

## A9.2-R5 : WEB APPLICATION DEVELOPMENT USING PHP

अवधि : 03 घंटे

DURATION : 03 Hours

अधिकतम अंक : 100

MAXIMUM MARKS : 100

ओएमआर शीट सं. :

OMR Sheet No. :

रोल नं. :

Roll No. :

उत्तर-पुस्तिका सं. :

Answer Sheet No. :

परीक्षार्थी का नाम :

Name of Candidate :

परीक्षार्थी के हस्ताक्षर :

; Signature of Candidate :

परीक्षार्थियों के लिए निर्देश :	Instructions for Candidates :
कृपया प्रश्न-पुस्तिका, ओएमआर शीट एवं उत्तर-पुस्तिका में दिये गए निर्देशों को ध्यानपूर्वक पढ़ें।	Carefully read the instructions given on Question Paper, OMR Sheet and Answer Sheet.
प्रश्न-पुस्तिका अंग्रेजी भाषा में है। परीक्षार्थी उत्तर लिखने के लिए केवल अंग्रेजी भाषा का ही प्रयोग कर सकते हैं।	Question Paper is in English language. Candidate has to answer in English language only.
इस मॉड्यूल/पेपर के दो भाग हैं। भाग एक में चार प्रश्न और भाग दो में पाँच प्रश्न हैं।	There are TWO PARTS in this Module/Paper. PART ONE contains FOUR questions and PART TWO contains FIVE questions.
भाग एक "वैकल्पिक" प्रकार का है जिसके कुल अंक 40 हैं तथा भाग दो "व्यक्तिपरक" प्रकार का है और इसके कुल अंक 60 हैं।	PART ONE is Objective type and carries 40 Marks. PART TWO is Subjective type and carries 60 Marks.
भाग एक के उत्तर, इस प्रश्न-पत्र के साथ दी गई ओएमआर उत्तर-पुस्तिका पर, उसमें दिये गए अनुदेशों के अनुसार ही दिये जाने हैं। भाग दो की उत्तर-पुस्तिका में भाग एक के उत्तर नहीं दिये जाने चाहिए।	PART ONE is to be answered in the OMR ANSWER SHEET only, supplied with the question paper, as per the instructions contained therein. PART ONE is NOT to be answered in the answer book for PART TWO.
भाग एक के लिए अधिकतम समय सीमा एक घण्टा निर्धारित की गई है। भाग दो की उत्तर-पुस्तिका, भाग एक की उत्तर-पुस्तिका जमा कराने के पश्चात् दी जाएगी। तथापि, निर्धारित एक घंटे से पहले भाग एक पूरा करने वाले परीक्षार्थी भाग एक की उत्तर-पुस्तिका निरीक्षक को सौंपने के तुरंत बाद, भाग दो की उत्तर-पुस्तिका ले सकते हैं।	Maximum time allotted for PART ONE is ONE HOUR. Answer book for PART TWO will be supplied at the table when the Answer Sheet for PART ONE is returned. However, Candidates who complete PART ONE earlier than one hour, can collect the answer book for PART TWO immediately after handing over the Answer Sheet for PART ONE to the Invigilator.
परीक्षार्थी, उपस्थिति-पत्रिका पर हस्ताक्षर किए बिना और अपनी उत्तर-पुस्तिका, निरीक्षक को सौंपे बिना, परीक्षा हॉल/कमरा नहीं छोड़ सकते हैं। ऐसा नहीं करने पर, परीक्षार्थी को इस मॉड्यूल/पेपर में अयोग्य घोषित कर दिया जाएगा।	Candidate cannot leave the examination hall/room without signing on the attendance sheet and handing over his/her Answer Sheet to the invigilator. Failing in doing so, will amount to disqualification of Candidate in this Module/Paper.
प्रश्न-पुस्तिका को खोलने के निर्देश मिलने के पश्चात् एवं उत्तर लिखना आरम्भ करने से पहले उम्मीदवार यह जाँच कर सुनिश्चित कर लें कि प्रश्न-पुस्तिका प्रत्येक दृष्टि से संपूर्ण है।	After receiving the instruction to open the booklet and before starting to answer the questions, the candidate should ensure that the Question Booklet is complete in all respect.

जब तक आपसे कहा न जाए, तब तक प्रश्न-पुस्तिका न खोलें।

DO NOT OPEN THE QUESTION BOOKLET UNTIL YOU ARE TOLD TO DO SO.

**PART ONE**

1. Each question below gives a multiple choice of answers. Choose the most appropriate one and enter in the "OMR" answer sheet supplied with the question paper, following instructions therein.

(1x10)

- 1.1. Making sure that extension\_dir directive points to the appropriate directory, which one of the following lines need to be uncommented or added in the php.ini file so as to enable mysqli extension ?
- (A) extension = php\_mysqli.dll
  - (B) extension = mysqli.dll
  - (C) extension = php\_mysqli.dl
  - (D) extension = mysqli.dl
- 1.2. Which one of the following method is used to retrieve the number of rows affected by an INSERT, UPDATE, or DELETE query ?
- (A) num\_rows()
  - (B) affected\_rows()
  - (C) changed\_rows()
  - (D) new\_rows()
- 1.3. Which of the following is the use of strlen() function in PHP ?
- (A) The strlen() function returns the type of string
  - (B) The strlen() function returns the length of string
  - (C) The strlen() function returns the value of string
  - (D) The strlen() function returns both value and type of string
- 1.4. Which one of the following methods can be used to diagnose and display information about a MySQL connection error ?
- (A) connect\_errno()
  - (B) connect\_error()
  - (C) mysqli\_connect\_errno()
  - (D) mysqli\_connect\_error()
- 1.5. Which of the methods are used to manage result sets using both associative and indexed arrays ?
- (A) get\_array() and get\_row()
  - (B) get\_array() and get\_column()
  - (C) fetch\_array() and fetch\_row()
  - (D) fetch\_array() and fetch\_column()
- 1.6. Which of the following in PHP is used to connect MySQL database through backend ?
- (A) PDO
  - (B) ODP
  - (C) SLQ
  - (D) LQS
- 1.7. Which one of the following statements instantiates the mysqli class ?
- (A) mysqli = new mysqli()
  - (B) \$mysqli = new mysqli()
  - (C) \$mysqli->new(mysqli)
  - (D) mysqli->new(mysqli)
- 1.8. HTML supports :
- (A) Ordered list
  - (B) Unordered list
  - (C) Both ordered and unordered list
  - (D) Neither ordered nor unordered list
- 1.9. A webpage displays a picture. What tag was used to display the picture ?
- (A) picture
  - (B) photo
  - (C) src
  - (D) img
- 1.10. Which tag creates a checkbox for a form in HTML ?
- (A) <checkbox>
  - (B) <input type = "checkbox">
  - (C) <input = checkbox>
  - (D) <input checkbox>

2. Each statement below is either TRUE or FALSE. Choose the most appropriate one and enter your choice in the "OMR" answer sheet supplied with the question paper, following instructions therein. (1x10)

2.1. Data validation is the process of ensuring that user input is clean, correct, and useful.

2.2. Insecure Cryptographic Storage isn't a single vulnerability, but a collection of vulnerabilities.

2.3. SQL is case sensitive. SELECT and select both are different in SQL.

2.4. In PHP in order to access MySQL database you will use `sqlconnect()` function.

2.5. Assuming class name to be ABC, `$obj = new ABC ();` can be used to instantiate an object in PHP ?

2.6. CSS stands for Cascading Sheets Style.

2.7. Java Script is client side scripting language.

2.8. You can make a website without using HTML.

2.9. `$this` is used to refer to properties or methods within the class itself ?

2.10. The `strip_tags()` function is used to remove all HTML tags from a string passed to a form.

3. Match words and phrases in column X with the closest related meaning / words(s) / phrase(s) in column Y. Enter your selection in the "OMR" answer sheet supplied with the question paper, following instructions therein. (1x10)

Column X		Column Y	
3.1	How many error levels are available in PHP ?	A.	extends
3.2	When you use the \$_GET variable to collect data, the data is visible to.	B.	7
3.3	What is the correct HTML tag for the smallest size heading.	C.	<img>
3.4	<td> tag is used for :	D.	<h6>
3.5	Which keyword is used to inherit our subclass into a superclass ?	E.	<h1>
3.6	A rainbow table is a pre-computed table for caching the output of :	F.	<p>
3.7	This HTML tag does not have a pair tag :	G.	IDE
3.8	How many methods are available for the exception class ?	H.	16
3.9	What are shared on the Internet and are called as Web pages ?	I.	cryptographic hash functions
3.10	NetBeans is a free and open source.	J.	only you
		K.	everyone
		L.	Hypertext documents
		M.	Table records

4. Each statement below has a blank space to fit one of the word(s) or phrase(s) in the list below. Choose the most appropriate option, enter your choice in the "OMR" answer sheet supplied with the question paper, following instructions therein. (1x10)

A.	Extern	B.	IPv4	C.	LIMIT	D.	Empty String
E.	MD5	F.	ASC	G.	static	H.	Final
I.	Intern	J.	IPv6	K.	Auto	L.	cross-site scripting
M.	Server						

- 4.1. PHP is \_\_\_\_\_ side scripting language.
- 4.2. If you want to fetch record with ascending order, then you can use \_\_\_\_\_ with SQL query.
- 4.3. \_\_\_\_\_ is not a variable scope in PHP.
- 4.4. The attack which involves the insertion of malicious code into a page frequented by other users is known as \_\_\_\_\_.
- 4.5. If you want to select limited records from MySQL database, you can use \_\_\_\_\_ clause with SQL query.
- 4.6. You can extend the exception base class, but you cannot override any of the preceding methods because they are declared as \_\_\_\_\_.
- 4.7. In MySQL, if there is no error, then the error() method will return \_\_\_\_\_.
- 4.8. When the SQL Server Browser service running on a machine that supports both IPv4 and IPv6 is queried on an IPv4 address, it responds with an \_\_\_\_\_ address.
- 4.9. One of the popular cryptographic hash functions is \_\_\_\_\_.
- 4.10. The keyword \_\_\_\_\_ allows class members (methods and properties) to be used without needing to instantiate a new instance of the class.

**PART TWO**  
**(Attempt any four question)**

5. You have been given a table named "MyGuest" with five columns : "id", "firstname", "lastname", "email" and "reg\_date". An example table, "MyGuest" is presented in following table with three records.

id	first name	last name	email	reg_date
1	John	Doe	<u>john@example.com</u>	22-10-2020 14:26
2	Mary	Moe	<u>mary@example.com</u>	23-10-2020 10:22
3	Julie	Dooley	<u>julie@example.com</u>	26-10-2020 10:48

Write PHP code (s) to perform each one of the following :

- (A) Create the table "MyGuest" with listed columns
  - (B) Insert the three records (as detailed in above table) into the table "MyGuest"
  - (C) Delete a record with id = 2 in the "MyGuest" table
- Create and check the connection with the database in each case.

(5+5+5)

6. (A) Briefly discuss, XAMPP, WAMP, MAMP, and LAMP. Also compare them on following basis : **Supporting Platforms, Programming Languages, Database, Servers, and Installation Process.**

- (B) Define Web Services. How are Web Services different from Web Application ?

(10+5)

7. (A) What are Java Script, JQuery, and Ajax ? Briefly discuss them. Also highlight the pros and cons of Java Script, JQuery, and Ajax.

- (B) Explain cross site request forgery with an example.

(10+5)

8. (A) PHP provides Get and Post methods through which a client (browser) can send information to the server. Briefly discuss the Get and Post methods to submit the HTML form data. Write example code(s) depicting some input fields in the HTML form and a submit button to submit the form data using Get and Post methods.

- (B) Injection flaws, Broken Authentication, and Cross Site Scripting (XSS) are most common Web Security Mistakes. Briefly discuss each of them.

(6+9)

9. (A) What is an exception ? How exceptions are handled in PHP ? Write a PHP code to explain the common flow of throw and try-catch blocks in exception handling. Also write a PHP code depicting the creation of user defined exception by extending the Exception class.

- (B) In PHP, what is the role of associative array ? Through examples, discuss the different ways to define associative array.

(9+6)

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**SPACE FOR ROUGH WORK**

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