

Sl. No.

A10.2-R5 : FULL STACK WEB DEVELOPMENT USING MVC FRAMEWORK

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 Candidate :**

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 की भाषा अंग्रेजी है। परीक्षार्थी केवल अंग्रेजी भाषा में ही उत्तर दे सकता है।	Question Paper is in English language. Candidate can 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, ओएमआर उत्तर-पुस्तिका पर 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. 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 जाँच कर यह 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

(Answer all the questions)

- 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 For controller action method _____ returns nothing as the result.

- (A) ResultEmpty
- (B) EmptyResult
- (C) ReturnEmpty
- (D) EmptyReturn

1.2 What is default authentication in Internet Information Services (IIS) ?

- (A) Standard User
- (B) Administrator
- (C) Anonymous
- (D) None

1.3 Which method scope prevents a method from being overridden by a subclass ?

- (A) Abstract
- (B) Protected
- (C) Final
- (D) Static

1.4 Which version of PHP introduced the instance of keyword ?

- (A) PHP 4
- (B) PHP 5
- (C) PHP 5.3
- (D) PHP 6

1.5 Which function effectively deletes all sessions that have expired ?

- (A) session_delete()
- (B) session_destroy()
- (C) session_garbage_collect()
- (D) SessionHandler::gc

1.6 Which one of the following databases has PHP supported almost since the beginning ?

- (A) Oracle Database
- (B) SQL
- (C) SQL+
- (D) MySQL

1.7 What will be the output of the following PHP code ?

```
<?php
$username = "jason";
if (ereg("[^a-z]", $username))
    echo "Username must be all lowercase!";
else
    echo "Username is all lowercase!";
?>
```

- (A) Error
- (B) Username must be all lowercase!
- (C) Username is all lowercase!
- (D) No Output is returned

<p>1.8 What will be the output of the following PHP code ?</p> <pre> <?php \$i = 0 do { \$i++; } while (\$i < 3); print \$i; ?> </pre> <p>(A) 2 (B) 3 (C) 0 (D) 1</p>	<p>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)</p> <p>2.1 ViewBag is slower than ViewData in MVC.</p> <p>2.2 The controller in MVC controls the data.</p> <p>2.3 PHP function calls are Call-by-reference.</p> <p>2.4 PHP 4 introduced class constructors.</p> <p>2.5 If there is no error, then what will the error() method returns 0.</p>
<p>1.9 [:alpha:] can also be specified as _____.</p> <p>(A) [A-Za-z0-9] (B) [A-za-z] (C) [A-z] (D) [a-z]</p>	<p>2.6 MVC 6 introduced new JSON project-based structure.</p> <p>2.7 Stored Procedures are not supported by MySQL.</p>
<p>1.10 Which one of the following keyword is used to inherit our subclass into a superclass ?</p> <p>(A) extends (B) implements (C) inherit (D) include</p>	<p>2.8 Controller extensions in CakePHP is called Helpers.</p> <p>2.9 The Model Class is the bread and butter of cakePHP applications.</p> <p>2.10 Truncate Command is used to Remove all Rows from A Table.</p>

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

	X		Y
3.1	Which attributes can be used for data validation in MVC ?	A	cross-site scripting
3.2	What is ActionResult() ?	B	View Class
3.3	What is ViewResult() ?	C	SQL Injection
3.4	Which one of the following methods can be used to diagnose and display information about a MySQL connection error ?	D	errno()
3.5	Which keyword is used to implement an interface.	E	interface
3.6	Which method returns the error code generated from the execution of the last MySQL function ?	F	DataAnnotations
3.7	Client side Code injection attack is known as :	G	Concrete Class
3.8	Code Injection that can destroy database is known as :	H	TextHelper
3.9	Which helper use to create a forms quickly in CakePHP ?	I	Abstract Class
3.10	Which Helper contains method to make text more usable and friendly in our views in CakePHP ?	J	mysqli_connect_errno()
		K	Implements
		L	errnumber()
		M	FormHelper

4. Each statement below has a blank space to fit one of the word(s) or phrase(s) in the list below. Enter your choice in the “OMR” answer sheet attached to the question paper, following instructions therein.

(1x10)

A.	\$_GET	B.	final	C.	glob()
D.	Static	E.	file()	F.	throw
G.	Temp Data	H.	\$this	I.	\$_POST
J.	View Data	K.	P?	L.	get_file()
M.	p+				

- 4.1 _____ helps you to maintain data when you move from controller to view.
- 4.2 _____ keyword is used to refer to properties or methods within the class itself.
- 4.3 _____ keyword is used in conjunction with an Exception object.
- 4.4 _____ keyword allows class members (methods and properties) to be used without needing to instantiate a new instance of the class.
- 4.5 _____ keyword is used to put a stop on inheritance.
- 4.6 When you use _____ variable to collect data, the data is visible to everyone.
- 4.7 When you use _____ variable to collect data, the data is visible to only you.
- 4.8 _____ regular expression matches any string containing zero or one p.
- 4.9 _____ PHP functions can be used to find files.
- 4.10 _____ function is capable of reading a file into an array.

PART TWO

(Answer any FOUR questions)

5. (a) What is MVC ? Explain MVC application life cycle ?
- (b) Mention what "beforeFilter()", "beforeRender" and "afterFilter" functions do in Controller ? (10+5)
6. (a) Design a HTML form to enter number of units of electricity bill and write a PHP program to calculate electricity bill using if-else conditions. Conditions are as follows :
- For first 50 units – Rs. 3.50/unit
 - For next 100 units – Rs. 4.00/unit
 - For next 100 units – Rs. 5.20/unit
 - For units above 250 – Rs. 6.50/unit
- (b) Write the differences between following :
- (i) PHP constants and variables.
 - (ii) PHP 4 and PHP 5. (7+8)
7. (a) What are the advantages and disadvantages of using MySQL ?
- (b) What are the differences between a primary key and a foreign key ? Explain with query.
- (c) What is an index ? How can an index be declared in MySQL ? (5+5+5)

8. (a) Define Abstraction and Interface in PHP ?
- (b) What are access specifiers ? Write the difference between access specifiers. (8+7)
9. (a) What is CakePHP and explain features of CakePHP framework ? What is Hooks in CakePHP ?
- (b) What is Cakephp Request Cycle ? (8+7)

- o o o -

SPACE FOR ROUGH WORK

SPACE FOR ROUGH WORK