Roll No…….. **Total No. of Printed Pages: 1**

Total No. of Questions: [09]

B. Tech (ME) (Semester -8th)

INTERNET WEB DEVELOPMENT

Subject Code: BCSE0F97

Paper ID: [OE3112311]

Time: 03 Hours **Maximum Marks: 60**

Instruction for candidates:

1. Section A is compulsory. It consists of 10 parts of two marks each.
2. Section B consist of 5 questions of 5 marks each. The student has to attempt any 4 questions out of it.
3. Section C consist of 3 questions of 10 marks each. The student has to attempt any 2 questions.

Section – A **(2 marks each)**

Q1. Attempt the following:

a) What is object-oriented programming?
b) Define polymorphism with an example.
c) What is the purpose of UML class diagrams?
d) Explain the function of a firewall in networking.
e) What are MIME types?
f) Define User Experience (UX) Design.
g) What is the role of CSS in web design?
h) Define the Document Object Model (DOM).
i) What is POJO in Java?
j) Explain the role of Java EE in enterprise applications.

Section – B **(5 marks each)**

Q2. Discuss the advanced concepts in Object Oriented Programming (OOP).

Q3. Explain the client-server architecture and the components of a web application.

Q4. What are HTML5 and CSS3? How do they enhance the look and feel of a web page?

Q5. Discuss the basics of multithreaded programming in Java.

Q6. Explain the role of JSP and servlets in server-side programming.

Section – C **(10 marks each)**

Q7. Describe in detail the principles behind the design and construction of web applications.

Q8. Explain how Java Database Connectivity (JDBC) works and its importance in web applications.

Q9. Discuss the concept of user experience design in the software development lifecycle (SDLC) and its role in web applications.