

QP CODE 2090559202

Reg. No

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--



DMI-ST. EUGENE UNIVERSITY

ZAMBIA

DEGREE EXAMINATION – JUNE 2024

055 CS 92 WEB TECHNOLOGY

Semester: IX

Time: 3:00 Hours

Max. Marks: 100

Answer any FIVE Questions (5 x 20 = 100 Marks)

1. a) Discuss the evolution of HTML, highlighting the key differences between HTML and HTML5. (10 Marks)
b) Explain the structure of an HTML document. (10 Marks)
2. a) What does DOM stand for and what is its purpose in web development? (6 Marks)
b) Can you explain the concept of DOM levels in JavaScript? (10 Marks)
c) Describe how you would add a new element to the DOM using JavaScript. (4 Marks)
3. a) Describe the various elements of a JSP page, including directives, comments, scripting elements, actions, and templates. (10 Marks)
b) Explain the role of JDBC (Java Database Connectivity) in connecting a JSP page to a database with example. (10 Marks)
4. a) Elucidate the key features of PHP that distinguish it from other programming languages. (10 Marks)
b) Explain the basic structure of a PHP script and how it executes on a web server. (10 Marks)
5. a) What is the purpose of an overview in the context of software development technologies? (10 Marks)
b) Explain the Model-View-Controller (MVC) architectural pattern and its benefits in software development. (10 Marks)
6. a) Explain the role of XML as a key component in web technology, discussing its syntax, structure, and typical use cases in web development. (10 Marks)
b) Demonstrate the process of transforming XML documents into XSLT (extensible Style sheet Language Transformation). (10 Marks)
7. a) Explain the Enterprise JavaBeans (EJB) technology and its benefits in enterprise application

- development. **(10 Marks)**
- b) Discuss the different types of EJBs (Session Beans, Entity Beans, and Message-Driven Beans) and their roles. **(5 Marks)**
 - c) Describe the features and benefits of advanced technologies like Bootstrap, Java Server Faces (JSF), and Spring and how they address common challenges in web application development. **(5 Marks)**