XII CS Answer Key March 2026 Unofficial

SECTION A (1 Mark Each)

1. Which keyword is used to define a structure in C++?

Answer:
(c) struct

---

2. Which tag is used to create a hyperlink in a web page?

Answer:
(b) <A>

---

3. The process of creating a website suitable to work on every device and screen size is known as

Answer:
Responsive Web Design

4.

T1 = 7
T2 = 5
T1 ∪ T2 = 9

T1∩T2= ?

Answer:
3

---

5. MySQL aggregate function used to find number of non-NULL values

Answer:
COUNT()

---

6. Branch of Computer Science dealing with robots

Answer:
 Robotics

SECTION B (2 Marks Each)

7 (a) Declare integer pointer and dynamically initialize value 10

int *p;
p = new int(10);

(b) Avoid memory leak

delete p;

---

8. Ways to implement compile-time polymorphism

1. Function Overloading

2. Operator Overloading

---

9. Operations on Data Structures

1. Traversal

2. Insertion

3. Deletion

4. Searching

5. Sorting

6. Merging

---

10. Circular Queue

Limitation of Linear Queue:
 Memory wastage occurs because deleted spaces cannot be reused.

How Circular Queue solves it:
 The last position is connected to the first position so unused spaces can be reused.

---

11. HTML code to display H□SO□

H₂SO₄

---

12. HTML list

RAM
ROM
Cache

---

13. Match the following

<A>	Target
<EMBED>	Src
<TABLE>	Frame
<FORM>	Name

14. Basic Data Types in JavaScript

1. **Number** – Example: 10;

2. **String** – Example: "Hello"

3. **Boolean** – Example: true

---

15 (a) Output
WELCOME TO JAVASCRIPT

(b) Difference

document.write()

- Displays output in the web page.

alert()

- Displays output in a popup dialog box.

---

16 (a) Relational Algebra

$\sigma_{\textbf{Batch="BioScience"}}(\text{STUDENT})$

(b)

πName,Score(STUDENT)

Output:

Name	Score
Rehma	480
Riya	455
Rekha	300

---

17. Difference between echo and print in PHP

echo	print
Can print multiple strings	Prints only one string
Slightly faster	Slower

---

18. Applications of Biometrics

1. Fingerprint authentication in smartphones

2. Attendance systems

3. Airport security

4. Bank authentication

SECTION C (3 Marks Each)

19 (a) Inheritance

Inheritance is the process by which **one class acquires the properties and behaviour of another class**.

(b) Types of Inheritance

1. **Single Inheritance** – One base class and one derived class.

2. **Multiple Inheritance** – One class inherits from multiple classes.

3. **Multilevel Inheritance** – Derived class becomes base class for another class.

4. **Hierarchical Inheritance** – Multiple classes inherit from one base class.

---

20. Algorithm for PUSH operation (Stack)

1. Start

2. Check if TOP = MAX-1

3. If true → **Stack Overflow**

4. Else

5. TOP = TOP + 1

6. STACK[TOP] = ITEM

7. Stop

---

21. Static vs Dynamic Web Page

Static Web Page	Dynamic Web Page
Fixed content	Content changes
Easy to develope	Difficult to develop
No database	Uses database

Same for every user	Changes according to user

22. Form Controls

1. Text Box

2. Radio Button

3. Check Box

4. Submit Button

5. Password Field

23. JavaScript code (1–100)

```
var i = 1;
while(i <= 100)
{
document.write(i + "<br>");
i++;
}
```

24. Types of Web Hosting

1. **Shared Hosting** – Multiple websites share a server.

2. **Dedicated Hosting** – One server for one website.

3. **VPS Hosting** – Virtual private server.

25. Major Components of SQL

1. **DDL (Data Definition Language)** – CREATE, ALTER, DROP

2. **DML (Data Manipulation Language)** – INSERT, UPDATE, DELETE

3. **DCL (Data Control Language)** – GRANT, REVOKE

SECTION D(Any 2 ,Score 5)

26. Correct SQL query

```
CREATE TABLE Bank
(
Acc_No INT PRIMARY KEY,
Name VARCHAR(20) NOT NULL,
DoB DATE,
Gender CHAR DEFAULT 'F',
Balance INT
);
```

27 (a) Output

12345

(b) Using for loop

```
<?php
for($A=1; $A<=5; $A++)
{
echo "$A";
}
?>
```

28. Major Cloud Service Models

1. **IaaS (Infrastructure as a Service)**
   Provides servers, storage, and networking.

2. **PaaS (Platform as a Service)**
   Provides platform for application development.

3. **SaaS (Software as a Service)**
   Provides software through internet.

29 (a) e-Learning

e-Learning is the **process of learning through electronic media such as internet, computers, or mobile devices.**

(b) Advantages of e-Learning

1. Learn anytime and anywhere

2. Cost effective

3. Time and place is not matter

4. Do online course and online certification

SECTION E (5 Marks)

30 (a) C++ Structure

```
struct Book
{
int BookID;
char BookName[30];
float Price;
};
```

(b) Difference between Array and Structure

Array	Structure
Stores same data type	Stores different data types
Access using index	Access using member name
Example: list of marks	Example: student record

---

31 (a,b,c,d) HTML Travel Blog Page

```
<html>
<body bgcolor="lightblue">

<marquee>Welcome to My Blog</marquee>

<h1>Travel Blog</h1>
<hr>

<p>
I love visiting <b>beautiful travel destinations</b> like mountains,
beaches and forests.
</p>
```

```
<img src="munnar.jpg" alt="Image of Tea Estate">

</body>
</html>
```

32 (a) Major Components of DBMS Environment

1. **Hardware** – Physical devices.

2. **Software** – DBMS software and applications.

3. **Data** – Stored database information.

4. **Procedures** – Rules and instructions.

5. **Database Access Language** – SQL.

32 (b) Users of DBMS

1. **Database Administrator (DBA)** – Controls and manages database.

2. **Application Programmers** – Develop programs using database.
3. **Sophisticated users** : Users with knowledge to use database

4. **Naive Users** – Access database through applications