COCHIN UNIVERSITY OF SCIENCE AND TECHNOLOGY

B.TECH. DEGREE I & II SEMESTER SUPPLEMENTARY EXAMINATION IN MARINE ENGINEERING JUNE 2020

MRE 1109 COMPUTER FUNDAMENTALS

(*2013 Scheme*)

Time: 30 Minutes [for Answering and Scanning/Uploading the page of the Answer Sheet] per module
Max. Marks: 14 per module

INSTRUCTIONS

1. You have to be available in Google Meet on demand by the faculty.
2. You have to share your '**live location**' to the faculty before uploading the answer sheet.
3. You have to answer only one question per module.
4. Answer may not exceed one page of an A4 size paper in a standard handwriting, as far as possible.
5. If at all an answer goes beyond one page, (due to your handwriting) another page can also be used. In such a situation, the page number should be given as 1/2, 2/2.
6. You have to put dated signature along with Register Number, Subject Code, Module/Group Number (as given in the Question Paper) in each page.
7. You have to put the Question Number correctly.
8. After answering the question, you have to scan and upload the answer page.

MODULE - I

(Answer ***ANY ONE*** question)

I(1).	(a)	Draw and explain star and mesh topology, their advantages and disadvantages.	(7)
	(b)	What is virtual memory? What is it used for? Where is it located?	(7)
		OR	
I(2).	(a)	What is BIOS? Where is it stored? What are its functions?	(6)
	(b)	Briefly explain the following terms: (i) Assembler (ii) Cache	(8)

MODULE - II

(Answer ***ANY ONE*** question)

II(1).	(a)	Write a program using goto that will behave like an infinite loop.	(7)
	(b)	Using a program as example, show the working of continue and how it is different from break.	(7)

OR

II(2).	(a)	What are increment operator and relational operators? Discuss their precedence and associativity.	(7)
	(b)	Using a do-while loop find the HCF of two given numbers.	(7)

MODULE - III

(Answer ***ANY ONE*** question)

III(1).	(a)	Using a function, print the multiples of 13 between two given numbers x and y.	(7)
	(b)	What is recursive function? Give an example.	(7)

OR

III(2).	(a)	What are the characteristic features specified by storage class? Explain the features of static storage class with a relevant example.	(7)
	(b)	Write a program to find the transpose of a given matrix of order 3×5.	(7)

MODULE - IV

(Answer ***ANY ONE*** question)

IV(1). Write the SQL query for the following based on the tables Sales and Products shown below

Sales

S#	SName	City
115	Midhun	Lucknow
123	Amarnath	Chennai
134	Praveen	Kochi
156	Jayesh	Banglore
167	Vipul	Mumbai
170	Pankajdas	Hyderabad
187	Narmeen	Jaipur

Products

P#	PName	S#	Price
334	Running shoes	115	3499
345	Backpack	170	1600
327	Sleeping bag	156	3500
445	Tent	187	6999
553	Yoga mat	115	599
621	Mask	187	70
731	Mosquito repellent	115	275

(Continued to 2)

	(i)	Display the details in the table Products in the descending order of Product names.	(2)
	(ii)	Change the price of mask to 30.	(2)
	(iii)	Add a new salesman in the table Sales with the information S#: 252, Sname: Bose, City: Guwahati	(2)
	(iv)	Display the P#, Product name and price of all the products sold by Midhun.	(2)
	(v)	Display the names of all the sales persons whose name starts with 'P'.	(2)
	(vi)	Delete all the data in the table Products.	(2)
	(vii)	Delete the column City from the table Sales.	(2)

OR

IV(2). Briefly explain the following: (14)

(i) Function overloading
(ii) Data encapsulation
(iii) Class
(iv) Inheritance

MODULE - V

(Answer ***ANY ONE*** question)

V(1).	(a)	What is an array of structures? Create an array of structure to store the details: Customer Number (integer), Customer Name (string), Units Consumed (integer), Amount (Float) for 20 customers.	(8)
	(b)	Briefly describe enumerated data type and preprocessor directive	(6)

OR

V(2).	(a)	Briefly explain the steps to create an input data file. Explain with an example.	(8)
	(b)	What is fseek ()? What is it used for?	(6)

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