SAMPLE PAPER-6 (Based on Database/Open source/Flash/Networking)

Database

1) **Define the following term with example:**

   i) Tuple ii) Relation iii) Cardinality iv) Degree v) Primary Key vi) Foreign Key
   vii) Alternate Key viii) Candidate Key ix) Composite Key x) relationship xi) DBMS
   xii) OLE xiii) DBMS and RDBMS

2) **Differentiate Between following**
   a) Text & Memo   b) Number & Auto Number c) Tuple & Attribute d) Hiding & Freezing Access column e) Datasheet & Design View f) Text & Number g) Currency & Date datatype

3) **Name the Following**
   i) An attribute which is capable of becoming a primary key.
   ii) The view in which we can add, edit and view records in MS-Access.
   iii) A data type used for linking to an internet or another location in the database.
   iv) A built in set of rules Access uses to make sure that the relationship is valid . it can also prevent accidental deletion or editing of data.
   v) Alphanumeric characters upto 65,535 characters..
   vi) The number of records in a relation.
   vii) A data type used for logical value(true/false) in the database.
   viii) A key that does not allow Null values and must always have a unique value.
   ix) A data type used for linking to an internet or another location in the database.
   x) A built in set of rules Access uses to make sure that the relationship is valid . it can also prevent accidental deletion or editing of data.
   xi) The number of fields in a relation.
   xii) Key used to relate two tables.
   xiii) Any two data types used to store alphanumeric characters in Access.
   xiv) sound,picture, other data such as MS-Word /MS-Excel file can be store in this data type
   xv) A data type which can be used to automatically store monetary values with appropriate sign, commas and decimals
   xvi) Data type which can store Photograph of a person
   xvii) Extension of MS-Access Database file
   xviii) A part of the Microsoft Office suite that is used to create and manage databases
   xix) Key which can uniquely identify the record but it is not be primary key
   xx) Key which is made up of two or more attribute

4) Study the following data and answer the questions given below :

Table: Patient

Name	P_no	Date_Admm	Doc_no
Mohan	P_101	21/03/2006	301
Priya	P_204	03/04/2006	134
Suraj	P_375	15/01/2006	204
Komal	P_424	24/06/2006	134

Table: Doctor

Doc_no	Doc_Name	Speciality
134	A.K. Sharma	Surgery
204	R. Khurana	Dentist
301	S. Shyam	Neurology
280	P.John	Dermotology

i) Name the field, which can act as the primary key for the table **Patient** and the table **Doctor** respectively.

ii) Name the field, which can act as the foreign key for the table **Patient.**

iii) What type of relationship exists between the table **Patient** and the table **Doctor** ?

5 Consider the following tables SENDER and RECIPIENT. Study the following data and answer the question given below :

Table SENDER

SENDERID	NAME	ADDRESS	CITY
ND01	R. JAIN	2,ABC APPTS	FARIDABAD
MU02	H. SINHA	12, NEWTOWN	FARIDABAD
MU15	S.JHA	27/A, PARKSTRET	MUMBAI
ND50	T. PRASAD	132-K, SDA	NEW DELHI

Table : RECIPIENT

RECID	SENDERID	RECNAME	RECADRESS	RECCITY
KO05	ND01	RAM VILAS	7,NH4, NIT	FARIDABAD
ND08	MU15	DEEPAK	123,SEC 12	FARIDABAD
MU19	ND50	DHARAM VEER	SEC 23 NTPC	FARIDABAD

(i) Suggest data types that should be used for each of the fields in the table RECIPIENT.

(ii) What type of relationship exists between the table SENDER and the table RECIPIENT?

(iii) Name the field that can be set as a foreign key in the table RECIPIENT.

6) Study the following-data and answer the questions given below :

Table: **Customers**

Customer	Cust_No	Acct_CreateDt	Amount
Manish	CNR_101	21/03/2001	450000
Rahul	CNR_204	03/04/2001	250000
Manpreet	CNR_375	15/01/2001	350000
Rajen	CNR_424	24/06/2001	650000

Table: Transactions

Trxn_ID	Cust_No	Trxn_Date	Withdrawal_Amt
2310201201	CNR_101	23/10/2012	14500
2410201202	CNR_101	24/10/2012	1500
2110201203	CNR_375	21/10/2012	12000
2410201204	CNR_424	12/10/2012	16000

   a. Name the field, which can act as the primary key for the table **Customers** and the table **Transactions** respectively.
   b. Name the field, which can act as the foreign key for the table **Transactions.**
   c. What are the Cardinality and Degree of the table Customers ?

7) Study the following data and answer the questions given below :

Table : Pancard.mdb

Permanent Account Number	Name	Father Name	Date Of Birth
Atbpe3452g	Er. Ramesh Gupta	Sh. Keshav Gupta	22-9-1989
Sdfg324erg	Dr. Mahipal Rawat	Sh. Magesh Rawat	9-10-1965
Dfghj234ty	Tr. Leelawati George	Sh. S.K.George	8-9-1945

Table: Moneytransaction .mdb

Permanent Account Number	Debit	Credit	balance	Transcation_ID
Sdfg324erg	45000		145000	T_001
Atbpe3452g		676543	32678	T_002
Sdfg324erg		65432	79568	T_003

i. Suggest the data types that should be used for each of the fields in the pancard table .
ii. Write the relationship between "pancard" and "moneytransaction" table**.**
iii. Name the field that can act as a primary key in "pancard" table and name the foreign key of "moneytransaction" table.

8) Suggest the data types for the following Teacher Table:

T_Code	- Teacher's Code generated Automatically
T_Name	- Teacher's Name
DOB	- Date of Birth
Basic_Sal	- Basic Salary
Qualification	-Qualification of a teacher (List should appear like- M.A., B.A, ….)
Photo	-Photograph of a teacher
Bio-Data	-Ms-Word file.
Blog	-Teacher's Blog on Internet

9) Study the following data and answer the questions given below:

Table: Video

Title	Vid_No	Actor	Price
Troy	1001	Sunil Nehra	315.00
Men In Black	1002	Neha	125.70
Speed	1003	Shuhita	220.10
Spider Man	1004	Pawan	480.00

Table: Issue

Member_No	Issue_Date	Return_Date	Vid_No
P123	07/12/2009	07/14/2009	1001
T102	09/30/2009	10/01/2009	1002
T096	10/08/2009	10/10/2009	1002
P103	10/03/2009	10/05/2009	1001
T089	09/30/2009	09/04/2009	1004
P037	04/05/2009	04/05/2009	1003

1) Suggest data types for each of the fields in the table Video
2) Name the fields, which can act as the primary keys for the table Video and the table Issue.
3) What type of relationship exists between table Video and Issue.

10) Consider the following tables STUDENT, SUBJECT_STUDENT and SUBJECT.
Study the following data and answer the question given below :

Table STUDENT

Admno	Name	DateofBirth
079	Santosh	27-12-1981
6875	Ashish	29-02-1998
5444	Augestine	22-07-1972
9873	Sanjay B.	30-09-1984

Table : SUBJECT_STUDENT

Subject_code	No_of_students	Subject_Name	Teacher
067	54	Multimedia	Mrs. Ashu
048	20	Physical Education	Mr. Imran
301	120	English	Ms. M. Bhal
042	73	Physics	Mr. Vikas
030	80	Economics	Mr. Suji

(i) Suggest data types that should be used for each of the fields in the table STUDENT .
(ii) What type of relationship exist between the table STUDENT and the table SUBJECT .
(iii) Name the field that can be set as a foreign key in the table SUBJECT_STUDENT with reference of SUBJECT table.

11)What is the significance of database?
12)Write down any two disadvantages of using a database system.
13)What is RDBMS? Name two RDBMS
14)What do you mean by Data Redundancy? How Ms-Access help to reduce it
15)What is Validation Rule and Validation text in MS Access
16) What is Input Mask? the data types that do not support this property
17) What is Default Value
18) What is Sorting of Data
19) What is Query
20) Explain Three Types of Relationship

Question Based on Multimedia

1) Write a short note on how multimedia is being used in healthcare.
2) Write a short note on Virtual Reality
3) Write a short note on Video Conferencing
4) Write a short note on how multimedia is being used in Education
5) What is Digital Library
6) .What is Information Kiosk
7) What is Video on Demand(VOD)
8) Write a short note on Different File formats:
   i)GIF ii)MPEG iii)AVI iv) JPEG v) BMP vi) MIDI vi) WAV vii) SWF viii) PSD ix) DAT x) PDF
9) Define the following :
   a) FLOSS   b) OSS   c) FSF   d) OSI   e) W3C   f) GNU
10) Explain the following with example : I) Freeware II) Shareware III) Proprietary Software
11) What is localization of software
12) Give the full Form of following : a) PHP   b)JSP   c)ASP,   D)ASCII   e)ISCII
13) Write short note on   a)MYSQL   b) Tomcat   c) Linux   d)Open Office e) Python
14) What is Open Source Software Name three Website which promotes open source software
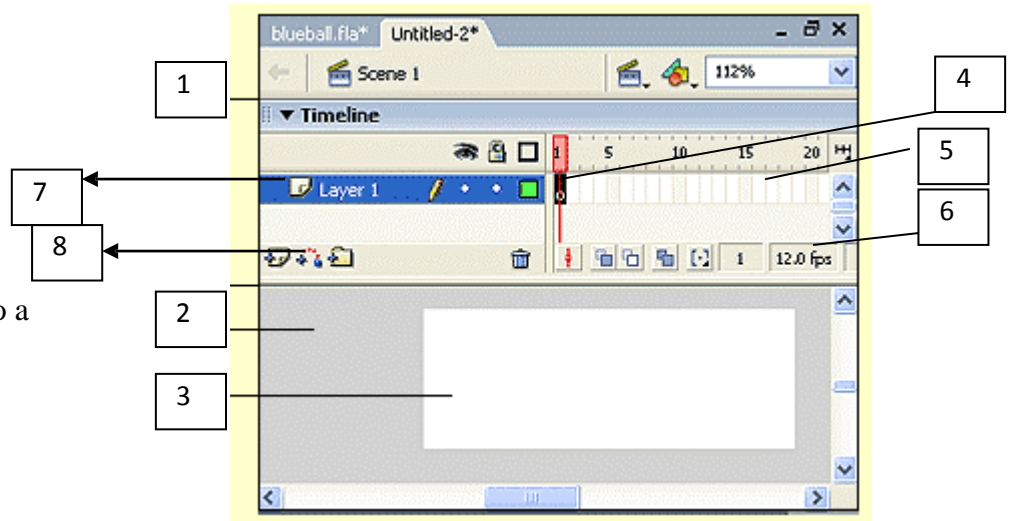
Networking

1) What is Network Give three Advantages of Network
2) Give 3 difference Between LAN/MAN/WAN
3) Give Two Difference Between LAN & WLAN
4) Define the following Term   a)Hub b)Switch c)Router d) Gateway e)Repeater f)MODEM
5) What is Interspaces
6) What is Data Transfer Rate(DTR)
7) Give the Full Form of Following a) FTP   b) SMS   c)MMS   d)HHTP   e)SMTP
       f)POP g)TCP/IP   h)GSM   i)CDMA   j)WLL   k) SLIP l)IMAP
8) What is topology? Difference Between Star / BUS /Ring topology
9) Name the following :
   i) the transmission media that can be used in   **a)**Sparsely populated areas **b)** Unidirectional
   ii) A general purpose client-server internet facility that facilitates remote login**.**
   iii) Software categories that has restriction on using and copying software and enforces a license fee.

    iv) Name the transmission media that use electromagnetic waves ranging in frequencies between   3 KHz and 1 GHz   ii) 1 GHz and 300 GHz

10) Define the term protocol

11) Explain the following : a)Firewall b)Cracker c)Hacker d)Cyber Law e) spyware f)malware

12) Difference between Twisted pair/Co-axial /Fiber-Optics cable

13) Name three wireless channel of communication

14) Difference between Packet Switching & Packet Switching

15) Explain Telnet & Arpanet

FLASH

1. What is Symbol
2. What are different types of Symbol? Explain Each?
3. What is instance and how is it different from Symbol

4. What is Scene

5. Identify in picture(1-8)
   And define them

6. What is Frame rate
7. How to Convert the Image to a Symbol
8. What is Blank frame
9. What is Key Frame
10.   What is tween
11.   What is Shape Tween
12.   What is Motion Tween
13.   What is Guided Motion
14.   What is Mask layer
15.   What is onion Skinning
16.   How to add sound in flash
17.   Different format in which you can publish flash
18.   Difference between JPEG/MPEG
19.   Difference Between BMP/GIF
20.   Difference between

ASP

1) Differentiate between Client Side scripting and Server-side scripting.
2) What is the purpose of using the Global.asa file?
3) Differentiate between the RESPONSE object and REQUEST object.
4) Expand the term DSN.
5) Name the built in function which can be used for the following
6) to convert the expression into Boolean
7) to convert a character to lowercase
8) Name any two collections of the Request Object.
9) Explain with example the usage of the QueryString collection of the Request object.
10) Differentiate between the Ad Rotator and Content Rotator components of ASP.
11) Give the usage and the object to which the following methods/properties belong:
> (i) Transfer
> (ii) Lock
12) Write the difference between lock and unlock method of Application object .
13) What is Page Counter Component Name Three Properties and Methods
14) Give difference between Hits() and pagehit() method
15) Differentiate between read and readall method of textstream object.
16) Complete the code which shows the no of visitor

<% Set pageCount = _____("_____.PageCounter") %>

<% pageCount._____ %>

You are visitor number <% _____ %> to this Web site.

17) Find output
   a. Response.write(strreverse (mid("Must write supporting answer",11,6)))
   b. Response.write(instr("this is exam" , "is"))
   c. Response.write((8*2-5+18<34) IMP (9>5))
   d. Response.Write(LCASE(MID("Plastic Elements"),3,8)))
   e. Response.Write(MONTHNAME(MONTH(CDATE("12-12-2010"))))
   f. Response.Write(CINT((5+5)/(3^2)))
   g. Response.write (NOT TRUE AND (TRUE OR FALSE))
   h. Response.write(RIGHT("Let's Learn and Experiment",LEN("LEARN")))
   i. Response.write«5-3)*(4/2-3))
   j. Response.write(strreverse (left(mid("Must write supporting answer",6,6),4)))

18) Name any two server variables?
19) Name objects required to manage database through ASP.
20) Buffer object is associated with which object? What is its use.
21) What is QueryString how it is different from Request.Form
22) Create a program to read a text file named data.txt and count the number of vowels and consonants.
23) Write a program to read a text file named upper.txt and display the contents of the file after converting all the alphabets to upper case alphabets.

24. Rewrite the following code after removing errors with each correction underlined.

```
<HTML>
<HEAD>
<%
Sub Proc1(n1, n2)
Request.Write(n1*n2)
%>
</HEAD>
<BODY>
<P>
Result : <% Call Proc1(3) %>
</P>
<% Proc1 3, 4 >
</P>
</BODY> </HTML>
```

25. Give the output for the following code segment:

```
<%
Txt = "India!"
Max = Len(Txt)
For I = 0 to Max
Ntxt = Left(Txt, I)
Response.Write(strReverse(Ntxt))
Response.Write("<BR>")
Next
%>
```

26) Underline the errors in the following code and write the corrected script.

```
<% For A = 1 to 5 %>
<Font Size =
<%A%>> Hello
User !!! <BR>
<Next>
```

27) Give the output for the following code segment:

```
<%
Arr = Array(25,30, 45,
76) Max =
UBound(Arr)
For I =Max to 1 Step -1
Arr(I) = 100 – Arr(I)
Next
For I = 0 to Max
Response.Write(Arr(I) & "<BR>")
Next
%>
```

VB Script

1. 1. What is variable in VBScript ? Write General rules for declaring a variable.
2. What is the use of option Explicit statement?
3. What do you men by scalar variable?
4. What is a comment in VBScript ? Explain with example .
5. How the sub procedure is different from function procedure ? Explain with help of an example .

Give output of the following statements:

- Document.write(strreverse (left(mid("Must write supporting answer",6,6),4)))
- Document.write(monthname(month("16-01-2009")))
- Document.write((8*2-5+18<34) XOR (9>5))
- Document.write(strreverse (mid("Must write supporting answer",11,6)))
- Document.write(instr("this is exam" , "his")
- Document.write(ucase(mid(" congratulations!",2,abs(13 mod 5))
- Document.write(instr("mistrust or DISTRUST" , "ST")
- Document.write(Right (" CLASS XII , hour(#4:30:10 AM#)
- Document . Write (LCASE (LEFT ("STATEMENT", 4)))
- Document . Write (CINT (4+5/2-6*2))
- Document . Write (MONTHNAME (MONTH (CDATE ("02/03/2006"))))
- Document.Write(INSTR(LTRIM(" WebTech"), "Tech"))
- Document.Write(UCASE(RIGHT("Multimedia",5)))
- Document.Write(ABS(4 – 10 * 3))
- Document.Write(UCASE(MID("Hello There"),7,3)))
- Document.Write(MONTHNAME(MONTH("15-2-2003")))
- Document.Write((4+5)MOD(3^2))
- Document.Write(LTRIM(LEFT("####Congratulations", 7)) (where # denotes a blank space)
- Document.Write(INSTR(LTRIM(" ActiveX Data object"), "obj"))
- Document.Write(strreverse (MID("Hello There" ,7,3)))
- Document.Write(isnumeric(MONTHNAME(MONTH("12-12-2009"))))
- Document.Write(Right(ucase("SWINE flu PaNdEmiC"),len("cases"))
- Document.Write (MID(monthname(month(date()))),hour("#6:25#"),len("exam")
- Document.Write((2*7^2>50 mod 3) XOR (7>5 EQV 5*3<5))
- Document.Write(LEFTt(Lcase("SWINE flu PaNdEmiC"),len("case"))
- Document.Write (MID(monthname(month(date()))),Minute("#6:25#") mod 4 ,len("exam"))
- Document.Write((2*7^2>50 mod 3) EQV (7>5 XOR 5*3<5))

6. What do you mean by event ? Give two examples of events.
   Name the events to be used in the following situations:
   (i) To display a message every time the viewer closes web page.
   (ii) (ii) To deactivate a particular textbox in a form
   (iii)To perform an action when a button is clicked.
   (iv) To perform an action as soon as a text fields gains a cursor.
7 . Name the built-in functions to be used in the following situations: 1
   (i) To return a number rounded to specified decimal places.
   (ii) C heck if string1 occurs within string2 and return the starting position of string2 In string1.
8 Differentiate between a sub-routine and a function with the help of an example.

9. Write an HTML code for creating a form, which ontains three textboxes as shown below. The first two textboxes accept two numbers as input from the user and the third textbox displays the sum of these two numbers. Include the VBScript code which contains a user-defined function required to be called when the user changes the values in any of the first two text boxes.

Enter numbers into the first two text boxes to find their sum

10 + 2.5 = 12.5

10. Write the HTML code for creating the form given below and also write the embedded VBScript code for the click event of the submit button.

Enter your name :

The date is :

Today the day is :

The time is :

click

11. Write the code to display the below form and add the vbscript to display the results as written when user enters salary and click on calculate bonus button.
If salary is >=25000, Bonus is 5% of salary
If salary is >=15000, Bonus is 3% of salary
If salary is < 15000, No Bonus

Date & Time:

Week Day Name:

Your Salary:

Your Bonus

Clear All   Calculate Bonus

12. Create a form that contains two checkbox options and a textbox as shown. When the user clicks on any checkbox the selected options must be displayed in the textbox. Write the HTML code for creating the form and the embedded VBScript code for the click events of the checkboxes.

The Check Box Control - Click on a check box.

Please select the categories that interest you.
☐ Movies
☑ Books

You have selected: books