MEDIUM:ENGLISH

Class : 12

Register Number

FIRST REVISION EXAMINATION - JANUARY - 2024

COMPUTER APPLICATION

Time Allowed : 3.00 Hours]

[Max. Marks : 70]

PART - I

I. Choose the best answer.   15X1=15

1. The expansion of JPEG is ------------
   (a) Joint Photographic Experts Group   (b) Joint Photo Experts Group
   (c) Join Photon Experts Group   (d) Joint Photographic express Group

2. What is the keyboard shortcut to open a PageMaker file?
   (a) Ctrl + Q   (b) Ctrl + M   (c) Ctrl + N   (d) Ctrl + X

3. SQL can be expanded as -------------
   (a) Script Query Language   (b) Special Query Language
   (c) Server Query Language   (d) Structured Query Language

4. PHP was created by -------------
   (a) Rasmus Lerdorf   (b) Guido Van Rossum
   (c) Vint Cerf   (d) Lawrence Roberts

5. What is the output of the following code?
   ```php
   <?php
   $x = array(1,2,3,4);
   $y = array(2,4,6,8);
   $z = $y[1] + $x[2];
   echo $z;
   ?>
   ```
   (a) 4   (b) 5   (c) 6   (d) 7

6. What is the output of the following code?
   ```php
   <?php
   $x=4;
   if ($x>5)
   echo "HELLO";
   else
   echo "HI";
   ?>
   ```
   (a) HI   (b) HELLO   (c) Error   (d) No Output

7. What type of loop is "while loop" in PHP?
   (a) Entry-Check Loop   (b) Exit-Check Loop   (c) Counter Loop   (d) Iteration Loop

8. The input data sent to the server with ---------------- method via URL address is known as query string.
   (a) POST   (b) GET   (c) REQUEST   (d) None of these

9. A ------------- is a computer or a device that provides functionality for other programs or devices.
   (a) server   (b) client   (c) database   (d) loop

10. In networking, nodes are identified by its
    (a) Serial number   (b) Name   (c) IP address   (d) None the these

11. Maximum characters used in the label of a node?
    (a) 255   (b) 128   (c) 63   (d) 32

12. ARPANET stands for
    (a) American Research Project Agency Network
    (b) Advanced Research Project Area Network
    (c) Advanced Research Project Agency Network
    (d) American Research Programs And Network

13. A cycle company buy tyres from another company. An example of
    (a) B2B   (b) B2C   (c) B2G   (d) C2B

14. Expansion of UPI:
    (a) Unified Payments Interface   (b) Uniform Payments Interface
    (c) Unified Payments Identification   (c) Uniform Payments Identification

CH / 12 / C.A / 1

15. What is friendly fraud?
   (a) Customer demands false reclaim or refund.
   (b) A stolen credit card is used to make a purchase.
   (c) Fake online shops offering cheapest price and collect credit card data.
   (d) Destroy all the information stored in a computer.

PART – II

Note: Answer any six questions: 6x2
       Question No. 24 is compulsory.

16. Define Animation.
17. What is a Pasteboard in PageMaker?
18. What is Relationship? and List its types.
19. How do you create an indexed array in PHP?
20. What are the uses of USB cables?
21. Write a short note on out-sourcing.
22. Write about phishing.
23. Define EDI. (C18)
24. What is the output of the following code snippet?

```
$i = 1;
while ($i <= 5)
{
    echo $i . "<br>";
    $i++;
}
```

PART – III

Note: Answer any six questions: 6x3
       Question No. 33 is compulsory.

25. How to you insert page numbers in Master pages?
26. Write about the rules for naming a variable in PHP?
27. Explain the difference between the POST method and GET method of sending data to the server in PH
28. What are the layers available in TCP/IP Reference Model?
29. What are the differences between Absolute URL and Relative URL?
30. Explain briefly Anatomy of a credit card.
31. List out some benefits of social networks.
32. List out the Popular open source software.
33. Write the syntax for a switch statement in PHP?

PART – IV

Note : Answer all the questions:
34. (a) Explain in detail about different file formats in multimedia files.   5x5
                  (OR)
    (b) Explain uses of Computer network.
35. (a) Explain the tools in PageMaker toolbox.
                  (OR)
    (b) Discuss about OSI model with its layers.
36. (a) Discuss on various database models available in DBMS.
                  (OR)
    (b) Explain the components used in Ethernet cabling.
37. (a) What are the datatypes in PHP? Explain.
                  (OR)
    (b) Explain any five E-Commerce revenue models.
38. (a) Explain 'for' loop with example.
                  (OR)
    (b) Differentiate symmetric key and asymmetric key encryption.

CH / 12 / C.

FIRST REVISION EXAMINATION-JANUARY-2024
SUBJECT: COMPUTER APPLICATION
CLASS: XII
CHENNAI DISTRICT

PART-I   **15X1=15**

1.(a) Joint Photographic Experts Group
2.(c) Ctrl+N
3.(d) Structured Query Language
4.(a) Rasmus Lerdort
5.(d) 7
6.(a) Hi
7.(a) Entry Check Loop
8 (b) GET
9.(a) Server
10.(c) IP Address
11.c) 63
12 c) Advanced Research Projects Agency Network
13.(a)B2B
14 (a) Unified Payments Interface
15.a) customer demands false reclaim or refund

PART-II (2 MARKS)

16. Animation is the process of displaying still images so quickly so that they give
the impression of continuous movement. In animation the screen object is a vector image.

17. A document page is displayed within a dark border. The area outside of the dark border is
referred to as the pasteboard.

19. create an indexed array in PHP,
• by enclosing a comma-separated list of values in square brackets (or)
• by using the array() function.

20. USB Cables: The Universal Serial Bus are used to connect key board, mouse and other peripheral
devices. Micro USB is a miniaturized version of the USB used for connecting mobile devices such as
smart phones,GPS devices and digital cameras.

21. Hiring third party service providers to handle business on behalf.

22. Phishing: Phishing is acquiring critical data like login credentials through telephone,
sms, e-mail or any social media by the crackers disguising as authentic.

23. The Electronic Data Interchange (EDI) is the exchange of business documents between one
tradepartner and another electronically. It is transferred through a dedicated channel or through
the Internet in predefined format without much human intervention.

4

24.

output

1
2
3
4
5

PART-III(3 MARKS)

1. Click on Master Pages icon.
2. Then click on Text Tool. Now the
cursor changes to I - beam.
3. Then Click on the left Master page
where you want to put the page
number.
4. Press Ctrl + Alt + P.
5. The page number displays as 'LM' on the left master page.
6. Similarly click on the right Master page where you want to put the page number.
7. Press Ctrl + Alt + P.
8. The page number displays as 'RM' on the right master page, but will appear correctly
on the actual pages.

26.

• A variable's name must start with a dollarsign ($), for example, $name
• The variable's name can contain acombination of strings, numbers, and the
underscore, for example, $my_report1.

• The first character after the dollar sign must be either a letter or an underscore
(it cannot be a number).

• Variable names in PHP are case-sensitive. This is a very important rule.

It means that $name and $Name are entirely different variables.

27.

POST	GET
The input data sent to the server with POST method is stored in the request body of the client's HTTP request.	The input data sent to the server with POST method via URL address is known as query string. All input data are visible by user after they click the submit button.

28

● Network Access Layer – concerned with building packets.
● Internet Layer - describes how packets are to be delivered.
● Transport Layer - ensure the proper transmission of data.
● Application Layer - application network processes. These processes include File

Transfer Protocol (FTP), Hypertext
Transfer Protocol (HTTP), and Simple
Mail Transfer Protocol (SMTP).

29

Absolute URL	Relative URL
The absolute URL is the complete address of a document on the Internet. it contains all the information that is required to find the files on the Internet. This is similar to a postal address.	The relative URL is the partial address of a document on the Internet. Relative URL contains only a file name or a file name with folder name. We can use this type of URL when the file is on the same server related to current document.

30.

1. **Publisher**: Emblem of the issuing bank.
2. **Credit card number**: The modern credit card number has 16-digit unique identification number.
3. **Name of the cardholder**: It is visibly embossed on the front side of the card.
4. **EMV chip**: It is integrated chip in addition to magnetic stripe to store cardholder's information.
5. **RFID symbol**: It indicates that it is a contactless smartcard.
6. **Expiration month and year:** The card is valid until the last day of the month printed on it.
7. **Card brand logo**: It is the name of the credit card network company. Eg: Visa, MasterCard and Rupay
8. **Magnetic stripe**: It is a magnetic material containing encrypted data about the card holder and accountnumber.

9. Hologram: Hologram is a security feature that prevents duplication.
10. **Signature:** It is cardholder's signature at the back of the card.
11.**CVC/CVV**: Card Verification code/value is a 3 digit code usually printed to the left of signature pane validates the card.

31.

 Group information sharing over long distances. Although friends and family
members can keep in contact via mobile phone calls or by text messages, social
nets provide a much richer environment for staying connected. We can also share
photo albums, videos and convey daily wishes through the social network.
Group discussions and Group chats go on in various groups through which
people are kept in touch with each other.

Broadcast announcements. Quick,easy way to spread informations of emergencies and natural calamities.Venues and local shops can advertise upcoming events on social networks. Business people can market their products through these networks.

Fostering diversity of thought. Some critics of social networks say that online communities attract people by similar interests and backgrounds. Indeed, when the people with different opinions do get together on online,

31.
NS2 , OPEN NMS, Ubuntu , MySQL,
PDF Creator, Open Office, 7zip
GNUCASH, GIMP, BLENDER,
AUDACITY, VLC, MOZILA FIREFOX,
MAGENTO, ANDROID, PHP

32

Syntax
```
switch (expression)
{
case value1:
//code to be executed if expression = value1;
break;
case value2:
//code to be executed if expression = value2;
break;
...
default:
//code to be executed
```

PAR-IV (5 MARKS)

34.**a**
 Text Formats
RTF-Rich Text Format is the primary file format introduced in 1987 by Microsoft with the specification of their published products and for cross-platform documents interchange.
,

Image Formats

  TIFF (Tagged Image File Format)
This format is common in desktop publishing world (high quality output),
and is supported by almost all software packages. Recent versions Tf TIFF allows image compression, and the format is comfortable for moving large files between computers.

BMP (Bitmap)
Initially this format is in use with Windows 3.1. It is quite large and uncompressed and hence BMP is used for the high-resolutionor large images.

DIB (Device Independent Bitmap) A device independent bitmap contains a colour table. The colour describes how pixel values corresponds to RGB colour values, which describes colors that are produced by emitting light.

GIF (Graphics Interchange Format) -GIF is a compressed image format. Most of the computer color images and backgrounds are GIF files. This file format is best suitable for graphics that uses only limited colors, and it is the most popular format used for online color photos. 8-bit

JPEG (Joint Photographic Experts Group)- JPEG is a commonly used method of lossy compression for digital images. The degree of compression can be adjusted and it works good with photographs, naturalistic artwork, and similar material but functions less on lettering, live drawings or simple cartoons.

TGA (Tagra)- It is the first popular format for high-resolution images. TGA files are common in animation video industry.
.
PNG (Portable Network Graphics)PNG is an extensible file format for the less loss, portable and well compressed storage of raster images.

WAV (Waveform Audio File Format)It is the most popular audio file format in windows for storing uncompressed soundfiles. In order to attain the reduced file size it can also be converted to other file formats like MP3. MP3 (MPEG Layer-3 Format)

MPEG Layer-3 format is the most popular format for storing and downloading music. The MP3 files are roughly compressed to one-tenth the size of an equivalent WAV file. OGG
OGG is a free, open source container Format that is designed for obtaining better streaming and evolving at high end quality digital multimedia.

4 Digital Video File Formats

AVI (Audio/Video Interleave) AVI is the video file format for Windows.Here sound and picture elements are stored in alternate interleaved chunks in the file.

MPEG (Moving Picture Experts Group)-MPEG is a standard for generating digital video and audio compression under the International Standards Organization (ISO) by the group of people.

34 b

The common uses of computer network are
� **Communication**
� **Resource sharing**
� **Information sharing**

Communication
Using computer networks, we can interact with the different people with each other all over the world. People can easily communicate at very low cost via

mobile, social media, telephone, e-mail,chatting, video conferencing, SMS, MMS, groupware etc...

Resource sharing

It allows all kind of programs, equipments and data to be accessed by anyone via network irrespective of the physical location of the resource. Simply resource sharing is a sharing of devices like printers,scanner, PDA, fax machine, and modems.

Information sharing

Using computer network, any application or other software can be stored at a central computer or server. The software can be shared among other computers of the network. It provides high reliability and backup can also be stored at one location for easy availability in case of crash.

35 (a)

9

Table 2.2	Tool Box Usage		
Tool	**Toolbox**	**Cursor**	**Use**
Pointer Tool			Used to select, move, and resize text object and graphics.
Text tool			Used to type, select, and edit text.
Rotating tool			Used to select and rotate objects.
Cropping tool			Used to trim imported graphics.
Line tool			Used to draw straight lines in any direction
Constrained line tool			Used to draw vertical or horizontal lines.
Rectangle tool			Used to draw squares and rectangles.
Rectangle frame tool			Used to create rectangular placeholders fo text and graphics.
Ellipse tool			Used to draw circles and ellipses.
Ellipse frame tool			Used to create elliptical placeholders for text and graphics.
Polygon tool			Used to draw polygons.
Polygon frame tool			Used to create polygonal placeholders for text and graphics.
Hand tool			Used to scroll the page (an alternative to the scroll bar)
Zoom tool			Used to magnify or reduce an area of the page.

35 B
1. **Physical Layer:**
   This is the 1st layer,it defines the electrical and physical specifications for devices.
2. **Data Link Layer:**
   It is the 2nd layer and it guarantees that the data transmitted are free of errors. This layer has simple protocols like "802.3 for Ethernet" and
"802.11 for Wi-Fi".
3. **Network Layer**: It is the 3rd layer determining the path of the data packets. This layer is responsible for routing of data packets using IP Addressing.
4. **Transport Layer**:
   It is the 4th layer that guarantees the transportation/sending of data successfully. It includes the error checking operation.
5. **Session Layer**: It is the 5th layer,identifies the established system session between different network entities. It controls dialogues between computers .For instance, while accessing a system remotely, session is created between your computer and the remote system.
6. **Presentation Layer:**
   It is the 6th layer that does the translation of data to the next layer (Prepare the data to the Application Layer). Encryption and decryption protocols occur in this layer such as, Secure Socket Layer (SSL).
7. **Application Layer**: It is the 7th layer,which acts as the user interface platform comprising of software within the system.

36.a
Hierarchical Database Model
The famous Hierarchical database model was IMS (Information Management System), IBM's first DBMS. In this model each record has information in parent/ child relationship like a tree structure. The collection of records is called as record types, In the above model we have many advantages like less redundant data, efficient search, data integrity and security.

Network model
The first developed network data model was IDS (Integrated Data Store) at Honeywell. Network model is similar to Hierarchical model except that in this model each member can have more than one owner. The many to many relationships are handled in a better way. This model identified the three database components Network schema, Sub schema and Language for data management.
Network schema –
 schema defines all about the structure of the database.
Sub schema – control on views of the database for the user
Language – basic procede for accessing the database.

Object-oriented database model

This model incorporates the combination of Object Oriented Programming(OOP's) concepts and database technologies. Practically, this model serves as the base of Relational model. Object oriented model uses small, reusable software known as Objects. These are stored in object oriented database. This model efficiently manages large number of different data types.

11

36.B

1. Patch Cable (Twisted pair)
2. RJ45 Connector
3. Ethernet Ports
4. Crimping Tool

1**. Patch Cable (Twisted pair)**

These Cables are generally made up of 8 wires in different colors. Four of them are
solid colours, and the others are striped. Ethernet cables are
normally manufactured in several industrial standards such as Cat 3, Cat 5, Cat 6, Cat 6e and cat 7.
"Cat" simply stands for "Category," and the Latest version denotes faster and higher frequencies,
measured in Mhz.

2. RJ45 Connector

The RJ45 connector looks similar like a telephone jack but it looks a slightly wider.
In RJ45 the "RJ" stands for the Registered Jack and the "45" simply refers to the
interface standard. The RJ45 connector is a small plastic cube. It has eight pins. It is connected to
each end of the Ethernet cable. It is also known as 8P8C connector.

3.Ethernet port
 is an opening which is a part of an Ethernet card. It accepts RJ45
connector with Ethernet cable. IIt is found on personal computers, laptops, routers,
switches, hubs and modems.Once you inject the plug into the
port the two led lights will glow in the computer, one is green and another one
is orange. The orange light will start blinking which indicates that the Internet
is connected.

4. Crimping Tool

Cut the cable with desired length

2. Strip the insulation sheath about 1 inch from both end of the cable and
expose the Twisted pair wires

3. After stripping the wire, untwist the smaller wires and arrange them into
the proper wiring scheme, T568B preferred generally.

4. Bring the wires tighter together and cut them down so that they all have
the same length (1⁄2 inch).

5. Insert all the 8 coloured wires into the eight grooves in the connector. The
wires should be inserted until the plastic sheath is also inside the connector.

12

37.a

1**. Integer**
2. Float
3. String
4. Boolean
5. Array
6. Object
7. Resource
8. NULL

Integer:
 Integer is a data type which contains whole numbers. It can be positive, negative, or zero.
Examples :
$age = 30;
$count = -10;

Float: Float is a data type which contains decimal numbers.
Examples :
$price = 19.99;
$weight = 65.5;

String: String is a data type which contains a sequence of characters enclosed in single quotes (") or double quotes (" ").
Examples :
$name = "Barath";
$message = 'Hello, World!';
Boolean: Boolean is a data type which contains the value True or False.
Examples :
$is_admin = true;
$is_logged_in = false;
Array: An array is a data type which has multiple values in a single variable.
Examples :
$prices = array(10, 20, 30);
$items = array("item1", "item2", "item3");
$prices = array(19.99, 24.99, 29.99);
Object: An object is a data type that represents an instance of a class.
Examples :
$user = new User();
$product = new Product();
Resource: A resource is a special type of data that represents a connection to an external resource, such as a file or a database.

38.a

'for loop' is called as the entry-check loop.
The for loop is used to execute a block of code a specific number of times.

Syntax
for (initialization; condition; increment/decrement)
{
//code to be executed;
}
The **initialization part** is executed only once at the beginning of the loop. It is used to initialize variables. **The condition is evaluated before each iteration** of the loop. If it is true, the code block is executed. If it is false, the loop is terminated. **The increment/ decrement** part is executed after each iteration of the loop. It is used to update variables. example.

To print the numbers from 1 to 5 in ascending order
for ($i = 1; $i<= 5; $i++)
{
echo $i . "<br>";
}

38.b

Symmetric Key Encryption	Asymmetric Key Encryption
Same key is used for both encryption and decryption	Different keys are used for encryption and decryption
Speed of encryption or decryption is very fast	Speed of encryption or decryption is comparatively slow
Plain text and cipher text are of same size	The size of cipher text is always greater than plain text.
Algorithms like DES, AES, RC4 uses symmetric key encryption	Algorithms like RSA, ECC, DSA use asymmetric key encryption
Provides confidentiality	Provides confidentiality, authenticity and non-repudiation
The number of key used grows exponentially with the number of users	The number of key used grows linearly with the number of users

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