**Sample Paper -1 for Exam 2016**
**Based on DATABASE / FILE FORMATS /FLASH / OSS / HTML / NETWORKING**
**Q1,Q2,Q3,Q7 (Total Marks Covered : 40)**

## Database

**Q1. Explain** the following **Terms** with one **suitable example**

1. Database  2. DBMS  3. RDBMS  4. Relation  5. Attribute  6. Tuple
7. Degree  8. Cardinality  9. Candidate Key  10. Primary Key  11. Alternate Key  12. Foreign Key

**Q2. Give Three characteristics of each Data type with two suitable data of each**

i)  AutoNumber  ii)  Number  iii) Text  iv) Memo  v) Currency  vi) Date/Time

vii)  OLE       viii) Boolean    ix)  Hyperlink

**Q3**. Explain with One Example

i)       One-to-Many Relationship
ii)      One-to One  Relationship

Q4. **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)   The number of fields in a relation.
x)   Key used to relate two tables.
xi)   Any two data types used to store alphanumeric characters in Access.
xii)  sound,picture, other data such as MS-Word /MS-Excel file can be store in this data type
xiii) A data type which can be used to automatically store monetary values with appropriate sign, commas and decimals
xiv) Data type which can store Photograph of a person
xv)  Extension of MS-Access Database file   **.**
**xvi)** A part of the Microsoft Office suite that is used to create and manage databases

xvii) Key which can uniquely identify the record but it is not be primary key

xviii) Key which is made up of two or more attribute

xix) Generating conditional records from single table or multiple table

xx) Key Symbol before the field in design view indicate

Q5. What is Validation Rule ? Give One Example?

Q6. What is Query ?

Q7 What is referential integrity in DBMS

Q8. What is Input Mask? the data types that do not support this property

Q9 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

**Q10 Study the following data and answer the questions given below:**

**Table: Video**

| Title | Vid_No | ISBN No | Actor | Price |
|---|---|---|---|---|
| Troy | 1001 | VS001001 | Sunil Nehra | 315.00 |
| Men In Black | 1002 | VS001002 | Neha | 125.70 |
| Speed | 1003 | VS001003 | Shuhita | 220.10 |
| Spider Man | 1004 | VS001004 | 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 & issue

2) Suggest the primary key for the table Video and the table Issue.

3) Name the Foreign Key of table Issue

4) Name Candidate keys and Alternate Keys of Table Video

5) What type of relationship exists between table Video and Issue.

Q11 Differentiate between

1) Text & memo          2) Datasheet View & Design View          3) Number & AutoNumber

4) Validation Rule & Input Mask     5) Freezing & Hiding Column in Table     6) OLE & Hyperlink

7) Date & Currency          8) Tuple & Attribute          9) Primary & Foreign Key

10) Alternate & Candidate Keys

## File Formats

**Q1. 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 xi)PNG xii) FLA xiii) TIFF xiv) WMV xv) MP3 xvi) MP4

Q2. Differentiate between Following
a) GIF & JPEG/JPG b) JPEG & MPEG c)SWF & FLA d) GIF & PNG e) MP3 & MP4

**Q3. Choose the correct option**
a)Which file format is best used for images placed in documents to be published in paper form?
a. JPEG b. TIFF c. BMP d. PNG
b. Which is *not* a format for saving an image created in a paint program?
a. JPEG b. PNG c. PDS d. BMP
c. Which of the following is *not* a sound file format?
a. WAV b. MPEG c. MP3 d. WMA
d. Which of the following images can be edited and resized without edge distortion?
a. bitmapped graphic b. AVI file c. raster graphic d. vector graphic
e) Master Adarsh is planning to gift a digital album of 'MODEL SAARC CONFERENCE 2015 ' to his teacher on her farewell. All the images have lots of colour shading and are all static images. Which of the following formats are best suited for this purpose:
(i) GIF (ii) JPEG (iii) AVI justify your choice

f) Mehmwal Ad Agency is developing an **advertisement** for one of its clients. The client has specified that the movie should be viewable on **DVD players** as well as on the **internet**. Also they want that the viewers should **not** have to download any **special codec** to view the file. Keeping these requirements in mind, suggest the most suitable format from the following:
a) AVI b) MPEG c) JPEG **Justify** your choice

g) Which image file format suitable for storing animations with transparent backgrounds a) GIF b) JPEG c) BMP **Justify** your choice
**h)** Name two movie formats used for webpage

i) Mr. S. Expert is suggesting to Mr. KRK to store all static images in JPEG format that has lots of colour shading but Mr. KRK has different thought and he want to store it in GIF format. With whom do you agree and why?

## Flash

Q1. What is Layer? Define 4 Types of Layer?
Q2. What is Symbol? Define 3 Types of Symbol?
Q3. What is Instance? How it is different from Symbol
Q4. What is a Frame? What are Frame Buffer and Frame Rate?
Q5. What is a Key frame? What is the use of Stage?
Q6. How Key frame is differ from Blank frame?
Q7. What is Timeline? Name three components present in Timeline?
Q8. Differentiate between
    **a)** Shape Tween & Motion Tween      b) Guide Layer & Mask Layer
    **c)** Publishing & Exporting      d) .Fla & .Swf
    **e)** Vector & Bitmap Graphics      f) Movie Clip & Graphics Symbol
    **g)** Character Kerning & Character Tracking  h) Hiding & Locking Layer

Q9. Explain the following  a) Onion Skinning   b) Alpha Value   c) Publish Preview
Q10. How to Add sound in Flash timeline
Q11. Explain the concept of Scenes in Flash
Q12  Give 4 Formats of Publishing & Exporting of Flash document
Q13.  Define Windows Projector &  Macintosh Projector
Q14. Explain two types of sounds.
Q15.How frame by frame animation differ from tween animation
Q16. . Define stroke. What is default stroke style?
Q17. Write steps to include flash file into a HTML file?
Q18. Write  Steps to do Motion Tweening in Flash on Text
Q19. Write Steps to do Guided Path Motion
Q20. Write Steps to do Masking.
Q21. Study thefiguregivenbelowand answer the questions that follow :



(i)  What is the  usage of the labeled as A in the  above figure?
(ii) What do the arrows in the timeline are a indicate?
(iii) Given the above settings, which layer contents will not be displayed on the stage?
(iv) What is the frame rate of the above movie?
v)What is the  usage of the  are labeled as B in the  above figure?
vi) What is the usage of the  labeled as C in the  above figure?
Q22. Rita is trying to make change in the movie. Though the content of layer on stage is visible but no changes can be done to it.What should she do so that she can make changes.

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## OPEN SOURCE & MULTIMEDIA APPLICATION

**Q1. Give Full Form of following**

   a) OSS   b) FLOSS  c) FOSS  d) OSI   e)W3C  f)GNU  g) FSF h) TTF

**Q2.  Define Freeware Software? Give 3 Characteristics of it ? 3 Example of Freeware Software?**

**Q3. Define Shareware Software? Give 3 Characteristics of it ? 3 Example of Shareware Software?**

**Q4. Define Proprietary Software? Give 3 Characteristics of it ? 3 Example of Proprietary Software?**

**Q5. Define Open Source Software? Give 3 Characteristics of it ? 3 Example of Open Source Software?**

**Q6. Define UNICODE & ASCII ?**

**Q7. Explain following  i) Tomcat   ii) MYSQL   iii) OpenOffice  iv) PHP  v) Linux  vi) PHP**

**Q8. Name 2 Website which promote Open Source Software**

**Q9. Which of the following software is Open Source : Linux, Windows 7, PhotoShop, MySQL.**

**Q10.Seema  is using software, which has been downloaded from internet and is available for one month. After one month he has to pay license fee for further use. What software Seema is using?**

**Q11. Explain the Following Software**

   a) MYSQL   b) OpenOffice   c) TOMCAT  d) Python   e) PHP   f) Mozilla Firefox

**Q12. Give 2 Examples of  each**

   a) Open Source   & Proprietary   Database

   b) Open Source   & Proprietary   Browser

   c) Open Source   & Proprietary   Office Suit

   d) Open Source   & Proprietary   Operating System

   e) Open Source   & Proprietary   Programming Language

   f) Open Source   & Proprietary   Web Server

**Q13. Define Localization & Internationalization**

**Q14. Name three Website which promotes open source software**

**Q15. Explain the following technology with two uses of each**

   a) Video Conferencing

   b) Virtual Reality

   c) Video of Demand

   d) Information Kiosk

   e) Digital Library

**Q16 Give Two Uses of Multimedia in following Area**

   a) Education

   b) Entertainment

   c) Office

   d) Publishing

   e) Advertisement

## NETWORKING

Q1. What is network ?

Q2. Write advantages of networking.

Q3. What are the various types of networking ? write examples of each type.

Q4. What do you mean by topology ? Write name of various topologies.

Q5. Which topology is better – Bus topology or Star topology?

Q6. Beauty Lines Fashion Inc. is a fashion company with design unit and market unit 135 meters away from each other. The company recently connected their LANs using Ethernet cable to share the stock related information. But, after joining their LANs, they are not able to share the information due to loss of signal in between. Which device out of the following should you suggest to be installed for a smooth communication?  i) UPS        ii) Modem      iii) Repeater

Q7. The doctors in the same room have connected their Palm Tops using Bluetooth for exchanging views about a patient. Out of the following what kind of network they have formed? LAN, MAN, PAN, WAN

Q8. The art and science of sensing when a system or network is being used inappropriately or without authorization is known as
            i) Authorization      ii) Firewall    iii) Intrusion detection            iv) Authentication

Q9. When we work on computer, a modem changes the digital data from our computer into analog data. This technique is known as  i) Modulation ii) Demodulation

Q10. Name the protocols used for sending & receiving mails.

Q11. Vijay is confused as he is unable to find the name of a network of computers and other devices that is confined to a relatively small space-an office. Help him to do that.

Q12. Identify the type of topology from the following:
(i) If each node is connected with the help of independent cable with the help of a independent cable with the help of a central switching (communication controller)
(ii) If each node is connected with the help of a single co-axial cable.

Q13. Mr. Taufiq Ahmed wants to prevent unauthorized access to/from his company's local area network. Write the name of a  system (software/hardware), which he should install to do the same.

Q14. Jai Khanna is confused between the terms Domain Name and URL. Explain the difference with the help of appropriate examples of each.

Q15. Define RJ45 Connector.

Q16. Monica is interested in transferring few Songs from her mobile phone to Sangeeta's mobile phone. Suggest two suitable wireless options she may opt for to do the same.

Q17. ABC Co is planning to connect their two different networks using different protocol and having different size in terms of computer.Which device will you suggest them to installed for connection.
            I.  Router  II  Bridge  III Gateway

Q18. Identify the type of Topology from the following:
(i)  if one node fails to pass data through itself, the entire networks fails and no traffic can flow.
(ii) nodes are connected together in an arbitrary fashion. A link may or may not connect two or more nodes.

Q19.What is Firewall? Why do we use it

Q20. Difference between Modem & Router

Q21. Explain VOIP/ SMTP / IMAP /

Q22. Write any two preventive measures for network security.

Q23Compare Optical Fiber and Coaxial transmission media.

24. Define interspace.
25. What is the difference between Message switching technique and Packet switching technique.
26. Give two applications of Cyber law.
27. Write one difference between Telnet and FTP.
28. What is the purpose of using a web browser? Name two web browsers.
29. Define the term bandwidth. Give unit of bandwidth.
30. Explain the terms Bridge and Gateway.
31. When should switch be preferred over Hub.
32. Define protocol.
33. Define following protocols
    FTP, TCP/IP , SLIP/PPP , HTTP

34. Differentiate between LAN,MAN and WAN.
35. A company wants to form a network of their five computers to a server within the company premises. Represent STAR ,BUS and RING topologies diagrammatically for this network.
36. What is a hub?
37. What are the various media used for data transmission in a network system?
38. Give the advantages of Email and world wide web services provided by Internet.
39. Differentiate between GSM and CDMA.
40. Write a short note on WLL.
48. The Great Brain Organization has set up its new Branch at Srinagar for its office and web based activities. It has 4 Wings of buildings as shown in the diagram :
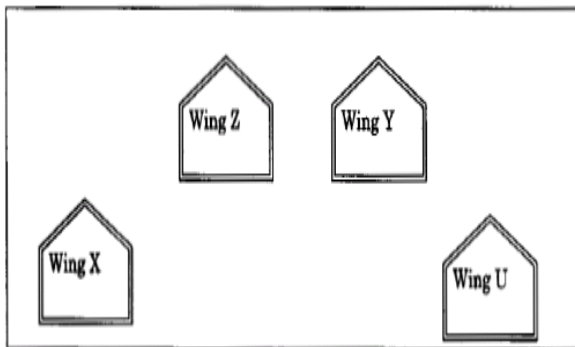


Center to center distances between various blocks

| | |
|---|---|
| Wing X to Wing Z | 50m |
| Wing Z to Wing Y | 70m |
| Wing Y to Wing X | 125m |
| Wing Y to Wing U | 80m |
| Wing X to Wing U | 175m |
| Wing Z to Wing U | 90m |

Number of Computers

| | | | |
|---|---|---|---|
| Wing X | 50 | Wing Z | 30 |
| Wing Y | 150 | Wing U | 15 |

(i) Suggest a most suitable cable layout of connections between the Wings, and topology.

(ii) Suggest the most suitable place (i.e. Wing) to house the server of this organisation with a suitable reason, with justification.

(iii) Suggest the placement of the following devices with justification:
   (1) Repeater
   (2) Hub/Switch

**(iv)** The organization is planning to link its head office situated in Delhi with the offices at Srinagar. Suggest an economic way to connect it; the company is ready to compromise on the speed of connectivity. Justify your answer.

## HTML

Q1. Write the HTML code to generate a Web Page in the format given below :
**Consider the following while writing the HTML code**
1. Title of the page should be "Save Girl Child"
2. Link colour should be "Maroon", visited link colour should be "Red" .
3. Heading of page is "violet"
4. Picture used in the page is the file "savegirl.jpg"
5. Table should have a border of width 1, border of table should be "green".
6. Background of first row is "yellow" and of second row is "cyan"
7. Pages linked to :
      At the National level as "national.html"
      At the State level as "state.html"
      At the District level as "district.html
8. Bottom message is of size 2 is linked to email-id savegirl@abc.com



Q2.    Fill in the blanks in the HTML code to create a framed web page in the following format:
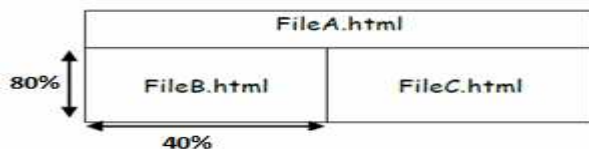


Q3. Difference Basefont and font tag

Q4 **Write the HTML code to do the following**
  I.   To sets the left /right margin of the web page.
  II.  Specifies that multiple items can be selected in the scrolling list box by holding down the control key
  III. The table should have a border of size 5 and color green.
  IV.  to set a checkbox as selected by default.
  V.   to have 3 pixels thick horizontal line centralized across 50% of the window.
  VI.  to create a textbox which can accept maximum of 20 characters with a default value "Enter Name".
  VII. to create a TextArea with 5 rows and 20 columns
  VIII. To have the 3 pixels thick horizontal line across the window.
  IX.  To set a radio button to remain selected by default.
  X.   To give the color of the border of a frame
  XI.  To display the cell content at the bottom of the cell of a table
  XII. To sets the top/bottom margin of the web page.
  XIII. Specifies the vertical placement of the text in the cells

Q 5.  Divide the page horizontally into three sections of measurement 20, 60, 20 respectively and then further divide the last row vertically into two columns each of equal proportion (50%, 50%).

Q6. What is the use of <EMBED> tag? Write any three attributes of <EMBED> tag

Q7. Differentiate between:
  I.   BR AND HR TAG.
  II.  ORDERED LIST & UNORDERED LIST
  III. CELLSPACING AND CELLPADDING
  IV.  <FRAME> AND <FRAMESET>
  V.   COLSPAN  AND ROWSPAN
  VI.  RADIO BUTTON AND CHECK BOX
  VII. <INPUT TYPE=" TEXT"> AND <TEXTAREA> TAG.
  VIII. SUBMIT BUTTON AND RESET BUTTON
  IX.  <SELECT > AND <OPTION>
  X.    INPUTBOX & MSGBOX

Q8. Insert an email link to image (MapleLeaf.jpg) with the width and height both set to 400 px

**Q9.** Explain with the help of an example how 'intrafile' linking is done.

Q10. Create a List which contain Delhi /Bombay/Chennai/Calcutta/Jaipur and Bombay is selected by default

Q11. Specify the tag and attributes to Send a form to the email address abc@gmail.com.