

Computer Application

Model Examination March 2022

Answer Key

Part I

A. Answer any 5 questions from 1 to 9. Each carries 1 Score

1. _____ is an example for exit control loop

Ans : do --- while loop

2. What is the size of the array in the following C++ declaration statement
int num[10];

Ans :

Size of array : 10

Memory Size : $10 * 4 = 40$ bytes

3. What will be the output of the following C++ statement.

cout<<strlen("Welcome");

Ans : 7

4. Write the keyword to declare a variable in Javascript

Ans : var

5. Give one example for FTP Client software.

Ans : FileZilla

6. The person who is responsible for controlling database is _____

Ans : DBA : Database Administrator

7. Which of the following is not a DBMS package

i. ORACLE

ii. SQL Server

iii. MySql

iv. HTML

Ans : HTML

8. Write an example for ERP package .

Ans : Oracle, SAP, Odoo, Tally, MS Dynamics

9. _____ is technology used for sending multimedia messages.

Ans : MMS

B. Answer all questions from 10 to 13. Each carries 1 Score

10. _____ is a library function that helps us to terminate C++ program

Ans : exit()

11. Write the full form HTTP

Ans : Hyper Text Transfer Protocol

12. What is a nested list?

Ans : A list inside another list

13. In DBMS storing of same data in multiple locations is called

Ans : Redundancy

Part II

A. Answer 2 questions from 14 to 17. Each carries 2 Scores

14. What is array traversal ? Give one example.

Ans : accessing each element of array atleast once to perform any operation.

Eg : Sorting

15 . Write down the names of any two web hosting methods.

Ans : Shared hosting, dedicated hosting

16. What is meant by constraints ? Give one example.

Ans : Constraints are the rules enforced on data that are entered into the column of a table.

Eg : NOT NULL

17 . Explain any two benefits of ERP.

Ans : **Improved Resource utilization:** An enterprise can plan and manage its resources effectively

by installing ERP software.

Better customer satisfaction: It means meeting maximum customers' requirements for a product or service. Using an ERP system, a customer will get more attention and service of an enterprise without spending more money and time

B. Answer 2 questions from 18 to 20. Each carries 2 Scores

18. Give names of two parameter passing techniques used in C++

Ans :

Call by Value

Call By Reference

19. What is Content Management System (CMS) ? Give one example.

Ans : Content Management System is a web based software system used for creating, administering and publishing websites. Eg : Joomla

20. Using example explain ORDER BY clause of SELECT comand.

Ans : ORDER BY is used for selecting table values in a sorted form. It can be ascending order or descending order.

SELECT * from STUDENT ORDER BY Mark;

PART III

A. Answer 3 questions from 21 to 24. Each carries 3 Scores

21. Write the names of any three fundamental data type in C++.

Ans : int, float, double

Static web page	Dynamic web page
The content and layout of a web page is fixed.	The content and layout may change during run time.
Static web pages never use databases.	Database is used to generate dynamic content through queries.
Static web pages directly run on the browser and do not require any server side application program.	Dynamic web page runs on the server side application program and displays the results.
Static web pages are easy to develop.	Dynamic web page development requires programming skills.

22. Compare static and dynamic web pages.

23. Write the data type of following values in Javascript.

- i. true
- ii. -300
- iii. "School"

Ans :

- i. Boolean
- ii. Number
- iii. String

24. Name any three fundamental operations in Relational Algebra. Give their symbols also.

Ans

- SELECT (σ)
- PROJECT (π)
- UNION (\cup)

B. Answer 2 questions from 25 to 27. Each carries 3 Scores

25. Compare break and continue statement in C++

Ans :

break : break statement transfers the program control outside the switch block or it takes the program control outside the immediate enclosing loop.

continue: The statement continue is another jump statement used for skipping over a part of the code within the loop-body and forcing the next iteration.

26. Read the following statements :

```
char name[20];
```

```
cin>>name;
```

```
cout<<name;
```

- i. What will be the output if you input the string " Sachin Thendulkar"
- ii. Justify your answer.

Ans :

- i. Sachin
- ii. White space is a delimiter to cin. cin will not read characters given after white space.

27. Write port numbers of the following services.

- i. HTTP
- ii. SMTP
- iii. DNS

Ans :

- i.80
- ii.25
- iii. 53

PART IV

A. Answer 3 questions from 28 to 31. Each carries 4 Scores

28. What is token in C++? Name any three token in C++.

Ans :

Tokens : Basic building blocks of C++ programs. There are five tokens in C++.

- 1. **Keywords**
- 2. **Identifiers**
- 3. **Literals**

29. List any four built in functions in C++.

Ans :

```
getchar();  
putchar();  
get();  
put();
```

30. Which are essential tags of HTML.

Ans :

```
<HTML>  
<HEAD>  
<TITLE>  
<BODY>
```

31. a) _____ is an attribute of <SCRIPT> tag.

b) Write the built in functions in JavaScript for the following :

- (i) to display a message on screen.
- (ii) to convert uppercase to lowercase.
- (iii) to find the character at a particular position.

Ans :

- a. Language
- b.
 - i. alert()
 - ii. toLowerCase()
 - iii. CharAt()

B. Answer 1 question from 32 to 33. Each carries 4 Scores

32. Write down the use of following tags

- i. <SELECT>
- ii. <FIELDSET>

Ans :

- i. used for making drop down list
- ii. used for grouping form controls

33. Write short notes on any two examples of Cyber crimes against individuals.

Identity Theft

someone pretends to be someone else someone uses another person's identifying information, like their name, credit card number, etc. without their permission to commit fraud or other crimes.

Harassment

Posting humiliating comments focusing on gender, race, religion, nationality at specific individuals in chat rooms, social media or e-mail. Using Internet, to harass someone is called **cyber stalking**.

PART V

Answer 2 questions from 34 to 36. Each carries 6 Scores

34. Write the HTML code to generate the following table.

Roll	Name	Class
100	AB	C2
101	PQ	C1
102	XY	A1

```
<TABLE border= 1>
<TR>
<TH> Roll </TH>
<TH> Name </TH>
<TH> Class </TH>
</TR>
<TR>
<TD> 100 </TD>
<TD> AB </TD>
<TD> C2 </TD>
</TR>
<TR>
<TD> 101</TD>
<TD> PQ</TD>
<TD> C1</TD>
</TR>
<TR>
<TD> 102</TD>
<TD> XY</TD>
<TD> A1</TD>
</TR>
</TABLE>
```

35. a. Define the following terms of RDBMS

- i. tuple

- ii. relation
- iii. Degree
- iv. cardinality

b. Write the degree and cardinality of following relation:

Regno	Name	Mark
101	Sachin	380
103	Fathima	420
106	Bincy	400
108	Joseph	350

Ans :

tuple : record or row of a table

relation : table is known as a relation

degree : number of columns or attributes in a table

cardinality : number of rows or tuples in a table

b. Degree : 3
Cardinality ; 4

36. a. Pick the odd one out. Give reason.

- i. CREATE
- ii. SELECT
- iii. UPDATE
- iv. DELETE

B. Consider the given relation ITEMS

Itemcode	Name	Price
001	Pencil	8.00
002	Pen	10.00
003	Notebook	15.00
004	Pen	12.00

- i. Suggest a suitable primary key for the above relation. Give reason.
- ii. Write SQL statement to list all the items in the table.
- iii. Write SQL statements to list itemcode and name of all items.

Ans :

a. CREATE : DDL command
(SELECT, UPDATE and DELETE are DML commands)

b.

- i. Itemcode : it does not have duplicate values. Itemcode is unique.
- ii. SELECT * FROM ITEMS;

iii. SELECT Itemcode, Name from ITEMS;