

**B.Tech (Computer Science and Technology) Program
Department of Technology, Shivaji University, Kolhapur
Continuous Internal Evaluation
Mid Semester Examination**

Class: Final-Year B. Tech (Computer Science and Technology)	Marks: 20
Course Code and Title: Mobile Computing	Day & Date: 27/2/24
Semester: VI	Academic Year: 2023-24
Time: 1 Hour 11.30 to 12.30 Pm.	
Instructions: 1. Figures and Letters to the right indicate Blooms Level to which the question is set and the assigned marks 2. Column to the extreme left indicates which CO is mapped or addressed by the question.	

CO	Q. No.	Question Description	Bloom's Level	Marks
1	1	Describe need and applications of wireless communication.	Remembering	6
1	2	Describe main problems of signal propagation? Why radio waves do not follows the straight line?	Understanding	8
2	3	Describe Space Division Multiplexing	Remembering	6



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Class: Final Year B. Tech (Computer Science and Technology)	Marks: 20
Course Code and Title: CS422 Information Security	Day & Date: Wed. 27/02/2024
Semester: VIII Academic Year: 2023-24	Time: 1 Hour (4:00 to 5:00 PM)

Instructions: 1. Figures and Letters to the right indicate Bloom level to which the question is set and the assigned marks
 2. Column to the extreme left indicates which CO is mapped or addressed by the question.
 3. Question 1 is compulsory, solve any one from remaining.

CO	Q. No.	Question Description	Bloom's Level	Marks																																				
CO2	1.	Discuss different security services with reference to X.800. Encrypt the following plaintext using playfair cipher encryption technique. Plaintext: "Different Colour Balloons". Key= "Hello"	Analyze - Apply	10																																				
CO1, CO2	2.	Discuss components of public key cryptosystem and secrecy and authentication in it. State applications of public key cryptosystem.	Understand	10																																				
CO2	3.	Draw S- DES block diagram and Explain. Using key-K (11010010) , generate sub-keys K1 and K2 for S-DES. P10 and P8 values are as follows <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td colspan="10" style="text-align: center;">P10</td> </tr> <tr> <td>3</td><td>5</td><td>2</td><td>7</td><td>4</td><td>10</td><td>1</td><td>9</td><td>8</td><td>6</td> </tr> </table> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td colspan="8" style="text-align: center;">P8</td> </tr> <tr> <td>6</td><td>3</td><td>7</td><td>4</td><td>8</td><td>5</td><td>10</td><td>9</td> </tr> </table>	P10										3	5	2	7	4	10	1	9	8	6	P8								6	3	7	4	8	5	10	9	Understand- Apply	10
P10																																								
3	5	2	7	4	10	1	9	8	6																															
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Class: Final Year B. Tech (Computer Science and Technology)	Marks: 20
Course Code and Title: CS424 Data Mining and Warehousing	Day & Date: Wed. 28/02/2024
Semester: VIII Academic Year: 2023-24	Time: 4.00 to 5.00pm
Instructions: 1. Figures and Letters to the right indicate Blooms Level to which the question is set and the assigned marks	
2. Column to the extreme left indicates which CO is mapped or addressed by the question.	

CO	Q. No.	Question Description	Bloom's Level	Marks
2	Q.1	Explain the concept of data preprocessing .Describe its need? How to handle noisy data with preprocessing?	Understand , Apply	5
1	Q.2	What is data normalization? Use these method to normalize the following group of data: 200, 300, 400, 500, 600, 800, and 1000,1200,1500.Calculate the value with- 1. min-max normalization with min=0 and max=1 2. z-score normalization using mean absolute deviation instead of standard deviation.	Apply	5
1	Q.3	Describe various statistical methods of classification. Apply Regression by division method for following data. Let a training data is {1.6,1.9,1.88,1.7,1.85,1.6,1.7,1.8,1.95,1.9,1.8,1.75,2,2.1,2.5}. Find the coefficient of regression. With division method classify the data into two different classes.	Understand	5
2	Q.4	Let a group of 12 sales price records has been sorted as follows- 5,10,11,13,15,35,50,55,72,92,204,215. Partition them into three bins by each of the following methods- 1. Equal frequency (equal-depth partitioning) 2. Equal width partitioning	Apply	5

1.6, 1.9, 1.7, 1.8, 2

1.6, 1.7, 1.8, 1.9,

1.6, 1.6, 1.7, 1.7, 1.75, 2.8, 2.8, 1.85, 1.88, 1.9, 1.9, 1.95, 2, 2.1, 2.5

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Class: Final-Year B. Tech (Computer Science and Technology)	Marks: 20
Course Code and Title: CS423 Soft Computing	Day & Date: Wednesday, 28/02/2024
Semester: VIII	Academic Year: 2023-24
Time: 1 Hour (11.30 am to 12.30 pm)	
Instructions: 1. Figures and Letters to the right indicate Blooms Level to which the question is set and the assigned marks 2. Column to the extreme left indicates which CO is mapped or addressed by the question.	

CO	Q. No.	Question Description	Bloom's Level	Marks
1	1	Explain Fuzzy-Genetic Hybrid system with diagram	Understand	6
2	2	Design McCulloch- Pitt's neuron model to implement AND Logical gate. (Consider bipolar data)	Create	8
2	3	Compare biological neuron and artificial neuron with suitable diagram	Analysis	6

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Final

Class: Third Year B. Tech (Computer Science and Technology)	Marks: 20
Course Code and Title: CS425 IT for Engineers Day & Date: 29/2/2024 Thursday	
Semester: VIII	Academic Year: 2023-24 Time: 1 Hour 11:30 AM TO 12:30 PM
Instructions:	
1. Figures and Letters to the right indicate Blooms Level to which the question is set and the assigned marks	
2. Column to the extreme left indicates which CO is mapped or addressed by the question.	
3. Draw neat labelled diagram whenever necessary.	

CO	Q. No.	Question Description	Bloom's Level	Marks
CO3	1	What is the working principle of website?	Remember	07
CO2	2	Explain different types of server.	Understand	07
CO2	3	What is need and what are different types of scripting languages.	Remember	06