the economy.	1
Q2 Answer any 5 out of the given 7 questions (1 x 5 = 5 marks)		
1	Name the operator used to access the members of a class.	1
2	_____ statement in Java allows you to use its prebuilt classes and its associated methods from a package. a) include b) static c) void d) import	1
3	_____ is the optional block used to clean up the code. It is executed whether the exception occurs or not.	1
4	Define the term Database.	1
5	Which of the following is not a DDL command? a) Update b) Alter c) Create d) Drop	1

6	Name one central initiative taken by the government for e-governance.	1
7	_____ portal is Mission Mode Project under the National E-Governance Plan, designed and maintained by National Informatics Centre (NIC), DeitY, MoCIT, Government of India.	1

Q3 Answer any 6 out of the given 7 questions		**(1 x6=6marks)**
1	The main thrust for e-Governance was provided by the launching of _____in 1987.	
2	Define Referential Integrity.	1
3	Which of the following is not a keyword in Java? a) break b) while c) for d) display	1
4	The expression 10%30 evaluates to 0.(True/ False)	1
5	ICT stands for _____	1
6	_____ is a special method that every Java application must have.	1
7	Write one example of a DBMS.	1

Q4	**Answer any 5 out of the given 6 questions**	**(1 x 5 = 5 marks)**
1	The services of the e-governance portal can be broadly classified into two categories _____ and _____.	½+½
2	Ramesh wants to book a train ticket online from Delhi to Bhopal, but he is not aware of the Indian Railways website where he can do so. What is the address of the Indian Railways website that he can use to purchase a ticket online?	1

3	Ram has joined a company . He is responsible for authoring access, monitoring its use, providing technical support, and acquiring software and hardware resources. What kind of role as a user he play in a company?	1
4	What is Meta Data?	1
5	There are _____ number of primitive datatypes in Java.	1

6	What will be the output of the following program?
	`class Prg`
	`{`
	`public static void main(String args[])`
	`{`
	`final int a=10;`
	`System.out.println(a);`
	`}`
	`}`
	a) 10
	b) a
	c) Unprintable Character
	d) Error
		1

Q5	**Answer any 5 out of the given 6 questions**	**(1 x 5 = 5 marks)**
1	A group of statements which get executed based on a condition is called a) Selection b) Sequential c) Iteration d) Exit	1
2	Identify the operator used in the expression if(a<=b) a) Arithmetic b) Relational c) Logical d) Assignment	1

<table>
<tr><td>3</td><td>_____ method of a String Class returns the character at the given index.
a) indexAt()
b) length()
c) isEmpty()
d) indexOf()</td><td>1</td></tr>
<tr><td>4</td><td>Write the schema of the table given below
Employee
<table><tr><td>Eid</td><td>Ename</td><td>Esal</td></tr><tr><td>101</td><td>Ramesh</td><td>40000</td></tr><tr><td>102</td><td>Geeta</td><td>50000</td></tr></table></td><td>1</td></tr>
<tr><td>5</td><td>Define the term Relation.</td><td>1</td></tr>
<tr><td>6</td><td>Which of the following is not an aggregate function?
a) count
b) Average
c) Avg
d) sum</td><td>1</td></tr>
</table>

<table>
<tr><td>Q6</td><td>Answer any 5 out of the given 6 questions (1 x 5 = 5 marks)</td></tr>
<tr><td>1</td><td>The _____ statement evaluates the test after executing the body of the loop.</td><td>1</td></tr>
<tr><td>2</td><td>Name the website that hosts video tutorials on different subjects, like, mathematics, history, physics, chemistry, civics, and economics.</td><td>1</td></tr>
<tr><td>3</td><td>Consider the following table Employee
<table><tr><td>Eid</td><td>Ename</td><td>Last_name</td><td>Esalary</td></tr><tr><td>E111</td><td>Ramesh</td><td>Kumar</td><td>40000</td></tr><tr><td>E112</td><td>Suresh</td><td></td><td>60000</td></tr></table>Write the Sql query to retrieve all the details of those employees whose last name is not specified.</td><td>1</td></tr>
</table>

<table>
<tr><td>4</td><td>Consider the following table Teacher

Teacher

<table><tr><td>Tid</td><td>Tname</td><td>Deptno</td></tr><tr><td>101</td><td>Gita</td><td>4</td></tr><tr><td>102</td><td>Surbhi</td><td>7</td></tr><tr><td>103</td><td>Shama</td><td>3</td></tr></table>
Write the Sql Query to retrieve the names of the teachers who belong to Deptno 4 or 7.</td><td>1</td></tr>
<tr><td>5</td><td>if ((percentage>=30) &&(percentage<40))
{
System.out.println(“ Passed in the exam”);
}
Consider the above statement, && will check for both the conditions to be:
a) True
b) False
c) Any of the above
d) None of the above</td><td>1</td></tr>
<tr><td>6</td><td>_____ offers free tutorials in all web development technologies like HTML, CSS, Javascript, PHPetc</td><td>1</td></tr>
</table>

SECTION B: SUBJECTIVE TYPE QUESTIONS

Answer any 3 out of the given 5 questions on Employability Skills (2 x 3 = 6 marks)

Answer each question in 20 – 30 words.

7	Explain briefly the five parameters of the Big Five factors model.	2
8	Write any two techniques to maintain a positive outlook.	2
9	What are the different stages involved in active listening?	2
10	Write any two characteristics of entrepreneurship.	2

11	Write any two benefits of green jobs.	2

Answer any 3 out of the given 5 questions **(2 x 3 = 6 marks)**

12	What are self-referencing tables?	2
13	Explain Delete table with the cascade command.	2
14	Define the term Wrapper class.	2
15	Write a program to compute the sum of two numbers using a method.	2
16	Define the term Data Redundancy.	2

Answer any 2 out of the given 3 questions **(3 x 2 = 6 marks)**

17	List the various ways in which database management applications can be used in the Education Sector.	3

18	Predict the output of the following code; Also categorize the loop as Entry/Exit control loop.
	`int j=1, s=0;`
	`while(j<6)`
	`{`
	`System.out.print( j+"+");`
	`s=s+j;`
	`j=j+j%3;`
	
	`}`
	`System.out.println("="+s);`
		3

19	Write any three properties of a database.	3

Answer any 3 out of the given 5 questions **(4 x 3 = 12 marks)**

20	What are Threads? Explain the concept of threads with the help of a program.	2+2
21	Consider the following table Employee and answer the questions that follow:	4

Id	Name	Age	Salary	Phone
1	Siddharth	24	62000	98110766656
2	Chavi	23	71000	99113423989

	<table><tr><td>3</td><td>Karan</td><td>26</td><td>65000</td><td>98105393578</td></tr><tr><td>4</td><td>Raunaq</td><td>22</td><td>89000</td><td>99101393576</td></tr><tr><td>5</td><td>Kunal</td><td>27</td><td>80000</td><td>97653455654</td></tr></table> Write the commands in SQL: a) To display the list of all employees below the age of 25. b) To count the number of employees with names starting with 'K'. c) To update the salary of ID 5 to 90000 d) To list the names and respective salaries in descending order of salary.	
22	What are operators in Java? What are the different types of operators in Java? Explain with the help of examples.	4
23	Why is Java considered as an Object Oriented Programming language? Explain data members and member methods with the help of an example.	4
24	Smitha is a entrepreneur, and she wants to develop an application for her new start up of food delivery to nearby areas . What is the process/stages of web application development which she has to follow to develop an application. Explain in detail.	4