

DIRECTORATE OF GOVERNMENT EXAMINATIONS, CHENNAI -6
HIGHER SECONDARY PUBLIC EXAMINATION MAY 2022
COMPUTER APPLICATIONS – KEY ANSWERS

Part – I

Answer all the questions:-

15 X 1 =15

Write the option code and corresponding answer :-

| Q.No. | Option Code | Answer | Mark |
|-------|-------------|--|----------|
| 1 | D | Joint Photographic Experts Group | 1 |
| 2 | D | All of the above | 1 |
| 3 | B | Entity-Relationship | 1 |
| 4 | A | .php | 1 |
| 5 | B | Array | 1 |
| 6 | C | for each | 1 |
| 7 | D | Structured Query Language | 1 |
| 8 | B | Extranet | 1 |
| 9 | A | Tim Berners Lee | 1 |
| 10 | B | Both (A) and (R) are correct and (R) is the correct explanation of (A) | 1 |
| 11 | A | Marketing manager | 1 |
| 12 | C | https:// | 1 |
| 13 | A | Directories | 1 |
| 14 | D | Server side | 1 |
| 15 | D | if else statement | 1 |

Part – II

Answer any 6 questions **Q.No.24** is compulsory.

6 X 2 =12

| Q.No | Answer | Mark |
|------|---|------------|
| 16 | <ul style="list-style-type: none"> • AVI - Audio/Video Intreleave • MPEG - Moving Picture Experts Group | 1 1 |
| 17 | <pre> switch (n) { case label 1: code to be executed if n=label 1; break; case label 2: code to be executed if n=label 2; break; case label 3: code to be executed if n=label 3; break; default: code to be executed if n is different from all abels; } </pre> | 2 |

| | | | |
|----|--|---|---|
| 18 | SQL | MySQL | 2 |
| | SQL is a Programming Language designed mainly for managing data in a RDBMS | MySQL is a open source software that allows managing Relational Database | |
| | OR | | |
| | To query and operate Database system. | It provides the flexibility of changing the source code as per the needs. | |
| 19 | PHP supports four types of Loops : <ul style="list-style-type: none"> • for Loop • foreach Loop • while Loop • do While Loop | | 2 |
| 20 | <ul style="list-style-type: none"> • PHP Paramete ized functions are the functions with parameters or arguments. <p style="text-align: center;">OR</p> <ul style="list-style-type: none"> • Values can be passed from one function to another function through parameters. | | 2 |
| 21 | Wired network | Wireless network | 2 |
| | A Wired network system Connected with network cable. | A Wireless network is Connecting devices without cables. | |
| | speakers, CCTV pr nters, and scanners are connected with cables. | Tablets(tab), indoor cameras and E-readers are connected. | |
| 22 | Yes, PHP is a case sensitive language. | | 2 |
| 23 | Check box | Radio button | 2 |
| | Selects more than one value | One value can be chosen at a time. | |
| 24 | <p>Cut: Command : Edit→Cut Shortcut key: Ctrl+X</p> <p>Paste: Command : Edit→Paste Shortcut key: Ctrl+V</p> <p>Note:-Not in Reduced Syllabus. Merely attempt (give marks)</p> | | 2 |

Part – III

Answer any 6 questions **Q.No.33** is compulsory.

6X3=18

| Q.No | Answer | Mark | |
|------|--|---|--|
| 25 | <ol style="list-style-type: none"> 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 or right 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 or 'RM' on the right master page but will appear correctly on the actual pages. | 3 | |
| 26 | <p>In ER Model, relationship exists between two entities. Three types of relationships are available</p> <ul style="list-style-type: none"> • One-to-one relationship • One-to-many relationship • Many-to-many relationship | 3 | |
| 27 | <p>Operator is a symbol which is used to perform mathematical and logical operations in the programming languages.</p> <p>Different Types of Operators in PHP are:</p> <ol style="list-style-type: none"> 1. Arithmetic operators 2. Assignment operators 3. Comparison operators 4. Increment/Decrement operators 5. Logical operators 6. String operators. | 3 | |
| 28 | If statement | If-elseif-else statement | |
| | I statement executes a statement or a group of statements if a specific condition is satisfied as per the user expectation. | If-elseif-else statement is a combination of if-else statement. Multiple conditions can be checked. | |
| | This is the simplest PHP's Conditional statements | Action is based on the result of the condition. | |
| | <pre> if (condition) { Execute statement(s) if condition is true; } </pre> <p>Note:-Not in Reduced Syllabus. Merely attempt (give 1 mark)</p> | <pre> if (1st condition) { Execute statement(s) if 1st condition is true; } elseif(2nd condition) { Execute statement(s) if 2nd condition is true; } else { Execute statement(s) if both conditions are false; } </pre> | <p>1 (if)</p> <p>2 (if else if else)</p> |

| 29 | <ul style="list-style-type: none"> • Electronic Funds Transfer (EFT) is the "electronic transfer" of money over an online network . • The amount sent from the sender's bank branch is credited to the receiver's bank branch on the same day in batches. | 3 | | | | | | |
|--|---|---|-----------------|-----------------|--|---|---|---|
| 30 | ARPANET - Advanced Research Projects Agency Network STP - Shielded Twisted Pair USB - Universal Serial Bus | 1 1 1 | | | | | | |
| 31 | Benefits of Open source network software <ul style="list-style-type: none"> • Network Software to Control, Analysis the Server, System, protocol, Network, Traffic flow and reports about ups and downs of network parts. • Notification It helps the user and administrator easily find working status of network systems and hardware • Alert message It gives details of faults, where and when it | 3 | | | | | | |
| 32 | <table border="1" data-bbox="349 840 1305 1144"> <thead> <tr> <th data-bbox="349 840 667 877">Internet</th> <th data-bbox="667 840 985 877">Intranet</th> <th data-bbox="985 840 1305 877">Extranet</th> </tr> </thead> <tbody> <tr> <td data-bbox="349 877 667 1144">Global network, public TCP/IP network used Sending email to a friend by over a billion people all over the world</td> <td data-bbox="667 877 985 1144">A TCP I / IP network with access estricted to Accessing your record in the members of an organization</td> <td data-bbox="985 877 1305 1144">TCP/IP Network with restricted members of an organization</td> </tr> </tbody> </table> | Internet | Intranet | Extranet | Global network, public TCP/IP network used Sending email to a friend by over a billion people all over the world | A TCP I / IP network with access estricted to Accessing your record in the members of an organization | TCP/IP Network with restricted members of an organization | 3 |
| Internet | Intranet | Extranet | | | | | | |
| Global network, public TCP/IP network used Sending email to a friend by over a billion people all over the world | A TCP I / IP network with access estricted to Accessing your record in the members of an organization | TCP/IP Network with restricted members of an organization | | | | | | |
| 33 | Note:-Error Program. Merely attempt (give marks) | 3 | | | | | | |

| 35 (a) | <p>PHP scripting language supports 13 primitive data types.</p> <p>PHP supports the following data types</p> <ol style="list-style-type: none"> 1.String 2.Integer 3.Folat 4.Boolean 5.Array 6.Object 7.NULL 8.Resource <p>The above data types are explained with exam p es</p> | | | 5 | | | | | | | | | | | | |
|---|---|--|--|-------------|------------|-------------------|--|---|---------------------------------------|---|--|---|---|---|--|---|
| (b) | <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 33%; text-align: center;">Credit card</th> <th style="width: 33%; text-align: center;">Debit card</th> <th style="width: 33%; text-align: center;">Stored value card</th> </tr> </thead> <tbody> <tr> <td>Card is anelectronic Paymen system normally used for retail transactions</td> <td>Payments using a Debit card are immediately transferred from the card holders designated bank account</td> <td>Preloaded with certain amount (value)</td> </tr> <tr> <td>Credit card issuer lends money to customer instead of deducting it from customer's bank account instantly</td> <td>Generally Debit cards function as ATM cards and act as a substitute for cash</td> <td>When the value is used, are recharged to use it again</td> </tr> <tr> <td>Bearer to buy goods or services from a vendor, based on the card holder's promise to the card issuer to payback the value later with an agreed interest</td> <td>Immediately transferred from the card holders designated bank account</td> <td>Customers don't need to have bank account to get prepaid cards</td> </tr> </tbody> </table> | | | Credit card | Debit card | Stored value card | Card is anelectronic Paymen system normally used for retail transactions | Payments using a Debit card are immediately transferred from the card holders designated bank account | Preloaded with certain amount (value) | Credit card issuer lends money to customer instead of deducting it from customer's bank account instantly | Generally Debit cards function as ATM cards and act as a substitute for cash | When the value is used, are recharged to use it again | Bearer to buy goods or services from a vendor, based on the card holder's promise to the card issuer to payback the value later with an agreed interest | Immediately transferred from the card holders designated bank account | Customers don't need to have bank account to get prepaid cards | 5 |
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| | | |
|-----------|--|---|
| (b) | <p>KEY:</p> <ul style="list-style-type: none"> • The candidate key that is chosen to perform the identification task is called the primary key and any others are Alternate keys. • Every tuple must have, by definition, a unique value for its primary key. A primary key which is a combination of more than one attribute is called a composite primary key. <p><u>Foreign Key</u> A foreign key is a “copy” of a primary key that has been exported from one relation into another to represent the existence of a relationship between them.</p> <p><u>Super Key</u> An attribute or group of attributes, which is sufficient to distinguish every tuple in the relation from every other one is known as Super Key</p> <p><u>Composite Key</u> A key with more than one attribute to identify rows uniquely in a table is called Composite key. This is also known as Compound Key.</p> | 5 |
| 38 (a) | <p>When the user keys in the input data in HTML controls and clicks the submit button the request will be generated and reaches a PHP file which is mentioned in the FORM tag under the Action attribute.</p> <p>All the input values are synchronized and sent to the server via POST method or GET method.</p> <p>Method is an attribute of form tag in HTML.</p> <p>Once the data reaches the server two PHP variables such as \$_POST and \$_GET collects the data and prepares the response accordingly.</p> <p>Post Method: The input data sent to the server with POST method is stored in the request body of the client’s HTTP request.</p> <p>Get Method: 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.</p> | 5 |

(b)

5

```
<?php
    $odd_Numbers=array(3,5,7,9,11,13,15)
    foreach($odd_Numbers as $Value)
    {
        print "$Value<br>";
    }
?>
```

(or)

```
<?php

    $odd_Numbers=array(3,4,5,6,7,8,9,10 11,12, 3,14,15);
    foreach($odd_Numbers as $Value)
    {
        If($Value%2 =1)
        print "$Value<br>";
    }
?>
```