UNITED UNIVERSITY	SECOND MID SEMESTER EXAM	EVEN SEM 2024-25	ROLL NO.	2	3	2	0	1	0	0	5	7

COURSE (BRANCH) : BCA (IBM)			SEMESTER 4TH
TIME-2HRS	SUBJECT-Machine learning	SUBJECT CODE- CAUIBC401T	MM. 30

		SECTION –A (ATTEMPT ALL QUESTIONS)	5	CO	BLOOM'S TAXONOMY LEVEL
1	A	What is the problem of classification?	1	CO3	K3
	B	Define Root node in decision tree?	1	CO4	K2
	C	What is k in k nearest neighbor?	1	CO3	K4
	D	What is sensitivity in confusion matrix ?	1	CO3	K4
	E	Define threshold value of sigmoid function?	1	CO4	K1
		SECTION –B (ATTEMPT ANY FIVE QUESTIONS)	10		
2	A	Explain why knn is known as a lazy learner.	2	CO4	K2
	B	Describe how a decision tree is made from a given data frame.	2	CO4	K2
	C	What is "rbf" function in SVM?	2	CO3	K3
	D	Explain and write the formula for information gain.	2	CO3	K3
	E	What do you understand by support vectors and equation of SVM margin?	2	CO4	K3
	F	What is the elbow method?	2	CO3	K2
		SECTION – C (ATTEMPT ANY ONE PART FROM THREE QUESTIONS)	15		
3	A	Write a python logic for training of [illegible] classification using any classification model.	5	CO4	K1
	B	Explain the working of k nearest neighbor with suitable diagram and steps?	5	CO3	K4
4	A	Explain Support Vector Classifier and its working with detailed diagram.	5	CO3	K3
	B	Elaborate about a decision tree algorithm also discuss the ensemble learning method.	5	CO3	K3
5	A	What is supervised machine learning explain any 2 classification models?	5	CO4	K4
	B	What is the difference between logistics regression and linear regression?	5	CO4	K4

CO MARKS DISTRIBUTION	CO4-22	CO3-25		
BLOOMS TAXONOMY DISTRIBUTION	K1-6	K2-12	K3-17	K4-12

UNITED UNIVERSITY	SECOND MID TERM	EVEN SEM 2024-25	ROLL NO. 2220102057

COURSE (BRANCH) – BCA/BCA-IBM			SEMESTER – 4TH
TIME : 2HRS	SUBJECT – Advanced Web Design	SUBJECT CODE- CAUCBC406T	MM. 30

		SECTION –A (ATTEMPT ALL QUESTIONS)	5	CO	BLOOMS TAXONOMY LEVEL
1	A	What is JavaScript? Explain its role in web development	1	CO3	K1
	B	What is PHP? Explain its role in web development.	1	CO3	K1
	C	How do you declare variables in PHP? What are the rules for naming variables	1	CO3	K3
	D	What are JavaScript data types?	1	CO4	K1
	E	What are the concept of closures in JavaScript	1	CO4	K2
		SECTION –B (ATTEMPT ANY FIVE QUESTIONS)	10		
2	A	What is the Document Object Model (DOM)? How does JavaScript interact with it?	2	CO3	K2
	B	Define a JavaScript function that takes two numbers as input and returns their sum	2	CO3	K3
	C	What does PHP stand for?	2	CO3	K2
	D	How do you declare a variable in PHP?	2	CO4	K3
	E	Write the syntax to print "Hello, World!" in PHP.	2	CO4	K3
	F	What is this keyword? Explain its behavior in different contexts (e.g., global, function, object)	2	CO4	K1,K3
		SECTION –C (ATTEMPT ANY ONE PART FROM EACH QUESTION)	15		
3	A	Explain the difference between let, const, and var in JavaScript?	5	CO3	K3
	B	Explain basic form validations in js?	5	CO3	K3
4	A	Explain the following control structures in PHP: if, else, and elseif. Provide examples.	5	CO3	K3,K4
	B	Explain the difference between while and do-while loops in PHP	5	CO4	K3
5	A	What are JavaScript events? Explain with examples.	5	CO4	K1,K2
	B	**Explain js form validation:-** 1) Create a registration form with fields (Name, Email, Password, Confirm Password) 2) Use JavaScript to validate each field before submission 3) Discuss error handling strategies	5	CO4	K3,K4

CO MARKS DISTRIBUTION	CO1- 0	CO2- 0	CO3- 24	CO4-23	CO5- 0
BLOOMS TAXONOMY DISTRIBUTION	K1- 5	K2- 4	K3- 09	K4- 2	K5-0

UNITED UNIVERSITY	SECOND MID SEMESTER	EVEN SEM 2024-25	ROLL NO.
COURSE (BRANCH)- BCA / BCA-IBM			SEMESTER - IV[th]
TIME:2HRS	SUBJECT- OPERATING SYSTEM	SUBJECT CODE- CAUCBC402T	MM. 30

		SECTION –A (ATTEMPT ALL QUESTIONS)	5	CO	BLOOMS TAXONOMY LEVEL
1	A	What is critical section problem?	1	CO3	K1
	B	Explain memory hierarchy.	1	CO3	K1
	C	Define semaphore.	1	CO3	K1
	D	Explain demand paging in brief.	1	CO4	K2
	E	Explain virtual memory in brief.	1	CO4	K2
		SECTION –B (ATTEMPT ANY FIVE QUESTIONS)	10		
2	A	Discuss monitor in brief.	2	CO3	K1
	B	Write short notes on hardware solution of process synchronization.	2	CO3	K2
	C	Explain reader – writer problem in brief.	2	CO3	K2
	D	Differentiate between binary and counting semaphore.	2	CO3	K2
	E	Differentiate logical and physical address space.	2	CO4	K2
	F	Briefly explain thrashing.	2	CO4	K2
		SECTION –C (ATTEMPT ANY ONE PART FROM EACH QUESTION)	15		
3	A	Consider the following snapshot of a system:	5	CO3	K2

	Allocation	*Max*	*Available*
	A B C D	*A B C D*	*A B C D*
T0	0 0 1 2	0 0 1 2	1 5 2 0
T1	1 0 0 0	1 7 5 0	
T2	1 3 5 4	2 3 5 6	
T3	0 6 3 2	0 6 5 2	
T4	0 0 1 4	0 6 5 6	

Answer the following questions using the banker's algorithm:

a. What is the content of the matrix ***Need***?
b. Is the system in a safe state?
c. If a request from thread *T1* arrives for (0, 4, 2, 0), can the request be granted immediately?

	B	Describe swapping in detail.	5	CO4	K2
4	A	Explain producer – consumer problem in detail.	5	CO3	K2
	B	Write short notes on fragmentation.	5	CO4	K2
5	A	Write short notes on deadlock.	5	CO3	K2
	B	Given six memory partitions of 100 MB, 170 MB, 40 MB, 205 MB, 300 MB, and 185 MB (in order), how would the first-fit, best-fit, and worst-fit algorithms place processes of size 200 MB, 15 MB, 185 MB, 75 MB, 175 MB, and 80 MB (in order)? Indicate which—if any—requests cannot be satisfied. Comment on how efficiently each of the algorithms manages memory.	5	CO4	K2

CO MARKS DISTRIBUTION	CO1-00	CO2-00	CO3-26	CO4-21	CO5-00
BLOOMS TAXONOMY DISTRIBUTION	K1-04	K2-43	K3-00	K4-00	K5-00

UNITED UNIVERSITY	SECOND MID TERM	EVEN SEM 2024-25	ROLL NO. 2220102052

COURSE (BRANCH) – BCA/BCA-IBM			SEMESTER – 4TH
TIME : 2HRS	SUBJECT – Advanced Web Design	SUBJECT CODE – CAUCBC406T	MM. 30

		SECTION – A (ATTEMPT ALL QUESTIONS)	5	CO	BLOOMS TAXONOMY LEVEL
1	A	What is JavaScript? Explain its role in web development	1	CO3	K1
	B	What is PHP? Explain its role in web development.	1	CO3	K1
	C	How do you declare variables in PHP? What are the rules for naming variables	1	CO3	K3
	D	What are JavaScript data types?	1	CO4	K1
	E	What are the concept of closures in JavaScript.	1	CO4	K2
		SECTION – B (ATTEMPT ANY FIVE QUESTIONS)	10		
2	A	What is the Document Object Model (DOM)? How does JavaScript interact with it?	2	CO3	K2
	B	Define a JavaScript function that takes two numbers as input and returns their sum.	2	CO3	K3
	C	What does PHP stand for?	2	CO3	K2
	D	How do you declare a variable in PHP?	2	CO4	K3
	E	Write the syntax to print "Hello, World!" in PHP.	2	CO4	K3
	F	What is this keyword? Explain its behavior in different contexts (e.g., global, function, object)	2	CO4	K1,K3
		SECTION – C (ATTEMPT ANY ONE PART FROM EACH QUESTION)	15		
3	A	Explain the difference between let, const, and var in JavaScript?	5	CO3	K3
	B	Explain basic form validations in js?	5	CO3	K3
4	A	Explain the following control structures in PHP: if, else, and elseif. Provide examples.	5	CO3	K3,K4
	B	Explain the difference between while and do-while loops in PHP	5	CO4	K3
5	A	What are JavaScript events? Explain with examples.	5	CO4	K1,K2
	B	**Explain js form validation:-** 1) Create a registration form with fields (Name, Email, Password, Confirm Password) 2) Use JavaScript to validate each field before submission 3) Discuss error handling strategies	5	CO4	K3,K4

CO MARKS DISTRIBUTION	CO1- 0	CO2- 0	CO3- 24	CO4-23	CO5- 0
BLOOMS TAXONOMY DISTRIBUTION	K1- 5	K2- 4	K3- 09	K4- 2	K5-0