

**[B17 CS 4101]**  
**SAGI RAMA KRISHNAM RAJU ENGINEERING COLLEGE (A)**  
**IV B. Tech I Semester (R17) Regular Examinations**  
**BIG DATA ANALYTICS**  
**Computer Science & Engineering**  
**MODEL QUESTION PAPER**

**TIME: 3 Hrs.**

**Max. Marks: 70 M**

Answer **ONE Question** from **EACH UNIT**  
 All questions carry equal marks

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			CO	KL	M
<b>UNIT - I</b>					
1.	a).	Explain the characteristics of big data.	CO1	K2	7
	b).	Explain the Patterns for big data development.	CO1	K2	7
<b>OR</b>					
2.	a).	Demonstrate the importance of big data.	CO1	K2	7
	b).	Compare the data in warehouse and data in hadoop.	CO1	K2	7
<b>UNIT - II</b>					
3.	a).	Explain in detail about the Google File System.	CO2	K2	7
	b).	Illustrate about the configuring Hadoop cluster on fully distributed mode.	CO2	K2	7
<b>OR</b>					
4.	a).	Explain in detail about the building blocks of Hadoop.	CO2	K2	7
	b).	Illustrate about the configuring Hadoop cluster on Pseudo distributed mode (single node).	CO2	K2	7
<b>UNIT - III</b>					
5.	a).	Experiment with the weather dataset using map reduce programs.	CO3	K3	7
	b).	Identify the difference between Hadoop Old API vs New API.	CO3	K3	7
<b>OR</b>					
6.	a).	Experiment with the weather dataset using UNIX tools.	CO3	K3	7
	b).	Identify the importance of a combiner function and how to improve the performance of a reducer using combiner.	CO3	K3	7
<b>UNIT - IV</b>					
7.	a).	Explain in detail about the PIG architecture.	CO4	K2	7
	b).	Demonstrate local and distributed modes of running PIG Scripts.	CO4	K2	7
<b>OR</b>					
8.	a).	Explain the operators supported by Pig w.r.t. data access, transformations and debugging operations.	CO4	K2	7
	b).	Consider The student data File (st.txt). Data in the following format Name, District, age, gender. i) Write a PIG script to Display Names of all female students ii) Write a PIG script to find the number of Students form Prakasham District iii) Write a PIG script to Display District wise count of all male students.	CO4	K3	7
<b>UNIT - V</b>					
9.	a).	Explain the architecture of HIVE with a neat sketch.	CO4	K2	7
	b).	Illustrate the process of creating and Managing the database and tables using Hive.	CO4	K2	7
<b>OR</b>					
10.	a).	Explain about the various data types supported by HIVEQL with an example.	CO4	K2	7
	b).	Explain about improvement of Hive Queries with Indexes.	CO4	K2	7

[ B 17 CS 4102 ]  
**SAGI RAMA KRISHNAM RAJU ENGINEERING COLLEGE (A)**  
**IV B. Tech I Semester (R17) Regular Examinations**  
**INTERNET OF THINGS**  
**Computer Science & Engineering**  
**MODEL QUESTION PAPER**

**TIME: 3 Hrs.**

**Max. Marks: 70 M**

Answer **ONE Question** from **EACH UNIT**

All questions carry equal marks

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			CO	KL	M
<b>UNIT – I</b>					
1.	a).	Compare and contrast various IoT levels?	1	4	7
	b).	Organize various IoT protocols under various layers and List various constraints of IoT devices.	1	4	7
<b>OR</b>					
2.	a).	Differentiate various communication API's?	1	4	7
	b).	Examine the importance of one M2M architecture?	1	4	7
<b>UNIT – II</b>					
3.	a).	Illustrate MQTT in smart agriculture application?	2	3	7
	b).	Demonstrate DoDAG construction in RPL and also explain how ranks are assigned to nodes with various messages in RPL?	2	3	7
<b>OR</b>					
4.	a).	Sketch the use of 6LoWPAN with a neat diagram and explain its functionality?	2	3	7
	b).	Discuss about LoRaWAN?	2	3	7
<b>UNIT – III</b>					
5.	a).	Implement IoT applications using Arduino IDE?	4	2	7
	b).	Use various sensors Components of the Internet of Things application?	4	3	7
<b>OR</b>					
6.	a).	Discuss the features about Raspberry Pi Programming?	4	2	7
	b).	With a neat diagram. Implement wireless temperature monitoring system IoT applications using Raspberry Pi?	4	2	7

<b>UNIT – IV</b>					
7.	a).	Explain in detail about the Data Analytics in IoT.	3	2	7
	b).	Discuss about the integration of cloud and Bigdata in IoT Analytics.	3	3	7
<b>OR</b>					
8.	a).	Explain about data Collection using Low Power Long Range radios.	3	2	7
	b).	Explain about the AAAS, SAAS with examples.	3	2	7
<b>UNIT – V</b>					
9.	a).	Write short notes about the Vulnerabilities and security requirements in IoT.	2	1	7
	b).	Explain about the Access Control Secure Message Communication in detail.	2	2	7
<b>OR</b>					
10.	a).	Discuss about the Home Intrusion detection system.	2	3	7
	b).	Design a smart parking system and specify how IoT is helpful for the Smart Irrigation in the Agriculture sector for better results?	2	6	7

[B 17 CS 4103]  
**SAGI RAMA KRISHNAM RAJU ENGINEERING COLLEGE (A)**  
**IV B. Tech I Semester (R17) Regular Examinations**  
**MACHINE LEARNING**  
**Computer Science & Engineering**  
**MODEL QUESTION PAPER**

**TIME: 3 Hrs.**

**Max. Marks: 70 M**

Answer **ONE Question** from **EACH UNIT**  
 All questions carry equal marks

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			CO	KL	M																																																																																										
<b>UNIT - I</b>																																																																																															
1.	a).	Illustrate in detail about ingredients of Machine Learning.	CO1	K2	7																																																																																										
	b).	Demonstrate about curse of Dimensionality and Overfitting.	CO1	K2	7																																																																																										
<b>OR</b>																																																																																															
2.	a).	List out & explain the models in the output of Machine Learning.	CO1	K2	7																																																																																										
	b).	Differentiate between Prior Probability and Conditional Probability.	CO1	K2	7																																																																																										
<b>UNIT - II</b>																																																																																															
3.	a).	Demonstrate least-squares method using least square regression for classification.	CO2	K2	7																																																																																										
	b).	Demonstrate Nearest Neighbor Classification with suitable example.	CO2	K2	7																																																																																										
<b>OR</b>																																																																																															
4.	a).	Develop Decision trees for following set of training examples.	CO2	K3	7																																																																																										
		<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Day</th> <th>Outlook</th> <th>Temperature</th> <th>Humidity</th> <th>Wind</th> <th>PlayTennis</th> </tr> </thead> <tbody> <tr><td>D1</td><td>Sunny</td><td>Hot</td><td>High</td><td>Weak</td><td>No</td></tr> <tr><td>D2</td><td>Sunny</td><td>Hot</td><td>High</td><td>Strong</td><td>No</td></tr> <tr><td>D3</td><td>Overcast</td><td>Hot</td><td>High</td><td>Weak</td><td>Yes</td></tr> <tr><td>D4</td><td>Rain</td><td>Mild</td><td>High</td><td>Weak</td><td>Yes</td></tr> <tr><td>D5</td><td>Rain</td><td>Cool</td><td>Normal</td><td>Weak</td><td>Yes</td></tr> <tr><td>D6</td><td>Rain</td><td>Cool</td><td>Normal</td><td>Strong</td><td>No</td></tr> <tr><td>D7</td><td>Overcast</td><td>Cool</td><td>Normal</td><td>Strong</td><td>Yes</td></tr> <tr><td>D8</td><td>Sunny</td><td>Mild</td><td>High</td><td>Weak</td><td>No</td></tr> <tr><td>D9</td><td>Sunny</td><td>Cool</td><td>Normal</td><td>Weak</td><td>Yes</td></tr> <tr><td>D10</td><td>Rain</td><td>Mild</td><td>Normal</td><td>Weak</td><td>Yes</td></tr> <tr><td>D11</td><td>Sunny</td><td>Mild</td><td>Normal</td><td>Strong</td><td>Yes</td></tr> <tr><td>D12</td><td>Overcast</td><td>Mild</td><td>High</td><td>Strong</td><td>Yes</td></tr> <tr><td>D13</td><td>Overcast</td><td>Hot</td><td>Normal</td><td>Weak</td><td>Yes</td></tr> <tr><td>D14</td><td>Rain</td><td>Mild</td><td>High</td><td>Strong</td><td>No</td></tr> </tbody> </table>	Day	Outlook	Temperature	Humidity	Wind	PlayTennis	D1	Sunny	Hot	High	Weak	No	D2	Sunny	Hot	High	Strong	No	D3	Overcast	Hot	High	Weak	Yes	D4	Rain	Mild	High	Weak	Yes	D5	Rain	Cool	Normal	Weak	Yes	D6	Rain	Cool	Normal	Strong	No	D7	Overcast	Cool	Normal	Strong	Yes	D8	Sunny	Mild	High	Weak	No	D9	Sunny	Cool	Normal	Weak	Yes	D10	Rain	Mild	Normal	Weak	Yes	D11	Sunny	Mild	Normal	Strong	Yes	D12	Overcast	Mild	High	Strong	Yes	D13	Overcast	Hot	Normal	Weak	Yes	D14	Rain	Mild	High	Strong	No			
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	b).	Explain briefly distance based clustering and hierarchical clustering.	CO2	K2	7																																																																																										
<b>UNIT - III</b>																																																																																															
5.	a).	Explain Feature construction and selection.	CO4	K2	7																																																																																										
	b).	Compare Bagging and random forests.	CO4	K2	7																																																																																										
<b>OR</b>																																																																																															
6.	a).	Explain how thresholding and discretisation is done in feature transformations.	CO4	K2	7																																																																																										
	b).	Demonstrate Adaboost and Gradient Boosting.	CO4	K2	7																																																																																										
<b>UNIT - IV</b>																																																																																															
7.	a).	Summarize Principle Component Analysis.	CO3	K2	7																																																																																										
	b).	Illustrate LDA.	CO3	K2	7																																																																																										
<b>OR</b>																																																																																															

8.	a).	Compare Model Evaluation Techniques.	CO3	K2	7
	b).	Demonstrate the Regularization Process.	CO3	K2	7
<b>UNIT - V</b>					
9.	a).	Explain back propagation in Neural Network with suitable Example.	CO5	K2	7
	b).	Explain Markov Decision Process.	CO5	K2	7
<b>OR</b>					
10.	a).	Compare multilayer perceptrons with respect to linear perceptron.	CO5	K2	7
	b).	Outline the uses of Reinforcement Learning.	CO5	K2	7

**[B 17 BS 4101]**  
**SAGI RAMA KRISHNAM RAJU ENGINEERING COLLEGE (A)**  
**IV B. Tech I Semester (R17) Regular Examinations**  
**MANAGERIAL ECONOMICS AND FINANCIAL ACCOUNTANCY**  
**Common to CSE & IT**  
**MODEL QUESTION PAPER**

**TIME: 3 Hrs.**

**Max. Marks: 70 M**

Answer **ONE Question** from **EACH UNIT**

All questions carry equal marks

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		CO	KL	M
	UNIT-I			
1.	Define Managerial Economics and Explain its nature and scope	CO1	K2	15
	OR			
2.	What do you mean by Elasticity of demand? Explain in detail about degrees of Price elasticity of Demand?	CO1	K2	15
	UNIT-II			
3.	Define Cost & classify the Elements of Cost?	CO2	K2	15
	OR			
4.	How do you calculate BEP? What are its Assumptions and Applications?	CO2	K3	15
	UNIT-III			
5.	What are Market Structures and explain the features of Perfect Competition?	CO3	K2	15
	OR			
6.	Why is pricing significant in the context of business? Describe any four pricing practices?	CO3	K2	15
	UNIT-IV			
7.	Describe about the Importance of Accounting and types of accounts	CO4	K2	15
	OR			
8.	Prepare the proforma of Trading Account and Profit & Loss account	CO4	K3	15
	UNIT-V			

9.	Explain about capital and the sources available for raising finance	<b>CO5</b>	<b>K2</b>	<b>15</b>
	OR			
10.	Explain about the concept and causes of depreciation. Evaluate the straight line method and diminishing balance methods.	<b>CO5</b>	<b>K2</b>	<b>15</b>

**[B17 CS 4104]**  
**SAGI RAMA KRISHNAM RAJU ENGINEERING COLLEGE (A)**  
**IV B. Tech I Semester (R17) Regular Examinations**  
**CRYPTOGRAPHY AND NETWORK SECURITY**  
**Computer Science & Engineering**  
**MODEL QUESTION PAPER**

**TIME: 3 Hrs.**

**Max. Marks: 70 M**

Answer **ONE Question** from **EACH UNIT**

All questions carry equal marks

			CO	KL	M
<b>UNIT - I</b>					
1.	a).	Differentiate Active attacks and Passive attacks.	CO1	K4	7
	b).	Explain key generation process in DES algorithm with neat diagram.	CO2	K2	7
<b>OR</b>					
2.	a).	What is mono alphabetic cipher? How it differs from Caesar cipher.	CO1	K4	7
	b).	Explain the structure of AES algorithm with neat diagram and describe the steps in AES encryption.	CO2	K2	7
<b>UNIT – II</b>					
3.	a).	Perform Encryption and Decryption using RSA algorithm for $p=17, q=11, e=7, M=88$ .	CO2	K3	7
	b).	Differentiate symmetric and public key cryptography and when the public key cryptosystems are preferred over symmetric key cryptosystems.	CO2	K4	7
<b>OR</b>					
4.	a).	Find the secret key shared between User A and User B using Diffie Hellman Key exchange algorithm for the following: <b><math>q=97, a=5, \text{ the private keys } X_A = 36, X_B = 58</math>.</b>	CO2	K3	7
	b).	What are different possible side channel attacks and their Countermeasures	CO1	K2	7
<b>UNIT – III</b>					
5.	a).	Describe digital signature algorithm with neat diagram and explain how to sign and verify using DSS algorithm.	CO3	K2	7
	b).	What are the requirements of message authentication?	CO3	K1	7
<b>OR</b>					
6.	a).	List and explain various steps of SHA in detail with neat diagram.	CO3	K2	7
	b).	Describe schemes to provide digital signature.	CO3	K2	7
<b>UNIT – IV</b>					
7.	a).	How does screen host architecture for firewalls differed from screened subnet firewall architecture? Which one of above offers more security?	CO4	K4	7
	b).	Discuss the services provided by PGP with neat diagram.	CO4	K2	7
<b>OR</b>					
8.	a).	Discuss in detail about SSL/TLS.	CO4	K2	7
	b).	Explain about different types of firewalls.	CO4	K2	7
<b>UNIT – V</b>					
9.	a).	Discuss the cryptographic Techniques used in Crypto currency.	CO5	K2	7
	b).	Write short notes on quantum cryptography.	CO5	K1	7
<b>OR</b>					
10.	a).	What is bit coin? How does bit coin work and specify the advantages and disadvantages.	CO5	K1	7
	b).	Why do we need quantum cryptography and how does it works	CO5	K2	7



**[B17CS4105]**  
**SAGI RAMA KRISHNAM RAJU ENGINEERING COLLEGE (A)**  
**IV B. Tech I Semester (R17) Regular Examinations**  
**SOFTWARE PROJECT MANAGMNT**  
**Computer Science & Engineering**  
**MODEL QUESTION PAPER**

**TIME: 3 Hrs.**

**Max. Marks: 70 M**

Answer **ONE Question** from **EACH UNIT**  
 All questions carry equal marks

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			CO	KL	M
<b>UNIT - I</b>					
1.	a).	Explain in detail various activities of software management	C01	K2	7
	b).	List and Explain various Software Effort Estimation Techniques	C01	K2	7
<b>OR</b>					
2.	a).	Explain few problems associated with software projects.	C01	K2	7
	b).	Describe project scope.	C01	K2	7
<b>UNIT - II</b>					
3.	a).	Describe incremental delivery and spiral model and give its applications	C03	K3	7
	b).	Illustrate the first two phases of the life-cycle process.	C03	K2	7
<b>OR</b>					
4.	a).	Define Artifact. Write in detail about Management Artifacts.	C03	K3	7
	b).	What is the sequence of individual iteration's workflow?	C03	K2	7
<b>UNIT - III</b>					
5.	a).	What is PERT in Project Management? Explain in detail.	C04	K3	7
	b).	Explain detail about the effort estimation models.	C04	K3	7
<b>OR</b>					
6.	a).	Discuss in detail different models of COCOMO with an example	C05	K3	7
	b).	What are the types of Risks in Software Engineering? Explain the Process of Risk Management.	C05	K2	7
<b>UNIT - IV</b>					
7.	a).	Draw and explain in detail various steps in Project Monitoring Cycle.	C06	K2	7
	b).	Define Scheduling resources with examples.	C06	K3	7
<b>OR</b>					
8.	a).	Explain in detail about creating the framework.	C06	K2	7
	b).	Discuss Cost Monitoring.	C06	K2	7
<b>UNIT - V</b>					
9.	a).	Explain software quality in detail	C07	K2	7
	b).	What is capability maturity model? Explain.	C07	K3	7
<b>OR</b>					
10.		What is Software Quality Metrics? Explain in detail various Categories of Software Quality Metrics with suitable example each.	C07	K2	14

**[B17 CS 4106]**  
**SAGI RAMA KRISHNAM RAJU ENGINEERING COLLEGE (A)**  
**IV B. Tech I Semester (R17) Regular Examinations**  
**SCRIPTING LANGUAGES**  
**Computer Science & Engineering**  
**MODEL QUESTION PAPER**

**TIME: 3 Hrs.**

**Max. Marks: 70 M**

Answer **ONE Question** from **EACH UNIT**  
 All questions carry equal marks

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			CO	KL	M
<b>UNIT - I</b>					
1.	a).	Explain about the Characteristics of Scripting Languages	CO1	K2	7
	b).	Discuss various Control Structures in PERL with examples	CO1	K2	7
<b>OR</b>					
2.	a).	Discuss about Web Scripting	CO1	K2	7
	b).	Explain about Arrays and Lists in PERL	CO1	K2	7
<b>UNIT - II</b>					
3.	a).	What are the security issues in PERL	CO1	K3	7
	b).	Write about Modules and Packages in PERL	CO1	K2	7
<b>OR</b>					
4.	a).	What are various data structures available in PERL. Explain	CO2	K3	7
	b).	How do you create Internet Ware applications using PERL	CO2	K3	7
<b>UNIT - III</b>					
5.	a).	How can you embed PHP Code into web pages.	CO3	K3	7
	b).	Write a short notes on Strings and Regular Expressions in PERL	CO3	K3	7
<b>OR</b>					
6.	a).	Describe PHP authentication and its methodologies.	CO3	K2	7
	b).	Discuss the procedure for uploading files with PHP	CO3	K2	7
<b>UNIT - IV</b>					
7.	a).	What are the Patterns available in TCL.	CO3	K2	7
	b).	Discuss Nuts and Bolts internet programming	CO3	K2	7
<b>OR</b>					
8.		Discuss about Advanced TCL Programming	CO3	K2	14
<b>UNIT - V</b>					
9.	a).	What are the built-in functions available in Python.	CO3	K2	7
	b).	Explain Exception handling mechanism in Python.	CO3	K3	7
<b>OR</b>					
10.	a).	Describe Web Application framework using Python.	CO4	K3	14

[B 17 BS 4201]  
**SAGI RAMA KRISHNAM RAJU ENGINEERING COLLEGE (A)**  
**IV B. Tech II Semester (R17) Regular Examinations**  
**MANAGEMENT AND ORGANIZATIONAL BEHAVIOR**  
**Common to CSE & IT**  
**MODEL QUESTION PAPER**

**TIME: 3 Hrs.**

**Max. Marks: 70 M**

Answer **ONE Question** from **EACH UNIT**  
 All questions carry equal marks

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		CO	KL	M
	<b>UNIT-I</b>			
1.	Define Management and Explain its functions	CO1	K2	14
	<b>OR</b>			
2.	Explain the principles of Management as outlined by Henry Fayol	CO1	K2	14
	<b>UNIT-II</b>			
3.	Describe the functions performed by Human Resource Manager	CO2	K2	14
	<b>OR</b>			
4.	Define Marketing, Explain in detail about Marketing mix	CO2	K2	14
	<b>UNIT-III</b>			
5.	Explain about the importance of Mission, Goal, Objective and Strategy	CO3	K2	14
	<b>OR</b>			
6.	What do you understand by SWOT analysis? Explain how it can be carried out.	CO3	K2	14
	<b>UNIT-IV</b>			
7.	What is Organisational Change and describe about the types of change	CO4	K2	14
	<b>OR</b>			
8.	What is Motivation and Explain about Maslows Human Need Theory	CO4	K2	14
	<b>UNIT-V</b>			

<b>9.</b>	Explain about the consequences of conflicts in an organisation	<b>CO5</b>	<b>K2</b>	<b>14</b>
	<b>OR</b>			
<b>10.</b>	What is Stress & Describe about methods of managing Stress	<b>CO5</b>	<b>K2</b>	<b>14</b>

**[B17CS4201]**  
**SAGI RAMA KRISHNAM RAJU ENGINEERING COLLEGE (A)**  
**IV B. Tech II Semester (R17) Regular Examinations**  
**DEEP LEARNING**  
**Computer Science & Engineering**  
**MODEL QUESTION PAPER**

**TIME: 3 Hrs.**

**Max. Marks: 70 M**

Answer **ONE Question** from **EACH UNIT**

All questions carry equal marks

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			<b>CO</b>	<b>KL</b>	<b>M</b>
<b>UNIT - I</b>					
1.	a).	Distinguish supervised vs unsupervised learning	CO1	K4	7
	b).	Explain about cross-validation	CO1	K2	7
<b>OR</b>					
2.	a).	What is Dimensionality reduction? Explain	CO1	K2	7
	b).	Explain about overfitting and under fitting	CO1	K2	7
<b>UNIT - II</b>					
3.	a).	Illustrate Deep feed forward networks	CO2	K2	7
	b).	Explain Gradient-Based Learning	CO2	K2	7
<b>OR</b>					
4.	a).	Explain about Various Activation Functions	CO2	K2	7
	b).	What is Regularization for Deep learning? Explain	CO2	K2	7
<b>UNIT - III</b>					
5.	a).	Illustrate Convolutional Network	CO3	K2	7
	b).	What is max pooling? Explain	CO3	K2	7
<b>OR</b>					
6.	a).	Illustrate Recurrent Neural Networks	CO2	K2	7
	b).	Explain about Long Short-Term Memory	CO2	K2	7
<b>UNIT - IV</b>					
7.	a).	What are Auto encoders? Explain	CO4	K2	7
	b).	Explain regularized & stochastic concepts?	CO4	K2	7
<b>OR</b>					
8.	a).	What is denoising? Explain	CO4	K2	7
	b).	What is Optimization for Deep Learning? Explain	CO4	K2	7
<b>UNIT - V</b>					
9.	a).	Illustrate Alexnet architecture	CO5	K2	7
	b).	Analyze how to improve performance of a model with Transfer learning	CO5	K4	7
<b>OR</b>					
10.	a).	Illustrate ResNet architecture	CO5	K2	7
	b).	Apply RNN for sentiment analysis	CO5	K3	7

**[B17 CS 4202]**  
**SAGI RAMA KRISHNAM RAJU ENGINEERING COLLEGE (A)**  
**IV B. Tech II Semester (R17) Regular Examinations**  
**CONCURRENT AND PARALLEL PROGRAMMING**  
**Computer Science & Engineering**  
**MODEL QUESTION PAPER**

**TIME: 3 Hrs.**

**Max. Marks: 70 M**

Answer **ONE Question** from **EACH UNIT**

All questions carry equal marks

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			CO	KL	M
<b>UNIT - I</b>					
1.	a).	Discuss in brief about the advantages and Disadvantages of concurrent programs.	CO1	K3	7
	b).	Differentiate between Concurrent and sequence programming.	CO1	K4	7
<b>OR</b>					
2.	a).	Discuss about the Race Condition	CO1	K2	7
	b).	Explain about Synchronization Primitives	CO1	K3	7
<b>UNIT - II</b>					
3.	a).	What are the conditions for prevention of Dead lock?	CO1	K3	7
	b).	Describe in brief about the Approaches for Inter-Process Communication.	CO1	K2	7
<b>OR</b>					
4.	a).	Discuss about the Issues and Challenges in Concurrent Programming	CO2	K3	7
	b).	Explain about Starvation	CO2	K3	7
<b>UNIT - III</b>					
5.	a).	Define sorting. Explain in brief about Hyper quick sorting.	CO3	K3	14
<b>OR</b>					
6.	a).	What are the steps in Breadth-First Search?	CO3	K2	7
	b).	Discuss about the Traversals.	CO3	K2	7
<b>UNIT - IV</b>					
7.		Define Task parallelism. Explain in brief about Task parallelism.	CO3	K3	14
<b>OR</b>					
8.		Discuss in brief about illustration of a shared memory system of three processors.	CO3	K2	14
<b>UNIT - V</b>					
9.	a).	What are the steps to initialize an OpenMP Application?	CO4	K2	7
	b).	Differentiate between OpenCL and OpenMP applications.	CO4	K3	7
<b>OR</b>					
10.	a).	Discuss in brief about C++ AMP and concurrency Visualiser.	CO4	K3	7
	b).	Explain in brief about acceleration of web applications using open CL	CO4	K3	7

**[B17 CS 4203]**  
**SAGI RAMA KRISHNAM RAJU ENGINEERING COLLEGE (A)**  
**IV B. Tech II Semester (R17) Regular Examinations**  
**ARTIFICIAL NEURAL NETWORKS**  
**Computer Science & Engineering**  
**MODEL QUESTION PAPER**

**TIME: 3 Hrs.**

**Max. Marks: 70 M**

Answer **ONE Question** from **EACH UNIT**

All questions carry equal marks

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			CO	KL	M
<b>UNIT - I</b>					
1.	a).	What is Neural Learning. Draw and Explain the general Neuron Model	CO1	K2	7
	b).	Explain typical classes of Network Architectures	CO1	K2	7
<b>OR</b>					
2.	a).	Discuss about the Activation Functions used in ANN	CO1	K2	7
	b).	Compare Biological Neurons and Artificial Neurons	CO1	K2	7
<b>UNIT - II</b>					
3.	a).	Discuss about the concepts of Optimization	CO1	K3	7
	b).	Write about Memory based Learning	CO1	K2	7
<b>OR</b>					
4.	a).	Discuss about Mathematical Foundations of Learning	CO2	K3	7
	b).	Explain Hebbian Learning	CO2	K3	7
<b>UNIT - III</b>					
5.	a).	Differentiate between perceptron representation and perceptron training and the single layer perceptron in detail	CO2	K3	14
<b>OR</b>					
6.	a).	Discuss about Bayes Classifier	CO2	K2	7
	b).	Discuss about the limitations of Perceptrons	CO2	K2	7
<b>UNIT - IV</b>					
7.		Write about generalized radial basis networks and its approximation properties	CO3	K2	14
<b>OR</b>					
8.		What is Back Propagation? Explain the back propagation training algorithm.	CO3	K2	14
<b>UNIT - V</b>					
9.	a).	Discuss about SVM in detail	CO3	K2	7
	b).	Write about Approximation properties of RBF	CO3	K3	7
<b>OR</b>					
10.	a)	How to Determine Optimal Hyperplane ? Discuss.	CO3	K3	7
	b)	Discuss about RBF Networks	Co3	K2	7