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Question Paper Code: 92205

B.E. / B.Tech. DEGREE EXAMINATION, NOV 2023

Second Semester

Computer science and Engineering

19UCS205 - INTRODUCTION TO COMPUTER SCIENCE AND ENGINEERING

(Regulation 2019)

Duration: Three hours   Maximum: 100 Marks

PART A - (10 x 2 = 10 Marks)

(Answer any ten of the Following Questions)

1.	Differentiate Microprocessor and Microcontroller?	CO1 (U)
2.	How timer and counter vary with respect to its operations?	CO1 (U)
3.	What is Blu Ray?	CO1 (U)
4.	What is Booting in Operating System?	CO2 (U)
5.	Define mnemonics.	CO2 (R)
6.	Brief about the System software that converts source code to Object code	CO2 (U)
7.	Enumerate the difference between OOP's and Procedural Programming.	CO3(U)
8.	Provide an example for lambda calculus in functional programming	CO3(An)
9.	Write the coding for factorial program using recursion in python language	CO3(An)
10.	Differentiate between LAN,MAN and WAN	(CO4 - U)
11.	Discuss the advantages of Star Topology	(CO4 - U)
12.	How Distributed computing helps in dividing the task	(CO5 - U)
13.	Discuss about Client Server Computing Environment	(CO5 - U)
14.	How Deep Learning is better than Machine Learning?	(CO6 - U)
15.	Discuss about any two real life modern applications of IoT	(CO6 - U)

PART – B (5 x 16= 80 Marks)

16. (a) Outline the concept of Microcontroller with block diagram and discuss   CO1 (U)
its applications and advantages?

Or

(b) Explain in detail about the Primary memory and its types. CO1 (U)

17. (a) What is a compiler and how are the different phases of compiler works? CO2 (U)

Or

(b) Explain in detail about DBMS and the languages involved CO2 (U)

18. (a) A department in a company has 10 numbers of systems with one server. (CO4 - AP)
They have two ideas to setup the network
Idea1: All the nodes can be connected in a circular fashion to establish a network without help of any interconnecting device.
Idea2: All the nodes and server can communicate with each other without disturbing other nodes.
Select the appropriate topology for design the network for above two ideas.
As a network engineer suggest the best one for deploying the network.

Or

(b) As a network engineer, you are designated to develop a network for a (CO4 - AP)
department with the following constraints
1. At low cost, network has to be established
2. there will be no additional network interconnecting device will be given.
3. Less amount of cables has to be used.
Select the appropriate topology for designing a network.

19. (a) Discuss in detail about the Concept of Cloud computing and its types of (CO5 - U)
services with suitable example.

Or

(b) Explain the various terminology used in Cyber Security with suitable (CO5 - U)
example.

20. (a) Discuss in detail about the concept of Internet Of Things and its (CO6 - U)
application with neat diagram.

Or

(b) Explain in detail about Machine Learning Approaches with example (CO6 - U)