

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)
MSc DEGREE EXAMINATION DECEMBER 2024
(First Semester)

Branch - COMPUTER SCIENCE

FULL STACK WEB DEVELOPMENT

Time: Three Hours

Maximum: 75 Marks

SECTION-A (10 Marks)

Answer ALL questions

ALL questions carry EQUAL marks

(10 × 1 = 10)

Module No.	Question No.	Question	K Level	CO
1	1	What is the primary purpose of the Internet? A) To connect different types of media B) To provide a global network for data exchange C) To manage domain names D) To create web pages	K1	CO1
	2	_____ is the purpose of the POST HTTP method. A) Retrieve data from the server B) Submit data to be processed by the server C) Update a resource on the server D) Delete a resource from the server	K2	CO1
2	3	What is the primary purpose of HTML? A) To provide a programming language for web applications B) To define the structure and content of web pages C) To create server-side applications D) To manage network protocols	K1	CO2
	4	Show the correct function of JavaScript from the following. A) Functions cannot return values B) Functions are used to perform actions and can return values C) Functions must always have parameters D) Functions in JavaScript are only used for mathematical operations	K2	CO4
3	5	How do you execute a Perl program locally from the command line? A) perl run program.pl B) run program.pl C) execute program.pl D) perl program.pl	K1	CO5
	6	Outline how to read user input from the standard input in Perl. A) input() B) read() C) scanf() D) <>	K2	CO5
4	7	What is the primary purpose of a relational database? A) To store data in a hierarchical structure B) To allow data to be organized in tables and establish relationships between them C) To manage user interfaces D) To perform statistical analysis on data	K1	CO4
4	8	Explain the method to create a Data Source Name (DSN) for MS Access in Windows. A) Use the ODBC Data Source Administrator to configure a new DSN with MS Access driver B) Edit the registry directly to create a DSN C) Create a new DSN in the MS Access application interface D) Write a Perl script to generate a DSN	K2	CO4
5	9	Which PHP tag is used to start a PHP script? A) <!--PHP B) <php> C) <?php D) <!php>	K1	CO4

Cont...

5	10	_____ is the main purpose of a Document Type Definition (DTD) in XML. A) To format XML data B) To validate the structure and rules of XML documents C) To style XML content D) To transform XML data into HTML	K2	CO5
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SECTION - B (35 Marks)

Answer ALL questions

ALL questions carry EQUAL Marks

(5 × 7 = 35)

Module No.	Question No.	Question	K Level	CO
1	11.a.	Explain the primary function of the Domain Name System (DNS).	K5	CO1
		(OR)		
	11.b.	Explain Uniform Resource Locator (URL) and its key components.		
2	12.a.	Determine the Markup and its important in web development.	K5	CO2
		(OR)		
	12.b.	Explain JavaScript Conditional Statements, and its uses.		
3	13.a.	List Scalar variables in Perl, and discover how they are used.	K4	CO5
		(OR)		
	13.b.	List some useful built-in functions in Perl.		
4	14.a.	Examine tables and relational data and analyze how they form the foundation of databases.	K4	CO4
		(OR)		
	14.b.	Classify DDL Queries with example.		
5	15.a.	Discuss about PHP and elaborate how it is used in web development.	K6	CO5
		(OR)		
	15.b.	Discuss about ASP and elaborate how it differs from PHP.		

SECTION -C (30 Marks)

Answer ANY THREE questions

ALL questions carry EQUAL Marks

(3 × 10 = 30)

Module No.	Question No.	Question	K Level	CO
1	16	Explain the basic structure of the internet and how it facilitates global communication. Discuss the role of key components such as servers, clients, IP addresses, DNS, and ISPs in enabling data transmission over the internet.	K5	CO1
2	17	Discuss the fundamentals of JavaScript and Provide examples of each concept and explain their importance in the context of web development.	K6	CO2
3	18	Examine the process of creating a Perl script, running it from the command line, and handling common issues that may arise. Provide an example of a simple Perl program that uses scalar variables, performs basic operations, and demonstrates numeric and string contexts.	K4	CO5
4	19	Discover the three-tier architecture in web applications. Analyze your explanation with a use case scenario of an e-commerce application and how data flows between these layers.	K4	CO4
5	20	Explain the fundamentals of PHP as a server-side scripting language. How does PHP handle form data, and what are the essential functions used for file handling, session management, and error handling in PHP? Provide examples for each concept, and discuss how PHP is used to interact with databases.	K5	CO4