R22 Regulation *Subject code: 4O8GB*

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

(Autonomous, Accredited by NAAC with 'A+' Grade)

B.Tech VIII Semester Regular Examinations, May 2026

INFORMATION TECHNOLOGY ESSENTIALS

(CSE(AI&ML))

Maximum Marks: 60 Date:12.05.2026 Duration: 3 hours

Note: **1.This question paper contains two parts A and B.**
2. Part A is compulsory which carries 10 marks. Answer all questions in Part A.
3. Part B consists of 5 Units. Answer any one full question from each unit.
4. Each question carries 10 marks and may have a, b, c, d as sub questions.

Part-A

All the following questions carry equal marks (10X1M=10 Marks)		Marks	CO	BTL
1.a)	Define a website.	1M	1	L1
b)	What is client-server architecture?	1M	1	L1
c)	Give an example of client-side scripting.	1M	2	L1
d)	What is a cookie?	1M	2	L1
e)	Define computer network.	1M	3	L1
f)	What is switching?	1M	3	L1
g)	What is mobile communication?	1M	4	L1
h)	What is 2G and 4G?	1M	4	L1
i)	What is meant by multimedia in applications?	1M	5	L1
j)	Which type of application would you use to manage student records?	1M	5	L1

Part-B

Answer All the following questions. (5X10M=50Marks)		Marks	CO	BTL
2	A. Compare web server, application server, and database server. B. Explain HTTP request-response cycle in detail.	5M 5M	1	L2
	OR			
3	A. Discuss different authoring tools and their uses. B. Compare static and dynamic websites.	5M 5M	1	L2
4	A. Explain the need for scripting languages in web development. B. Discuss file handling in PHP with examples.	5M 5M	2	L2
	OR			
5	A. Develop a simple PHP script using HTML forms. B. Compare PHP with other scripting languages.	5M 5M	2	L2
6	A. Compare different types of computer networks. B. Describe network components and their functions.	5M 5M	3	L2
	OR			
7	A. Discuss wireless LAN and its working. B. Differentiate routing and switching.	5M 5M	3	L2

8	A. Explain digital cell phone components. B. Explain SMS working mechanism.	5M 5M	4	L2
	OR			
9	A. Compare different generations of cellular networks. B. Explain mobile network architecture.	5M 5M	4	L2
10	A. Discuss simple database applications with examples. B. Describe design and development of information systems.	5M 5M	5	L2
	OR			
11	A. Design a simple database-driven application. B. Develop a model for an information system.	5M 5M	5	L2