MODEL EXAMINATION -2019

Computer Application - (Commerce)

1x5 = 5 marks

1. Array
2. strcat()
3. Javascript, VB Script
4. Alternate key.
5. Business Process Re-engineering

6-16 any 9 ⇒ 9x2 = 18

6. Keywords - Reserved words - convey a specific meaning to compiler — (1)

   eg:- Any example (48 keywords) — (1)
   int, float, char, void ... etc

7. int mark[5]; — (1)
   int mark[] = {30, 50, 65, 25, 75};

8. Container Tag :- Require opening tags as well as closing tags — (1)

   eg:- Any one <HTML> and </HTML> — (1)

9. <HTML Dir = "rtl" > — (1)
   Lang = "zh"
   Lang = "Ar" — (1)

10. START attribute enables to change the begining value of an ordered list (1)

    eg:- <OL START="5">

(II)

TYPE : attribute customise the numbering system used in ordered list, which can set the set of values as

1 - 1,2,3...
A - A,B,C...
a - a,b,c...
I - I, II, III, ...
i - i, ii, iii, ...

11.

Cell Spacing	Cell padding
→ Determines the space between cells of a table	→ specifies the space between the cell border & cell content
→ Value is given in pixels (1)	→ Value is given in pixels (1)

12. Responsive Web Design

→ Designing web page in such a way that webpage will be able to adjust itself to the screen size of the device. (2)

13. a) Degree

→ The no: of attributes in relation (table). (1) (columns, fields)

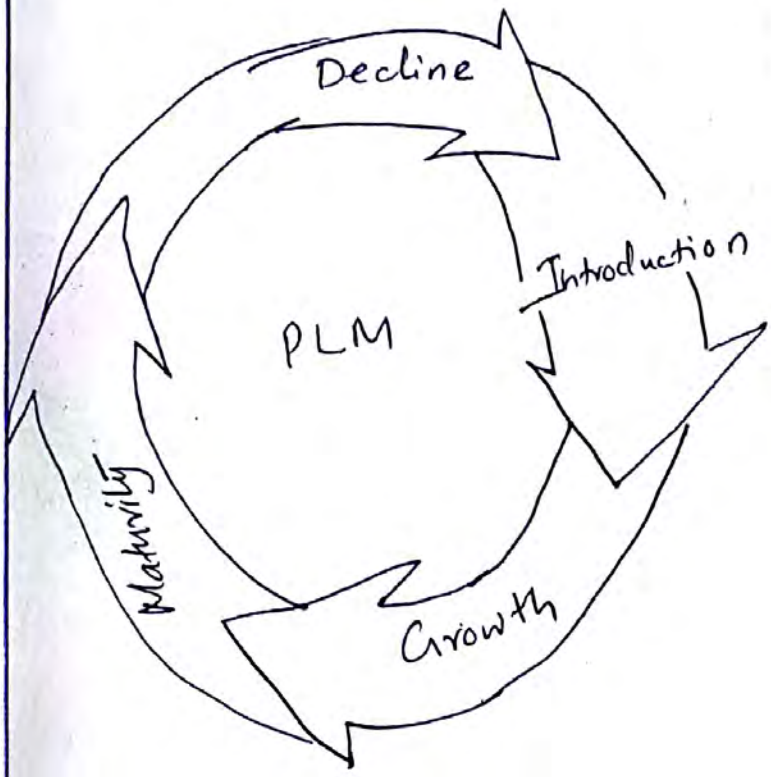
b) Cardinality

→ The no: of rows or tuples / records in a relation / table (1)

14. 1) Hardware (Hardware resources)
2) Software (DBMS, application programs, utilities)
3) Data (most important Component)
4) Users (people who use the DBMS - DBA, application programmers, Sophisticated users, Naive users)
5) Procedures (Instructions & rules that govern the design & use of db)

[any 4 with explanation — ½×4=2
only listing — 1 mark]

15. Product Life Cycle Management (PLM)



Explanation or Diagram ↓ (2) marks.

16. → CyberSpace

(→ Coined by William Gibson – 1 mark)

→ virtual environement created by computer systems connected to internet.

→ Simulated world, so many things/services in one space.

→ E-commerce sites, netbanking, sites with social interaclions

[Any 2 points (2) marks]

17-27 any 9 ⇒ 9×3 = 27

17. a) Jump Statements → Statement that facilitate the transfer of programs control from one placeto another.

(1) → Perform unconditional control transfer.

eg- return, goto, break & continue (½ mark) If-goaly

18. b) goto example

```
int i=1;
start :
        cout <<i;
++i;
if ( i<=50)
goto start;
```

(2)

~~18. HAI1HAI2~~

18. HAI1HAI2HAI3HAI

(3)

19.
```
#include<iostream>
using namespace std;
int main()
{
  float mark,sum=0,avg;
  int n=0;
  char ch;
  do
  {
   cout<<"Enter the mark of next student ";
   cin>>mark;
   n++;
   sum= sum+mark;
   cout<<" Any more students (Y/N) ? ";
   cin>>ch;
  }while(ch=='Y' || ch=='y');
  avg= sum/n;
  cout<<" Average mark = "<<avg;
  return 0;
  }
```

(3)

20.

Static web page	Dynamic web page
→ Content & Layout is fixed	→ Content & Layout may change during runtime
→ Never use databases	→ Database is used to generate dynamic content through queries.
→ Directly run on the browser & don't require server side application	→ Runs on server side application program & displays the results
→ Easy to develop	→ Requires programming skills

[Any 3 points 3 marks]

21. Three Different ways to add javascripts

i) Inside <BODY>

→ Placing scripts inside <BODY> tag

① → Scripts will be executed while the content of the web page is being loaded.

ii) Inside <HEAD>

→ Adding scripts inside the head section [<HEAD> Tag]

① → Head section will be loaded before body, therefore if any function call is to be made from body section, its better to use function defenition in head section.

(iii) External JavaScript file

→ Scripts can be placed into an external file with file extension .js and then link that file from with in the ~~Web~~ web document

22. Built-in functions in Javascript

1) alert() function → used to display a message on the screen

(or) eg:- alert("Welcome to JavaScript");

2) isNaN() → used to check the given value is a number or not.

→ if it is not a no: Result will be 'true'
& if it is a no: Result (return) will be 'false'

(or) eg- isNaN("welcome"); → true.

3) toUpperCase() → Returns the uppercase form of the given string

eg:- var x,y;
(or) x="JavaScript";
y= x.toUpperCase(x);
alert(y);

output → alert box with message "JAVASCRIPT"

4) toLowerCase → Returns the lowercase form of the given string

(or) eg

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5) charAt() → Returns the character at a particular position

→ charAt(1) returns the second character

(or) eg:-

```
var x;
x = "JavaScript";
y = x.charAt(4);
alert(y);
```

output → alert box with a message 'S'

[Any 3 with explanation or eg 3 marks]

23. Web hosting

1) Shared Hosting → most common

→ many different websites are on one, single web server & they share the resources like

(1) CPU & RAM

→ Chepear & easy to use

→ Low bandwidth result in slow down of access if there is more traffic

2) Dedicated Hosting → Client leases the entire web server & all its resources.

→ Single website on a server

(1) → most expensive but best for performance & speed.

→ Used for large organisations/government departments

→ If Purchased → Co-location.

3) Virtual Private server (VPS) → physical server is virtually partitioned into several servers

using virtualisation technology.

(1) → VPS provides dedicated amount of resources to each individual virtual server.
→ Provides almost same service as Dedicated but with lesser cost.
→ eg VMware, VirtualBox, Free VPS, Usermode Linux, Microsoft Hyper-V

24. (a) Data Abstraction

The Act of showing essential data with out showing the entire data in order to hide the complexity & enforce security.

① → Three levels. physical, logical & view levels [only (1/2)]

(b) (i) Physical level → Lowest level of abstraction
→ Describes how data is actually stored in secondary storage devices

(ii) Logical level (Conceptual) → Next highest level of abstraction
→ Describes what data is stored in the database & what relationship exist among them.

(iii) View Level → Highest level of abstraction
→ The way in which the users view the data
→ Describes only a part of database

[Any two (2) mark or diagram]

SQL queries

25) a) Select * from CUSTOMER; (1)

b) Select ID, name, designation from CUSTOMER ORDER BY name; (1)

c) Select * from CUSTOMER WHERE Salary > 25,000; (1)

26) a) ERP - Advantages

i) Improved resource utilisation
ii) Better customer ~~sf~~ satisfication.
iii) Provides accurate information
iv) Decision making Capability.
v) Increased flexibility
vi) Information Integrity.

[Any 4 ⇒ 4 × ½ = 2]

b) Example for ERP

→ Oracle (JD Edwards → People Soft
→ Oracle business suite)
→ SAP (Systems, Applications & Products)
→ Odoo [Open ERP]
→ Microsoft Dynamics
→ Tally ERP
→ GNU KHATTA

[any one (1) mark]

27) SMS → Short Message Service
→ Text message service in mobile communication system (with GSM 160 characters) (1)
→ 'Store & forward' mechanism using SMSC or 'forward & forget'
→ SS7 protocol. (Signalling System No.7)

MMS → Multimedia messaging service
→ Standard for sending & receiving multimedia content like text, graphics, videos, music ...etc (1)
→ No specific size limit.

GPS → Global positioning system
→ Satellite based navigation system used to locate a geographical position anywhere on earth using longitude and latitude. (1)
→ Designed & Operated by US Department of Defence.

28-30 any 2 ⇒ 2×5 = 10

28. a) function → is a named unit of statements in a program to perform a specific task as part of the solution (2 marks)
Types → predefined / built-in & User-defined (types only 1 mark)

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b) int Display (int, int);

(or) char Display (int, int);

(or) char Display (char, char);

(or) double Display (int, int);

.. etc

(1)

c) Int Calcsum (int a, int b, int c)

{ int Sum;

Sum = a+b+c;

return Sum;

}

(2)

29. a) anchor tag or <a> tag (1)

or example.

b) Address (2)

c) (i) Internal hyperlinks

→ A hyperlink to a particular section of the same document

→ Name attribute also required

(or) example.

(ii) External hyperlinks → A link from one web page to another web page

→ Using the URL of the external file.

(1)

XII

(or) example

30. a) Constraints → Rules enforced on data

(1) that are entered into the column of a table

b) Example NOT NULL, AUTO_INCREMENT, UNIQUE,

(2) PRIMARY KEY, DEFAULT

[any 4]

c) → Table constraints are similar to column constraints, main difference is that table constraints can be used not only on

(2 marks) individual columns but also on a group of columns

→ Appear at the end of the table definitions.

[example only 1 mark].