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**KOLEJ PROFESIONAL MARA BERANANG**

**DIPLOMA IN COMPUTER SCIENCE**

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| **COURSE NAME** | : | WEBSITE APPLICATION DEVELOPMENT |
| **COURSE CODE** | : | CSC 2713 |
| **ACADEMIC SESSION** | : | 3 2023/2024 |
| **TYPE OF ASSESSMENT** | : | WRITTEN TEST |
| **DURATION** | : | 1 HOUR AND 30 MINUTES |

**CLO 1 – EXPLAIN THE CONCEPT OF A DYNAMIC WEBSITE IN THE DEVELOPMENT OF A WEBSITE APPLICATION. (C2, PLO1)**

**INSTRUCTION TO CANDIDATES:**

1. This question paper consists of **two (2)** sections.
2. Answer all questions in Section A using OMR sheet provided using 2B pencil.
3. Answer all questions in Section C in this question paper.
4. Candidates are advised to read each question carefully before attempting to answer.

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| **Personal Details** | |
| **Name** |  |
| **I/D Number** |  |
| **Class** | DCS 4 [A] [B] |
| **Lecturer** | PUAN NURHANNANIE |

1. Any cheating or misconduct during the test will be severely penalize.

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| **Section / Question No.** | **Marks** |
| A |  |
| B |  |
| C |  |
| **Total Marks** | **/ 40** |
| **Percentage** | **/ 20** |

**SECTION A (15 Marks)**

**Multiple Choice Questions**

Answer all questions. Shade your answer in the OMR provided.

1. What is a dynamic website ?
   1. A website that is very large.
   2. A website that has information only.
   3. A website that has interactive elements.
   4. A website that has no form of interactivity.
2. Which of the followings is NOT one of components of dynamic website architecture.
   1. Client
   2. Database
   3. Link
   4. Server
3. Browser supported languages and framework as below except \_\_\_\_\_\_\_\_\_\_?
   1. laravel
   2. php
   3. React.Js
   4. Vue.Js
4. A dynamic web page \_\_\_\_\_\_
   1. Is different always in a predefined order.
   2. Is the same every time whenever it displays.
   3. Generates on demand by a program or request from browser.
   4. Both is same every time whenever it displays and generates on demand by program or request from browser.
5. Which statement best explains the difference between static and dynamic websites.
   1. A static website doesn’t allow moving to another webpage whereas a dynamic website changes.
   2. A static website remains the same whereas a dynamic one allows for user interaction.
   3. A dynamic website alters to user inputs or actions whereas a static website remains constant.
   4. A dynamic website changes according to user whereas a static one can only be changed by site author.
6. Which of the following is not determine by HTTP status code?
   1. Bad gateway
   2. Page not found
   3. Page is fast loading
   4. Too many request
7. Rails is written using which language?
   1. C#
   2. Java
   3. Ruby
   4. Python
8. The libraries that build a new higher-level API for client-side programming is \_\_\_\_\_\_?
   1. Controllers
   2. Framework
   3. Scripting engine
   4. Database engine
9. Which of the following is server side scripting language?
   1. HTML
   2. DHTML
   3. Javascript
   4. PHP
10. Which of the following options is TRUE about server-side scripting.
    1. The source codes of server-side scripts are never visible to the browser.
    2. The source codes of server-side scripts are always visible to the browser.
    3. Server-side scripts are interpreted and converted to HTML text for display on the server.
    4. Server-side scripts are interpreted and converted to JavaScript for display on the client’s browser.
11. Which of the following is NOT a function of a server-side code?
    1. Access/write file on server.
    2. Interact with local storage.
    3. Interact with otner servers.
    4. Querying the database.
12. The three parts that constitute backend development are \_\_\_\_\_\_\_\_ .
    1. Server, database, Java
    2. Server, application, database
    3. Database, mySQL, application
    4. Web design, server, application
13. What is the primary purpose of a back-end framework in web development?
    1. To write client-side JavaScript code.
    2. To test web applications for securities vulnerabilities.
    3. To style web pages and make them visually appealing.
    4. To manage server-side logic, database interactions and routing.
14. The \_\_\_\_\_\_ method when used in the method field, leaves entity body empty.
    1. GET
    2. PUT
    3. POST
    4. SEND
15. Which template tag is user to create link reference in the Django template?
    1. {{ url }}
    2. {% url % }
    3. << url >>
    4. <% url %>

**SECTION C (25 Marks)**

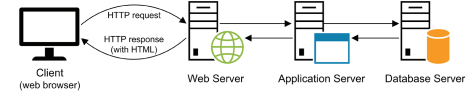
**Short Answers Questions**

Answer all questions in this question booklet.

1. List two (2) features or advantages of dynamic website. (4 marks)

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1. Complete the Diagram 1 below with correct answer. (3 marks)







(c)

(b)

Diagram 1

1. Differentiate between client-side scripting and server-side scripting language by completing the table below. (6 marks)

|  |  |  |
| --- | --- | --- |
| **Characteristic** | **Client-side scripting** | **Server-side Scripting** |
| 1. Source code visibility | Visible to the client |  |
| 1. Load processing time |  |  |
| 1. Script execution location |  |  |

1. Give the correct command using Django framework for the given illustration (a), (b) and (c) below. (6 marks)

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| **Illustration** | **Answer** |
| a) |  |
| b) |  |
| c) |  |

1. a) List two (2) types of HTTP request methods. (2 marks)
2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. b) Assuming the google sheet Student as a database, by using Sheety.co and Postman application as API and user interface, give the appropriate method and codes using JSON to add new records in Student database which consists the attributes of studentname, studentid and studentmentor. (4 marks)

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**END OF QUESTION PAPER**