

K. J. Somaiya Institute of Engineering and Information Technology, Sion, Mumbai-22
(Autonomous College Affiliated to University of Mumbai)

End Semester Exam

Nov – Dec 2021

(B.Tech) Program: Information Technology

Examination: SY Semester: III

Course Code: IUITC304 and Course Name: Paradigms and Computer Programming Fundamentals

Duration: 03 Hours

Max. Marks: 60

Instructions:

- (1) All questions are compulsory.
- (2) Draw neat diagrams wherever applicable.
- (3) Assume suitable data, if necessary.

Q 1	Solve any six questions out of eight:	Max. Marks 12	CO	BT level
Ai)	Describe declarative paradigm.	2	CO1	U
ii)	Define exception handling.	2	CO1	R
iii)	What is initialization and finalization in programming language?	2	CO2	R
iv)	What is multitasking in concurrent programming ?	2	CO3	R
v)	Explain purpose of scripting language.	2	CO5	U
vi)	Write a javascript code which checks the string entered by user is palindrome or not.	2	CO6	U
vii)	Describe POP UP & Alert function in javascript.	2	CO6	U
viii)	What are the unification rules used in prolog ?	2	CO4	U
Q.2	Solve any FOUR questions out of six.	16		
i)	Describe the difference between static and dynamic scoping.	4	CO1	U
ii)	Discuss all features of object oriented programming.	4	CO2	U
iii)	Discuss implementation method of thread.	4	CO3	U
iv)	Justify role of scripting in web development.	4	CO5	AN
V	Design calculator using javascript .	4	CO6	A
VI	Explain pure function with the help of example.	4	CO4	U

Q.3	Solve any Two questions out of three.	16		
I.	Discuss core language design issues.	8	CO1	U
II.	a) Write a code to design webpage which accept user details & stored in db. b) Find out square root of number entered by user & display result using alert message/box.	8	CO6, CO5	AP
III.	Write a Prologue Code for Following statement. martin owns honda city. Smith owns maruti_dezire. patel owns innova car. bravo owns car. honda_city car is sedan. innova car is sedan. datsun car is truck. a) What does smith own? b) Does smith own something? c) Who owns car datsun? d) Does bravo own sedan? e) Does bravo own truck	8	CO4	AP
OR				
Q.4	Solve any two questions out of three.	16		
I.	Explain how to maintain the static link and dynamic link during a subroutine call	8	CO1	U
II.	Why do we need static members and how to access them, explain with example?	8	CO2	U
III.	Define synchronization in concurrent programming. Write a step to implement it in java.	8	CO3	U