



R20 Regulation

Subject code: 3E6FC

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

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

B.Tech VI Semester Supplementary Examinations, November 2025

STACK TECHNOLOGIES

(IT)

Maximum Marks: 70

Date: 21.11.2025

Duration: 3 hours

- Note:**
1. This question paper contains two parts A and B.
 2. Part A is compulsory which carries 20 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 (10X2M=20 Marks)		Marks	CO	BTL
1	What are the advantages of Hibernate over JDBC?	2M	1	L1
2	What is session in hibernate?	2M	1	L1
3	What is Spring frame work/features?	2M	2	L1
4	What is autowiring?	2M	2	L1
5	What are the advantages of Spring Boot?	2M	3	L1
6	What is thymeleaf?	2M	3	L1
7	What is React?	2M	4	L1
8	What are the advantages of using React?	2M	4	L1
9	In which types of applications is Node.js most frequently used?	2M	5	L1
10	What are some distinctive features of Express?	2M	5	L1

Part-B

Answer All the following questions. (5X10M=50Marks)		Marks	CO	BTL
11	a) Explain about persistence class and generator class with an example. b) Explain Hibernate Query Language (HQL).	5M 5M	1	L2
OR				
12	a) Explain Lazy collection and Bidirectional mapping in Hibernate. b) Mention some Dialects used in Hibernate.	5M 5M	1	L2
13	a) Differentiate between Bean Factory and Application Context in spring. b) What is the difference between singleton and prototype bean?	5M 5M	2	L2
OR				
14	Explain concept of Dependency Injection with its types.	10M	2	L2
15	a) Differentiate Spring and Spring Boot Framework. b) Explain Spring Boot flow architecture.	4M 6M	3	L2
OR				
16	a) Explain Spring boot Starter Parent and Starter Web. b) Explain Starter Actuator in Spring boot.	4M 6M	3	L2

17	a) Explain about dataflow in React. b) Write differences between ReactJs and React Native.	5M 5M	4	L2
	OR			
18	Explain about Working with forms in React.	10M	4	L2
19	Explain different modules used in Node.js.	10M	5	L2
	OR			
20	Explain Express Js Routing.	10M	5	L2