COER University End SEMESTER EXAMINATION, EVEN SEMESTER, 2023-24         Time       ::::::::::::::::::::::::::::::::::::	COER University         DISCRPTICE COMMENDIATION CONSTRUCTION CON	Roll No.	(178)	SET-I	ľ
Time       : 3-hour       Semester       : VI       Total Marks : 100         Program Name : B. Tech CSE       Branch/Specialization : CSE       Course Code       : Data Mining and Warehousing         Note: All questions are computery. No student is allowed to lave the examination hall before the completion of the time.       CO       BI         Q. No 1       Attempt Any Four Parts. Each Question Carries 5 Marks.       CO       I         (a)       Explain the term Data Mining with example.       CO 1       2         (b)       Apply the two methods below to normalize the following group of data: 200, 300, 400, 600, and 1000.       a)       Use min-max normalization by setting min=0 and max=1.0       b)       Z-score normalization         (c)       Define data integration and transformation in data mining.       CO 1       2         (d)       Explain the Data Discretization and Concept hierarchy generation with suitable example.       CO 1       2         (e)       Define data integration and transformations.       CO 2       5         (a)       Consider the data Set D with following transactions.       CO 2       5         (a)       Consider the data Set D with following transactions.       CO 2       5         (a)       Consider the data Set D with following transactions.       CO 2       5         (b)       Define frequent itenes	Time       : 3-hour       Semester       : VI       Total Marks : 100         Program Name: B.Tech CSE       Branch/Specialization: CSE       Course Code       : SOC314         Note: All questions are computery. No student is allowed to leave the examination hall before the completion of the time.       Image: Course Code       CO       Bit         Q. No 1       Attempt Any Four Parts. Each Question Carries 5 Marks.       CO       Bit         (a)       Explain the term Data Mining with example.       CO       1       3         (b)       Apply the two methods below to normalize the following group of data: 200, 300, 400, 60, and 1000.       CO       1       3         (c)       Define data integration and transformation in data mining.       CO       1       2         (c)       Define data integration and transformation with example.       CO       1       2         (e)       Define data characterization and Concept hierarchy generation with suitable col 1       2       2         (d)       Explain the term       Data Discretization and Concept hierarchy Semestar.       CO 1       2         (e)       Define data characterization and Concept hierarchy generation with suitable col 1       2       2         (e)       Define data characterization and bata discrimination with example.       CO 2       5		<b>COER University</b> END SEMESTER EXAMINATION, EVEN SEMESTER, 2023-24		
Q. No 1       Attempt Any Four Parts. Each Question Carries 5 Marks.       CO       Bit         (a)       Explain the term Data Mining with example.       CO 1       2         (b)       Apply the two methods below to normalize the following group of data: 200, 300, 400, 600, and 1000.       (c)       1       3         (c)       Define data integration and transformation in data mining.       CO 1       2         (c)       Define data integration and transformation in data mining.       CO 1       2         (c)       Define data characterization and data discrimination with example.       CO 1       2         (e)       Define data characterization and data discrimination with example.       CO 1       2         (e)       Define data Set D with following transactions.       CO 2       5         (a)       Consider the data Set D with following transactions.       CO 2       5         (a)       Consider the data Set D with following transactions.       CO 2       5         (a)       Consider the data Set D with following transactions.       CO 2       5         (a)       Consider the data Set D with following transactions.       CO 2       5         (a)       Consider the data Set D with following transactions.       CO 2       5         (a)       Detine frequent item sets in database D usin	Q. No.1       Attempt Any Four Parts. Each Question Carries 5 Marks.       CO       Bit         (a)       Explain the term Data Mining with example.       (C)       1       3         (b)       Apply the two methods below to normalize the following group of data: 200, 300, 400, 600, and 1000.       (C)       1       3         (c)       Define data integration and transformation in data mining.       CO       1       2         (c)       Define data integration and transformation in data mining.       CO       1       2         (d)       Explain the Data Discretization and Concept hierarchy generation with suitable col 1       2       2         (e)       Define data characterization and data discrimination with example.       CO 1       2         (e)       Define data characterization and data discrimination with example.       CO 1       2         (f)       Explain the Data Discretization and genetic control (C)       2       5         (a)       Consider the data Set D with following transactions.       CO 2       5         (a)       Consider the data set D with following transactions.       CO 2       5         (a)       Consider the data set D with following transactions.       CO 2       2         (a)       Discuestion mining to correlation analysis with example.       CO 2       2 <th>Time Program I Course Co</th> <th>: 3-hour       Semester       : VI       Total Marks         Name : B.Tech CSE       Branch/Specialization : CSE         ode       : SOC314       Course Name       : Data Mining and Warehousing</th> <th>: 100 ng e.</th> <th></th>	Time Program I Course Co	: 3-hour       Semester       : VI       Total Marks         Name : B.Tech CSE       Branch/Specialization : CSE         ode       : SOC314       Course Name       : Data Mining and Warehousing	: 100 ng e.	
Q. No 1       Attempt Any Four Parts. Each Question Carries 5 Harks.       CO 1       2         (a)       Explain the term Data Mining with example.       CO 1       3         (b)       Apply the two methods below to normalize the following group of data: 200, 300, 400, 600, and 1000.       a)       Use min-max normalization by setting min=0 and max=1.0       b)       Z-score normalization and transformation in data mining.       CO 1       2         (c)       Define data integration and transformation in data mining.       CO 1       2       2         (d)       Explain the Data Discretization and Cocept hierarchy generation with suitable con 1       2       2         (e)       Define data characterization and data discrimination with example.       CO 1       2         (e)       Define data Set D with following transactions.       CO 2       5         Transaction ID       Items       100       A, C, D       200       B, C, E         300       A, B, C, E       300       A, B, C, E       200       B, C, E         300       A, B, C, E       300       A, B, C, E       202       2       2         (b)       Define frequent sets, Confidence and support countwith suitable example.       CO 2       2       2         (c)       Explain Atssociation mining to correlation analysis with example. <th>Q. NO 2       Attempt Any Four Parts. Each Question connector forms       CO 1       2         (a)       Explain the term Data Mining with example.       CO 1       3         (b)       Apply the two methods below to normalize the following group of data: 200, 300, 400, 600, and 1000.       a)       Use min-max normalization by setting min=0 and max=1.0       b)       Z-score normalization       CO 1       2         (c)       Define data integration and transformation in data mining.       CO 1       2       2         (d)       Explain the Data Discretization and Concept hierarchy generation with suitable example.       CO 1       2         (e)       Define data characterization and data discrimination with example.       CO 1       2         (e)       Define data characterization and data discriminations.       CO 1       2         (a)       Consider the data Set D with following transactions.       CO 2       5         Transaction D       Items       CO 2       5         100       A, C, D       200       B, C, E       300       A, B, C, E         400       B, E       Using the threshold values support = 2 and confidence=50%.       Evalain Association miling to correlation analysis with example.       CO 2       2         (c)       Explain Association miling to correlation analysis with example.       CO 2</th> <th>O No 1</th> <th>Attompt Any Four Parts, Each Question Carries 5 Marks.</th> <th>СО</th> <th>BL</th>	Q. NO 2       Attempt Any Four Parts. Each Question connector forms       CO 1       2         (a)       Explain the term Data Mining with example.       CO 1       3         (b)       Apply the two methods below to normalize the following group of data: 200, 300, 400, 600, and 1000.       a)       Use min-max normalization by setting min=0 and max=1.0       b)       Z-score normalization       CO 1       2         (c)       Define data integration and transformation in data mining.       CO 1       2       2         (d)       Explain the Data Discretization and Concept hierarchy generation with suitable example.       CO 1       2         (e)       Define data characterization and data discrimination with example.       CO 1       2         (e)       Define data characterization and data discriminations.       CO 1       2         (a)       Consider the data Set D with following transactions.       CO 2       5         Transaction D       Items       CO 2       5         100       A, C, D       200       B, C, E       300       A, B, C, E         400       B, E       Using the threshold values support = 2 and confidence=50%.       Evalain Association miling to correlation analysis with example.       CO 2       2         (c)       Explain Association miling to correlation analysis with example.       CO 2	O No 1	Attompt Any Four Parts, Each Question Carries 5 Marks.	СО	BL
(b)       Apply the two methods below to normalize the following group of data: 200, 300, 400, 600, and 1000.       a)       a)       Use min-max normalization by setting min=0 and max=1.0       b)       J.score normalization       CO 1       2         (c)       Define data integration and transformation in data mining.       CO 1       2       2         (d)       Explain the Data Discretization and Concept hierarchy generation with suitable example.       CO 1       2         (e)       Define data characterization and data discrimination with example.       CO 1       2         (e)       Define data characterization and data discrimination with example.       CO 2       5         (a)       Consider the data Set D with following transactions.       CO 2       5         Transaction ID       Items       CO 2       5         100       A, C, D       200       B, C, E       300       A, B, C, E         400       B, E       Using the threshold values support = 2 and confidence=50%.       Evaluate the following.       a) All Frequent item sets in database D using Apriori Algorithm.       b)       Strong Association rules for database D.       CO 2       2       2         (b)       Define frequent sets, Confidence and support countwith suitable example.       CO 2       2       2       2       2       2       2	(b)       Apply the two methods below to normalize the following group of data: 200, 300, 400, 600, and 1000.       (C)       3         (b)       Apply the two methods below to normalize the following group of data: 200, 300, 400, 600, and 1000.       (C)       1       2         (c)       Define data integration and transformation in data mining.       (C)       1       2         (d)       Explain the Data Discretization and Concept hierarchy generation with suitable example.       (C)       1       2         (e)       Define data characterization and data discrimination with example.       (C)       1       2         (e)       Define data Set D with following transactions.       (C)       1       2         (a)       Consider the data Set D with following transactions.       (C)       1       2         (a)       Consider the data Set D with following transactions.       (C)       2       5         (a)       Consider the data Set D with following transactions.       (C)       2       5         (a)       Consider the data Set D with following transactions.       (C)       2       5         (a)       Consider the data Set D with following transactions.       (C)       2       5         (b)       Define fracture sets in database D using Apriori Algorithm.       b)       3       All Frequen	(a)	Explain the term Data Mining with example	CO 1	2
b)       2-score normalization         c)       Define data integration and transformation in data mining.       c0 1       2         c)       Define data integration and transformation with example.       c0 1       2         (c)       Define data characterization and data discrimination with example.       c0 1       2         (e)       Define data characterization and data discrimination with example.       c0 1       2         (a)       Consider the data Set D with following transactions.       c0 2       5         Transaction ID       Items       c0 2       5         100       A, C, D       c0 3       2         200       B, C, E       300       A, B, C, E       400         300       A, B, C, E       400       B, E       2         Using the threshold values support = 2 and confidence=50%.       Evaluate the following.       a) All Frequent item sets in database D using Apriori Algorithm.       b)         b)       Strong Association rules for database D.       c0 2       2       2         (c)       Explain Association mining to correlation analysis with example.       c0 2       2       2         (d)       Explain multilevel and multidimensional association rule with suitable example.       c0 2       2         (e)       Di	b)       2-secore normalization       CO 1       2         (c)       Define data integration and transformation in data mining.       CO 1       2         (d)       Explain the Data Discretization and Concept hierarchy generation with suitable example.       CO 1       2         (e)       Define data characterization and data discrimination with example.       CO 1       2         (e)       Define data characterization and data discrimination with example.       CO 1       2         (a)       Consider the data Set D with following transactions.       CO 2       5         Transaction ID       Items       CO 2       5         100       A, C, D       200       B, E         Using the threshold values support = 2 and confidence=50%.       Evaluate the following.       a) All Frequent item sets in database D using Apriori Algorithm.       b) Strong Association rules for database D.         (b)       Define frequent sets, Confidence and support countwith suitable example.       CO 2       2         (c)       Explain Association mining to correlation analysis with example.       CO 2       2         (d)       Explain hassociation mining to correlation analysis with suitable example.       CO 2       2         (e)       Discuss in detail about the quantitative association rule with suitable example.       CO 2       2 <t< td=""><td>(b)</td><td>Apply the two methods below to normalize the following group of data: 200, 300, 400, 600, and 1000. a) Use min-max normalization by setting min=0 and max=1.0</td><td>CO 1</td><td>3</td></t<>	(b)	Apply the two methods below to normalize the following group of data: 200, 300, 400, 600, and 1000. a) Use min-max normalization by setting min=0 and max=1.0	CO 1	3
(c)       Define data integration and transformation in data infinitization with suitable in the Data Discretization and Concept hierarchy generation with suitable in the concept hierarchy generation with suitable in the data characterization and data discrimination with example.       CO 1       2         (e)       Define data characterization and data discrimination with example.       CO 1       2         (e)       Define data characterization and data discrimination with example.       CO 1       2         (a)       Consider the data Set D with following transactions.       CO 2       5         (a)       Consider the data Set D with following transactions.       CO 2       5         100       A, C, D       200       B, C, E       300       A, B, C, E         300       A, B, C, E       400       B, E       Using the threshold values support = 2 and confidence=50%.       Evaluate the following.       a)       All Frequent item sets in database D using Apriori Algorithm.       b)       Strong Association rules for database D.       CO 2       2         (b)       Define frequent sets, Confidence and support countwith suitable example.       CO 2       2       2         (d)       Explain multilevel and multidimensional association rule with suitable example.       CO 2       2       2         (e)       Discuss in detail about the quantitative association rule mining.       CO 2       <	(c)       Define data integration and transformation in data infinity.       CO 1       2         (d)       Explain the Data Discretization and Concept hierarchy generation with suitable example.       CO 1       2         (e)       Define data characterization and data discrimination with example.       CO 1       2         (e)       Define data characterization and data discrimination with example.       CO 1       2         (a)       Consider the data Set D with following transactions.       CO 2       5         Transaction ID       Items       CO 2       5         100       A, C, D       200       B, C, E       400       8         100       A, C, D       200       B, C, E       400       8       2       3       3       3       3       3       3       3       3       3		b) Z-score normalization	CO 1	2
CAMPAC.       CO 1       2         (e)       Define data characterization and data discrimination with example.       CO 1       2         Q. No 2       Attempt Any Four Parts. Each Question Carries 5 Marks.       CO 8       BL         (a)       Consider the data Set D with following transactions.       CO 2       5         Transaction ID       Items       CO 2       5         100       A, C, D       200       B, C, E         300       A, B, C, E       400       B, E         Using the threshold values support = 2 and confidence=50%.       Evaluate the following.       a) All Frequent item sets in database D using Apriori Algorithm.       b) Strong Association rules for database D.       CO 2       2         (b)       Define frequent sets, Confidence and support countwith suitable example.       CO 2       2       2         (c)       Explain Multidimensional association rule with suitable example.       CO 2       2       2         (d)       Explain multidiver and multidimensional association rule mining.       CO 2       2       2         (e)       Discuss in detail about the quantitative association rule mining.       CO 3       2       2         (d)       Explain multidimensional association rule mining.       CO 3       2       2         (e)	(e)Define data characterization and data discrimination with example.CO 12(e)Define data characterization and data discrimination with example.CO 11(a)Consider the data Set D with following transactions. Transaction IDItemsCO 25100A, C, D200B, C, E300A, B, C, E400B, E2200B, C, E300A, B, C, E400B, E222(c)Evaluate the following a)A) All Frequent item sets in database D using Apriori Algorithm. b) Strong Association rules for database D.CO 222(c)Explain Association mining to correlation analysis with example.CO 222(d)Explain multideval and multidimensional association rule with suitable example. CO 2CO 22(e)Discuss in detail about the quantitative association rule mining.CO 32(a)Define classification with an example. Also, discuss different challenges occur during classification process?CO 32(b)Define confusion matrix with an example. Also discuss precision, recall, accuracy and F1-score performance measures.CO 32(d)How Bayesian classification is based on Bayes' theorem and probabilistic reasoning? Discuss the application of Bayesian classification in text classification and sparn filtering.CO 32(e)Explain density-based clustering method based on connected regions (DBSCAN)CO 32	(c) (d)	Explain the Data Discretization and Concept hierarchy generation with suitable	CO 1	2
Q. No 2       Attempt Any Four Parts. Each Question Carries 5 Marks.       CO       BL         (a)       Consider the data Set D with following transactions.       CO 2       5         Transaction ID       Items       CO 2       5         100       A, C, D       200       B, C, E       300       A, B, C, E         300       A, B, C, E       300       A, B, C, E       20       20       Evaluate the following.       20         a)       All Frequent item sets in database D using Apriori Algorithm.       b)       Strong Association rules for database D.       CO 2       2         (c)       Explain Association mining to correlation analysis with example.       CO 2       2       2         (d)       Explain Association mining to correlation rule with suitable example.       CO 2       2         (e)       Discuss in detail about the quantitative association rule mining.       CO 2       2         Q. No 3       Attempt Any Four Parts. Each Question Carries 5 Marks.       CO 3       2         (c)       Define classification with an example. Also, discuss different challenges occur during classification process?       CO 3       2         (d)       Define confusion matrix with an example. Also discuss precision, recall, accuracy and F1-score performance measures.       CO 3       2         <	Q. No 2       Attempt Any Four Parts. Each Question Carries 5 Marks.       CO       BL         (a)       Consider the data Set D with following transactions.       CO 2       5         Transaction ID       Items       CO 2       5         100       A, C, D       200       B, C, E       300       A, B, C, E         400       B, E       Using the threshold values support = 2 and confidence=50%.       Evaluate the following:       a) All Frequent item sets in database D using Apriori Algorithm.       b) Strong Association rules for database D.       CO 2       2         (b)       Define frequent sets, Confidence and support countwith suitable example.       CO 2       2         (c)       Explain Association multidimensional association rule with suitable example.       CO 2       2         (c)       Explain multidimensional association rule mining.       CO 2       2         (d)       Define classification with an example. Also, discuss different challenges occur during cO 3       2         (a)       Define classification with an example. Also discuss precision, recall, accuracy and diagram.       CO 3       2         (e)       Define confusion matrix with an example. Also discuss precision, recall, accuracy and diagram.       CO 3       2         (c)       Define confusion matrix with an example. Also discuss precision, recall, accuracy and diagram.	(0)	Define data characterization and data discrimination with example.	CO 1	2
Q. No 2       Attempt Any Four Parts. Each Question Carries 5 Marks.       CO       BL         (a)       Consider the data Set D with following transactions.       CO 2       5         Transaction ID       Items       CO 2       5         100       A, C, D       200       B, C, E       300       A, B, C, E       400       B, E       Using the threshold values support = 2 and confidence=50%.       Evaluate the following.       2       2       2         (b)       Define frequent item sets in database D using Apriori Algorithm.       b)       Strong Association rules for database D.       CO 2       2       2         (c)       Explain Association mining to correlation analysis with example.       CO 2       2       2         (d)       Explain Association multidimensional association rule with suitable example.       CO 2       2         (e)       Discuss in detail about the quantitative association rule mining.       CO 2       2         Q. No 3       Attempt Any Four Parts. Each Question Carries 5 Marks.       CO 3       2         (a)       Define classification with an example. Also, discuss different challenges occur during classification process?       CO 3       2         (b)       Define confusion matrix with an example. Also discuss precision, recall, accuracy and fiagram.       CO 3       2	Q. No 2       Attempt Any Four Parts. Each Question Carries 5 Marks.       CO       BL         (a)       Consider the data Set D with following transactions.       Transaction ID       Items       CO 2       5         100       A, C, D       200       B, C, E       300       A, B, C, E       400       B, E         Using the threshold values support = 2 and confidence=50%.       Evaluate the following.       a)       All Frequent item sets in database D using Apriori Algorithm.       b)       Strong Association rules for database D.       CO 2       2         (b)       Define frequent sets, Confidence and support countwith suitable example.       CO 2       2       2         (c)       Explain Association mining to correlation analysis with example.       CO 2       2       2         (d)       Explain multilevel and multidimensional association rule with suitable example.       CO 2       2         (e)       Discuss in detail about the quantitative association rule mining.       CO 3       2         (a)       Define classification with an example. Also, discuss different challenges occur during classification process?       CO 3       2         (b)       Define backward and forward propagation in neural network with neat and clean classification process?       CO 3       2         (c)       Define confusion matrix with an example. Also discuss prec	(0)			
Q. No 2       Attempt Any Four Parts. Each Question Carries 5 Marks.       Co       2         (a)       Consider the data Set D with following transactions.       CO 2       5         (a)       Consider the data Set D with following transactions.       CO 2       5         100       A, C, D       200       B, C, E         300       A, B, C, E       400       B, E         Using the threshold values support = 2 and confidence=50%.       Evaluate the following.       a) All Frequent item sets in database D using Apriori Algorithm.         b)       Strong Association rules for database D.       CO 2       2         (c)       Explain Association mining to correlation analysis with example.       CO 2       2         (d)       Explain multilevel and multidimensional association rule with suitable example.       CO 2       2         Q. No 3       Attempt Any Four Parts. Each Question Carries 5 Marks.       CO       BI         (a)       Define classification with an example. Also, discuss different challenges occur during classification process?       CO 3       2         (b)       Define backward and forward propagation in neural network with neat and clean CO 3       2       2         (c)       Define confusion matrix with an example. Also discuss precision, recall, accuracy and classification process?       CO 3       2	Q. No 2       Attempt Any Four Parts. Each Question Carries 5 marks.       CO 2       5         (a)       Consider the data Set D with following transactions.       Transaction ID       Items         100       A, C, D       200       B, C, E       300       A, B, C, E         300       A, B, C, E       300       A, B, C, E       CO 2       2         400       B, E       Using the threshold values support = 2 and confidence=50%.       Evaluate the following.       a)       All Frequent item sets in database D using Apriori Algorithm.       b)       Strong Association rules for database D.       CO 2       2         (b)       Define frequent sets, Confidence and support countwith suitable example.       CO 2       2         (c)       Explain Association mining to correlation analysis with example.       CO 2       2         (d)       Explain Association mining to correlation analysis with example.       CO 2       2         (e)       Discuss in detail about the quantitative association rule with suitable example.       CO 2       2         (a)       Define classification with an example. Also, discuss different challenges occur during       CO 3       2         (b)       Define classification matrix with an example. Also discuss precision, recall, accuracy and filtering.       CO 3       2         (c)       Define		The section Convice E Marks	CO	BL
<ul> <li>(a) Consider the data Set D with following transactions.</li> <li>Transaction ID Items</li> <li>100 A, C, D</li> <li>200 B, C, E</li> <li>300 A, B, C, E</li> <li>400 B, E</li> <li>Using the threshold values support = 2 and confidence=50%.</li> <li>Evaluate the following.</li> <li>a) All Frequent item sets in database D using Apriori Algorithm.</li> <li>b) Strong Association rules for database D.</li> <li>(b) Define frequent sets, Confidence and support countwith suitable example.</li> <li>(c) Explain Association mining to correlation analysis with example.</li> <li>(d) Explain multilevel and multidimensional association rule mining.</li> <li>(c) Biscuss in detail about the quantitative association rule mining.</li> <li>(c) Biscuss in detail about the quantitative association rule mining.</li> <li>(c) Biscuss in detail about the quantitative association rule mining.</li> <li>(c) Biscuss in detail about the quantitative association rule mining.</li> <li>(c) Biscuss in detail about the quantitative association rule mining.</li> <li>(c) Biscuss in detail about the quantitative association rule mining.</li> <li>(c) Biscuss in detail about the quantitative association rule mining.</li> <li>(c) Biscuss in detail about the quantitative association rule mining.</li> <li>(c) Biscuss in detail about the quantitative association rule mining.</li> <li>(c) Define confusion matrix with an example. Also, discuss different challenges occur during classification process?</li> <li>(d) How Bayesian classification is based on Bayes' theorem and probabilistic reasoning?</li> <li>(c) Define confusion of Bayesian classification in text classification and spam filtering.</li> <li>(e) Explain density-based clustering method based on connected regions (DBSCAN)</li> <li>(c) C) 2</li> </ul>	<ul> <li>(a) Consider the data Set D with following transactions.</li> <li>Transaction ID Items</li> <li>100 A, C, D</li> <li>200 B, C, E</li> <li>300 A, B, C, E</li> <li>400 B, E</li> <li>Using the threshold values support = 2 and confidence=50%.</li> <li>Evaluate the following.</li> <li>a) All Frequent item sets in database D using Apriori Algorithm.</li> <li>b) Strong Association rules for database D.</li> <li>(b) Define frequent sets, Confidence and support countwith suitable example.</li> <li>(c) Explain Association mining to correlation analysis with example.</li> <li>(c) Explain Association multidimensional association rule with suitable example.</li> <li>(c) Explain multilevel and multidimensional association rule with suitable example.</li> <li>(c) 2</li> <li>(d) Explain multilevel and multidimensional association rule mining.</li> <li>(c) 2</li> <li>(d) Define classification with an example. Also, discuss different challenges occur during classification process?</li> <li>(c) Define confusion matrix with an example. Also discuss precision, recall, accuracy and F1-score performance measures.</li> <li>(d) How Bayesian classification is based on Bayes' theorem and probabilistic reasoning? Discuss the application of Bayesian classification in text classification and spam filtering.</li> <li>(c) Explain density-based clustering method based on connected regions (DBSCAN)</li> <li>(c) Strong Association metric method based on connected regions (DBSCAN)</li> <li>(c) Strong Association of Bayesian classification in text classification and spam filtering.</li> <li>(c) Explain density-based clustering method based on connected regions (DBSCAN)</li> <li>(c) Strong Association of Bayesian classification in text classification and spam filtering.</li> </ul>	Q. No 2	Attempt Any Four Parts. Each Question Carries 5 Marks.	CO 2	5
Transaction IDItems100A, C, D200B, C, E300A, B, C, E400B, EUsing the threshold values support = 2 and confidence=50%. Evaluate the following. a) All Frequent item sets in database D using Apriori Algorithm. b) Strong Association rules for database D.(b)Define frequent sets, Confidence and support countwith suitable example.CO 2(c)Explain Association mining to correlation analysis with example.CO 2(d)Explain multilevel and multidimensional association rule mining.CO 2Q. No 3Attempt Any Four Parts. Each Question Carries 5 Marks.CO(a)Define classification with an example. Also, discuss different challenges occur during 	Transaction IDItems100A, C, D200B, C, E300A, B, C, E400B, EUsing the threshold values support = 2 and confidence=50%. Evaluate the following. a) All Frequent item sets in database D using Apriori Algorithm. b) Strong Association rules for database D.(b)Define frequent sets, Confidence and support countwith suitable example.(c)Explain Association mining to correlation analysis with example.(d)Explain multilevel and multidimensional association rule with suitable example.(e)Discuss in detail about the quantitative association rule mining.(b)Define classification with an example. Also, discuss different challenges occur during classification process?(b)Define confusion matrix with an example. Also discuss precision, recall, accuracy and diagram.(c)Define confusion matrix with an example. Also discuss precision, recall, accuracy and F1-score performance measures.(d)How Bayesian classification is based on Bayes' theorem and probabilistic reasoning? Discuss the application of Bayesian classification in text classification and spam filtering.(e)Explain density-based clustering method based on connected regions (DBSCAN)(c)Explain density-based clustering method based on connected regions (DBSCAN)(c)Explain density-based clustering method based on connected regions (DBSCAN)(c)Explain density-based clustering method based on connected regions (DBSCAN)	(a)	Consider the data Set D with following transactions.		
100A, C, D200B, C, E300A, B, C, E400B, EUsing the threshold values support = 2 and confidence=50%.Evaluate the following.a) All Frequent item sets in database D using Apriori Algorithm.b) Strong Association rules for database D.(b) Define frequent sets, Confidence and support countwith suitable example.CO 2(c) Explain Association mining to correlation analysis with example.CO 2(d) Explain multilevel and multidimensional association rule with suitable example.CO 2(e) Discuss in detail about the quantitative association rule mining.CO 3Co 4Co 3Co 4Co 4Co 5Co 7Co 7Co 7Co 8Co 7Co 8Co 7Co 8Co 8Co 8Co 9Co 9	100A, C, D200B, C, E300A, B, C, E400B, EUsing the threshold values support = 2 and confidence=50%. Evaluate the following.a) All Frequent item sets in database D using Apriori Algorithm. b) Strong Association rules for database D.(b) Define frequent sets, Confidence and support countwith suitable example.(c) Explain Association mining to correlation analysis with example.(d) Explain multilevel and multidimensional association rule mining.(e) Discuss in detail about the quantitative association rule mining.(f) Define classification with an example. Also, discuss different challenges occur during classification process?(b) Define confusion matrix with an example. Also discuss precision, recall, accuracy and F1-score performance measures.(c)Define confusion dative is based on Bayes' theorem and probabilistic reasoning? Discuss the application of Bayesian classification in text classification and spam filtering.(e)(f) How Bayesian classification of Bayesian classification in text classification and spam filtering.(e)(f) Explain density-based clustering method based on connected regions (DBSCAN)(c) algorithm with an example.		Transaction ID Items		
200B, C, E300A, B, C, E400B, EUsing the threshold values support = 2 and confidence=50%.Evaluate the following.a) All Frequent item sets in database D using Apriori Algorithm.b) Strong Association rules for database D.(b) Define frequent sets, Confidence and support countwith suitable example.(c) Explain Association mining to correlation analysis with example.(d) Explain multilevel and multidimensional association rule with suitable example.(e) Discuss in detail about the quantitative association rule mining.(f) Define classification with an example. Also, discuss different challenges occur during classification process?(b) Define backward and forward propagation in neural network with neat and clean diagram.(c) Define confusion matrix with an example. Also discuss precision, recall, accuracy and F1-score performance measures.(d) How Bayesian classification is based on Bayes' theorem and probabilistic reasoning?(d) How Bayesian classification of Bayesian classification in text classification and spam filtering.(e) Explain density-based clustering method based on connected regions (DBSCAN)(c) Explain density-based clustering method based on connected regions (DBSCAN)(c) Structure of the scample.	200       B, C, E         300       A, B, C, E         400       B, E         Using the threshold values support = 2 and confidence=50%.         Evaluate the following.         a) All Frequent item sets in database D using Apriori Algorithm.         b) Strong Association rules for database D.         (b) Define frequent sets, Confidence and support countwith suitable example.       CO 2       2         (c) Explain Association mining to correlation analysis with example.       CO 2       2         (d) Explain multilevel and multidimensional association rule with suitable example.       CO 2       2         (e) Discuss in detail about the quantitative association rule mining.       CO 2       2         Q. No 3       Attempt Any Four Parts. Each Question Carries 5 Marks.       CO 8       BL         (a) Define classification with an example. Also, discuss different challenges occur during classification process?       CO 3       2         (b) Define backward and forward propagation in neural network with neat and clean diagram.       CO 3       2         (c) Define confusion matrix with an example. Also discuss precision, recall, accuracy and F1-score performance measures.       CO 3       2         (d) How Bayesian classification is based on Bayes' theorem and probabilistic reasoning?       CO 3       3         Discuss the application of Bayesian classification in text classificati		100 A, C, D		
300A, B, C, E400B, EUsing the threshold values support = 2 and confidence=50%.Evaluate the following.a) All Frequent item sets in database D using Apriori Algorithm.b) Strong Association rules for database D.(b) Define frequent sets, Confidence and support countwith suitable example.(c) Explain Association mining to correlation analysis with example.(d) Explain multilevel and multidimensional association rule with suitable example.(e) Discuss in detail about the quantitative association rule mining.(f) Define classification with an example. Also, discuss different challenges occur during classification process?(b) Define confusion matrix with an example. Also discuss precision, recall, accuracy and f1-score performance measures.(d) How Bayesian classification is based on Bayes' theorem and probabilistic reasoning? Discuss the application of Bayesian classification in text classification and spam filtering.(e) Explain density-based clustering method based on connected regions (DBSCAN)(c) Explain density-based clustering method based on connected regions (DBSCAN)(c) Strong based clustering method based on connected regions (DBSCAN)(c) Co 3(c) Explain density-based clustering method based on connected regions (DBSCAN)(c) Explain density-based clustering method based on connected regions (DBSCAN)(c) Strong based clustering method based on connected regions (DBSCAN)(c) Explain density-based clustering method based on connected regions (DBSCAN)	300       A, B, C, E         400       B, E         Using the threshold values support = 2 and confidence=50%.         Evaluate the following.         a) All Frequent item sets in database D using Apriori Algorithm.         b) Strong Association rules for database D.         (b) Define frequent sets, Confidence and support countwith suitable example.       CO 2         (c) Explain Association mining to correlation analysis with example.       CO 2         (d) Explain multilevel and multidimensional association rule with suitable example.       CO 2         (e) Discuss in detail about the quantitative association rule mining.       CO 2         Q. No 3       Attempt Any Four Parts. Each Question Carries 5 Marks.       CO BL         (a) Define classification with an example. Also, discuss different challenges occur during classification process?       CO 3       2         (b) Define backward and forward propagation in neural network with neat and clean diagram.       CO 3       2         (c) Define confusion matrix with an example. Also discuss precision, recall, accuracy and F1-score performance measures.       CO 3       2         (d) How Bayesian classification is based on Bayes' theorem and probabilistic reasoning?       CO 3       3         Discuss the application of Bayesian classification in text classification and spam filtering.       CO 3       2         (e) Explain density-based clustering method based on		200 B, C, E		
400B, EUsing the threshold values support = 2 and confidence=50%. Evaluate the following. a) All Frequent item sets in database D using Apriori Algorithm. b) Strong Association rules for database D.(b)Define frequent sets, Confidence and support countwith suitable example.CO 2(c)Explain Association mining to correlation analysis with example.CO 2(d)Explain multilevel and multidimensional association rule with suitable example.CO 2(e)Discuss in detail about the quantitative association rule mining.CO 2(f)Define classification with an example. Also, discuss different challenges occur during classification process?CO 3(b)Define backward and forward propagation in neural network with neat and clean diagram.CO 3(c)Define confusion matrix with an example. Also discuss precision, recall, accuracy and F1-score performance measures.CO 3(d)How Bayesian classification is based on Bayes' theorem and probabilistic reasoning? Discuss the application of Bayesian classification in text classification and spam filtering.CO 3(e)Explain density-based clustering method based on connected regions (DBSCAN) algorithm with an example.CO 3	400B, EUsing the threshold values support = 2 and confidence=50%. Evaluate the following. a) All Frequent item sets in database D using Apriori Algorithm. b) Strong Association rules for database D.(b)Define frequent sets, Confidence and support countwith suitable example.CO 2 CO 2 CO 2 CO 2(c)Explain Association mining to correlation analysis with example.CO 2 CO 2 CO 2(d)Explain multilevel and multidimensional association rule with suitable example.CO 2 CO 2 CO 2(e)Discuss in detail about the quantitative association rule mining.CO 3 CO 3Q. No 3Attempt Any Four Parts. Each Question Carries 5 Marks. classification process?CO 8L CO 3(a)Define classification with an example. Also, discuss different challenges occur during diagram.CO 3 CO 3(b)Define confusion matrix with an example. Also discuss precision, recall, accuracy and diagram.CO 3 CO 3(c)Define confusion matrix with an example. Also discuss precision, recall, accuracy and Discuss the application of Bayesian classification in text classification and spam filtering.CO 3 CO 3(d)How Bayesian classification is based on Bayes' theorem and probabilistic reasoning? Discuss the application of Bayesian classification in text classification and spam filtering.CO 3 CO 3(e)Explain density-based clustering method based on connected regions (DBSCAN)CO 3 CO 3(e)Explain density-based clustering method based on connected regions (DBSCAN)CO 3 CO 3		300 A, B, C, E	1	
Using the threshold values support = 2 and confidence=30%. Evaluate the following. a) All Frequent item sets in database D using Apriori Algorithm. b) Strong Association rules for database D.CO 2 2 2 2 (c) Explain Association mining to correlation analysis with example.CO 2 2 2 2 (d) Explain multilevel and multidimensional association rule with suitable example.CO 2 2 2 2 (e) Discuss in detail about the quantitative association rule mining.CO 2 2 2 2 (C) Explain classification with an example. Also, discuss different challenges occur during diagram.CO 3 2 2 2(b) Define classification matrix with an example. Also discuss precision, recall, accuracy and diagram.CO 3 2 2 22 2 2(c) Define confusion matrix with an example. Also discuss precision, recall, accuracy and F1-score performance measures.CO 3 2 2 2 22 2 2(d) How Bayesian classification is based on Bayes' theorem and probabilistic reasoning? Discuss the application of Bayesian classification in text classification and spam filtering.CO 3 2 2 2(e) Explain density-based clustering method based on connected regions (DBSCAN)CO 3 2 2 2	Using the threshold values support = 2 and confidence=50%.         Evaluate the following.         a) All Frequent item sets in database D using Apriori Algorithm.         b) Strong Association rules for database D.         (b) Define frequent sets, Confidence and support countwith suitable example.       CO 2         (c) Explain Association mining to correlation analysis with example.       CO 2         (d) Explain multilevel and multidimensional association rule with suitable example.       CO 2         (e) Discuss in detail about the quantitative association rule mining.       CO 3         Q. No 3       Attempt Any Four Parts. Each Question Carries 5 Marks.       CO 8         (a) Define classification with an example. Also, discuss different challenges occur during classification process?       CO 3       2         (b) Define confusion matrix with an example. Also discuss precision, recall, accuracy and diagram.       CO 3       2         (c) Define confusion matrix with an example. Also discuss precision, recall, accuracy and F1-score performance measures.       CO 3       2         (d) How Bayesian classification is based on Bayes' theorem and probabilistic reasoning? Discuss the application of Bayesian classification in text classification and spam filtering.       CO 3       2         (e) Explain density-based clustering method based on connected regions (DBSCAN)       CO 3       2	A	400 B, E		
Evaluate the following.a) All Frequent item sets in database D using Apriori Algorithm.b)b) Strong Association rules for database D.CO 22(b) Define frequent sets, Confidence and support countwith suitable example.CO 22(c) Explain Association mining to correlation analysis with example.CO 22(d) Explain multilevel and multidimensional association rule with suitable example.CO 22(e) Discuss in detail about the quantitative association rule mining.CO 22(e) Define classification with an example. Also, discuss different challenges occur during classification process?CO 32(b) Define backward and forward propagation in neural network with neat and clean diagram.CO 32(c) Define confusion matrix with an example. Also discuss precision, recall, accuracy and F1-score performance measures.CO 32(d) How Bayesian classification is based on Bayes' theorem and probabilistic reasoning? Discuss the application of Bayesian classification in text classification and spam filtering.CO 32(e) Explain density-based clustering method based on connected regions (DBSCAN)CO 32	Evaluate the following.       a) All Frequent item sets in database D using Apriori Algorithm.       b) Strong Association rules for database D.         (b) Define frequent sets, Confidence and support countwith suitable example.       CO 2       2         (c) Explain Association mining to correlation analysis with example.       CO 2       2         (d) Explain multilevel and multidimensional association rule with suitable example.       CO 2       2         (e) Discuss in detail about the quantitative association rule mining.       CO 2       2         Q. No 3       Attempt Any Four Parts. Each Question Carries 5 Marks.       CO 8       BL         (a) Define classification with an example. Also, discuss different challenges occur during classification process?       CO 3       2         (b) Define backward and forward propagation in neural network with neat and clean diagram.       CO 3       2         (c) Define confusion matrix with an example. Also discuss precision, recall, accuracy and F1-score performance measures.       CO 3       2         (d) How Bayesian classification is based on Bayes' theorem and probabilistic reasoning?       CO 3       3         Discuss the application of Bayesian classification in text classification and spam filtering.       CO 3       2         (e) Explain density-based clustering method based on connected regions (DBSCAN)       CO 3       2		Using the threshold values support = $2$ and confidence=50%.		
a) All Frequent item sets in database D using Aprilon Algorithm.b) Strong Association rules for database D.(b) Define frequent sets, Confidence and support countwith suitable example.CO 22(c) Explain Association mining to correlation analysis with example.CO 22(d) Explain multilevel and multidimensional association rule with suitable example.CO 22(e) Discuss in detail about the quantitative association rule mining.CO 8(a) Define classification with an example. Also, discuss different challenges occur during classification process?CO 32(b) Define backward and forward propagation in neural network with neat and clean diagram.CO 32(c) Define confusion matrix with an example. Also discuss precision, recall, accuracy and F1-score performance measures.CO 32(d) How Bayesian classification is based on Bayes' theorem and probabilistic reasoning? Discuss the application of Bayesian classification in text classification and spam filtering.CO 32(e) Explain density-based clustering method based on connected regions (DBSCAN)CO 32	<ul> <li>a) All Frequent tem sets in database D using April Argonium.</li> <li>b) Strong Association rules for database D.</li> <li>(b) Define frequent sets, Confidence and support countwith suitable example.</li> <li>(c) Explain Association mining to correlation analysis with example.</li> <li>(c) Explain Multilevel and multidimensional association rule with suitable example.</li> <li>(c) Explain multilevel and multidimensional association rule with suitable example.</li> <li>(c) Z 2</li> <li>(d) Explain multilevel and multidimensional association rule with suitable example.</li> <li>(e) Discuss in detail about the quantitative association rule mining.</li> <li>(c) Z 2</li> <li>(e) Define classification with an example. Also, discuss different challenges occur during classification process?</li> <li>(b) Define backward and forward propagation in neural network with neat and clean diagram.</li> <li>(c) Define confusion matrix with an example. Also discuss precision, recall, accuracy and F1-score performance measures.</li> <li>(d) How Bayesian classification is based on Bayes' theorem and probabilistic reasoning?</li> <li>(c) Explain density-based clustering method based on connected regions (DBSCAN)</li> <li>(c) Explain density-based clustering method based on connected regions (DBSCAN)</li> </ul>		Evaluate the following.		
<ul> <li>(b) Strong Association rules for database D.</li> <li>(c) Define frequent sets, Confidence and support countwith suitable example.</li> <li>(c) Explain Association mining to correlation analysis with example.</li> <li>(d) Explain multilevel and multidimensional association rule with suitable example.</li> <li>(c) Explain multilevel and multidimensional association rule with suitable example.</li> <li>(c) Explain frequent sets, Confidence and support countwith suitable example.</li> <li>(d) Explain multilevel and multidimensional association rule with suitable example.</li> <li>(e) Discuss in detail about the quantitative association rule mining.</li> <li>(f) Define classification with an example. Also, discuss different challenges occur during classification process?</li> <li>(b) Define backward and forward propagation in neural network with neat and clean diagram.</li> <li>(c) Define confusion matrix with an example. Also discuss precision, recall, accuracy and F1-score performance measures.</li> <li>(d) How Bayesian classification is based on Bayes' theorem and probabilistic reasoning? Discuss the application of Bayesian classification in text classification and spam filtering.</li> <li>(e) Explain density-based clustering method based on connected regions (DBSCAN)</li> <li>(c) CO 3</li> </ul>	<ul> <li>(b) Strong Association rules for database D.</li> <li>(c) Explain Association mining to correlation analysis with example.</li> <li>(c) Explain Association mining to correlation analysis with example.</li> <li>(c) Explain multilevel and multidimensional association rule with suitable example.</li> <li>(c) Explain multilevel and multidimensional association rule mining.</li> <li>(d) Explain multilevel and multidimensional association rule mining.</li> <li>(e) Discuss in detail about the quantitative association rule mining.</li> <li>(f) Define classification with an example. Also, discuss different challenges occur during classification process?</li> <li>(b) Define backward and forward propagation in neural network with neat and clean diagram.</li> <li>(c) Define confusion matrix with an example. Also discuss precision, recall, accuracy and F1-score performance measures.</li> <li>(d) How Bayesian classification is based on Bayes' theorem and probabilistic reasoning? Discuss the application of Bayesian classification in text classification and spam filtering.</li> <li>(e) Explain density-based clustering method based on connected regions (DBSCAN)</li> <li>(c) CO 3</li> </ul>		a) All Frequent item sets in database D using Apriori Algorithm.		
<ul> <li>(b) Define frequent sets, Confidence and support contrivial solution example.</li> <li>(c) Explain Association mining to correlation analysis with example.</li> <li>(d) Explain multilevel and multidimensional association rule with suitable example.</li> <li>(e) Discuss in detail about the quantitative association rule mining.</li> <li>(f) Define classification with an example. Also, discuss different challenges occur during classification process?</li> <li>(g) Define backward and forward propagation in neural network with neat and clean diagram.</li> <li>(c) Define confusion matrix with an example. Also discuss precision, recall, accuracy and F1-score performance measures.</li> <li>(d) How Bayesian classification is based on Bayes' theorem and probabilistic reasoning?</li> <li>(c) Explain density-based clustering method based on connected regions (DBSCAN)</li> <li>(c) Explain density-based clustering method based on connected regions (DBSCAN)</li> </ul>	<ul> <li>(b) Define frequent sets, confidence and support counter or count performance or performance or performance or count performance or performance performance or performance or performance or performance or pe</li></ul>		b) Strong Association fulles for database D.	CO 2	2
<ul> <li>(c) Explain Association mining to correlation analysis with example.</li> <li>(d) Explain multilevel and multidimensional association rule with suitable example.</li> <li>(e) Discuss in detail about the quantitative association rule mining.</li> <li>(f) CO 2 2</li> <li>(g) Define Classification with an example. Also, discuss different challenges occur during CO 3 2</li> <li>(g) Define classification process?</li> <li>(h) Define confusion matrix with an example. Also discuss precision, recall, accuracy and diagram.</li> <li>(c) Define confusion matrix with an example. Also discuss precision, recall, accuracy and F1-score performance measures.</li> <li>(d) How Bayesian classification is based on Bayes' theorem and probabilistic reasoning?</li> <li>(c) Explain density-based clustering method based on connected regions (DBSCAN)</li> <li>(c) Explain density-based clustering method based on connected regions (DBSCAN)</li> </ul>	<ul> <li>(c) Explain Association mining to correlation analysis with example.</li> <li>(d) Explain multilevel and multidimensional association rule with suitable example.</li> <li>(e) Discuss in detail about the quantitative association rule mining.</li> <li>(f) Define classification with an example. Also, discuss different challenges occur during classification process?</li> <li>(b) Define backward and forward propagation in neural network with neat and clean diagram.</li> <li>(c) Define confusion matrix with an example. Also discuss precision, recall, accuracy and F1-score performance measures.</li> <li>(d) How Bayesian classification is based on Bayes' theorem and probabilistic reasoning? Discuss the application of Bayesian classification in text classification and spam filtering.</li> <li>(e) Explain density-based clustering method based on connected regions (DBSCAN)</li> <li>(c) CO 3</li> </ul>	(b)	Define frequent sets, Confidence and support countwild surface example.	CO 2	2
<ul> <li>(d) Explain induitiever and induition interview association rule mining.</li> <li>(e) Discuss in detail about the quantitative association rule mining.</li> <li>(c) Define the classification with an example. Also, discuss different challenges occur during classification process?</li> <li>(b) Define backward and forward propagation in neural network with neat and clean diagram.</li> <li>(c) Define confusion matrix with an example. Also discuss precision, recall, accuracy and F1-score performance measures.</li> <li>(d) How Bayesian classification is based on Bayes' theorem and probabilistic reasoning? Discuss the application of Bayesian classification in text classification and spam filtering.</li> <li>(e) Explain density-based clustering method based on connected regions (DBSCAN)</li> <li>(c) CO 3</li> </ul>	<ul> <li>(d) Explain indufferent and indufferent absorbation can be for the formation of the formation o</li></ul>	(C)	Explain Association mining to correlation analysis with enaltype.	CO 2	2
<ul> <li>(e) Discuss in defail about the quantitative absertation (a) discuss in defail about the quantitative absertation (a) Define Courses (b) Define classification with an example. Also, discuss different challenges occur during courses (classification process)</li> <li>(b) Define backward and forward propagation in neural network with neat and clean courses (classification matrix with an example. Also discuss precision, recall, accuracy and filtering.</li> <li>(c) Define confusion matrix with an example. Also discuss precision, recall, accuracy and course (classification is based on Bayes' theorem and probabilistic reasoning? Co 3</li> <li>(d) How Bayesian classification is based on Bayes' theorem and probabilistic reasoning? Discuss the application of Bayesian classification in text classification and spam filtering.</li> <li>(e) Explain density-based clustering method based on connected regions (DBSCAN)</li> <li>(c) Co 3</li> </ul>	<ul> <li>(e) Discuss in detail about the quantitative accountering the integral of the quantitative accountering the integral of the quantitative accountering integral of the quantitative accoun</li></ul>	(a)	Discuss in detail about the quantitative association rule mining.	CO 2	2
Q. No 3Attempt Any Four Parts. Each Question Carries 5 Marks.COBI(a)Define classification with an example. Also, discuss different challenges occur during classification process?CO 32(b)Define backward and forward propagation in neural network with neat and clean diagram.CO 32(c)Define confusion matrix with an example. Also discuss precision, recall, accuracy and F1-score performance measures.CO 32(d)How Bayesian classification is based on Bayes' theorem and probabilistic reasoning? Discuss the application of Bayesian classification in text classification and spam filtering.CO 33(e)Explain density-based clustering method based on connected regions (DBSCAN) algorithm with an example.CO 32	Q. No 3Attempt Any Four Parts. Each Question Carries 5 Marks.COBL(a)Define classification with an example. Also, discuss different challenges occur during classification process?CO 32(b)Define backward and forward propagation in neural network with neat and clean diagram.CO 32(c)Define confusion matrix with an example. Also discuss precision, recall, accuracy and F1-score performance measures.CO 32(d)How Bayesian classification is based on Bayes' theorem and probabilistic reasoning? Discuss the application of Bayesian classification in text classification and spam filtering.CO 33(e)Explain density-based clustering method based on connected regions (DBSCAN) algorithm with an example.CO 32	(e)	Discuss in detail about the quantitative association rate initially.		
Q. No 3Attempt Any Four Parts. Each Question Carries 5 straints.CCDefine(a)Define classification with an example. Also, discuss different challenges occur during classification process?CO 32(b)Define backward and forward propagation in neural network with neat and clean diagram.CO 32(c)Define confusion matrix with an example. Also discuss precision, recall, accuracy and F1-score performance measures.CO 32(d)How Bayesian classification is based on Bayes' theorem and probabilistic reasoning? Discuss the application of Bayesian classification in text classification and spam filtering.CO 32(e)Explain density-based clustering method based on connected regions (DBSCAN) algorithm with an example.CO 32	<ul> <li>Q. No 3 Attempt Any Four Parts. Each Question carries 5 marks.</li> <li>(a) Define classification with an example. Also, discuss different challenges occur during classification process?</li> <li>(b) Define backward and forward propagation in neural network with neat and clean diagram.</li> <li>(c) Define confusion matrix with an example. Also discuss precision, recall, accuracy and F1-score performance measures.</li> <li>(d) How Bayesian classification is based on Bayes' theorem and probabilistic reasoning? Discuss the application of Bayesian classification in text classification and spam filtering.</li> <li>(e) Explain density-based clustering method based on connected regions (DBSCAN)</li> <li>(c) CO 3</li> </ul>		Attended Any Four Ports Fach Question Carries 5 Marks	0	BI
<ul> <li>(a) Define classification with an example. Also, discuss different channeliges occur during cost of a classification process?</li> <li>(b) Define backward and forward propagation in neural network with neat and clean diagram.</li> <li>(c) Define confusion matrix with an example. Also discuss precision, recall, accuracy and F1-score performance measures.</li> <li>(d) How Bayesian classification is based on Bayes' theorem and probabilistic reasoning? Discuss the application of Bayesian classification in text classification and spam filtering.</li> <li>(e) Explain density-based clustering method based on connected regions (DBSCAN) CO 3 2 algorithm with an example.</li> </ul>	<ul> <li>(a) Define classification with an example. Also, discuss different charlenges occur during cost occur during cost occur during classification process?</li> <li>(b) Define backward and forward propagation in neural network with neat and clean diagram.</li> <li>(c) Define confusion matrix with an example. Also discuss precision, recall, accuracy and F1-score performance measures.</li> <li>(d) How Bayesian classification is based on Bayes' theorem and probabilistic reasoning? Co 3 Discuss the application of Bayesian classification in text classification and spam filtering.</li> <li>(e) Explain density-based clustering method based on connected regions (DBSCAN) Co 3 2 algorithm with an example.</li> </ul>	Q. NO 3	Define classification with an example. Also discuss different challenges occur during	CO 3	2
<ul> <li>(b) Define backward and forward propagation in neural network with neat and clean diagram.</li> <li>(c) Define confusion matrix with an example. Also discuss precision, recall, accuracy and F1-score performance measures.</li> <li>(d) How Bayesian classification is based on Bayes' theorem and probabilistic reasoning? Discuss the application of Bayesian classification in text classification and spam filtering.</li> <li>(e) Explain density-based clustering method based on connected regions (DBSCAN)</li> <li>(c) CO 3</li> </ul>	<ul> <li>(b) Define backward and forward propagation in neural network with neat and clean diagram.</li> <li>(c) Define confusion matrix with an example. Also discuss precision, recall, accuracy and F1-score performance measures.</li> <li>(d) How Bayesian classification is based on Bayes' theorem and probabilistic reasoning? Discuss the application of Bayesian classification in text classification and spam filtering.</li> <li>(e) Explain density-based clustering method based on connected regions (DBSCAN)</li> <li>(c) CO 3</li> </ul>	(a)	Define classification process?		
<ul> <li>(b) Define backward and forward propagation in fictural fietwork with field and creat diagram.</li> <li>(c) Define confusion matrix with an example. Also discuss precision, recall, accuracy and F1-score performance measures.</li> <li>(d) How Bayesian classification is based on Bayes' theorem and probabilistic reasoning? CO 3 3 Discuss the application of Bayesian classification in text classification and spam filtering.</li> <li>(e) Explain density-based clustering method based on connected regions (DBSCAN) CO 3 2 algorithm with an example.</li> </ul>	<ul> <li>(b) Define backward and forward propagation in field at field with field and field in the end of the diagram.</li> <li>(c) Define confusion matrix with an example. Also discuss precision, recall, accuracy and F1-score performance measures.</li> <li>(d) How Bayesian classification is based on Bayes' theorem and probabilistic reasoning? CO 3 3 Discuss the application of Bayesian classification in text classification and spam filtering.</li> <li>(e) Explain density-based clustering method based on connected regions (DBSCAN) CO 3 2 algorithm with an example.</li> </ul>		classification process?	CO 3	2
<ul> <li>(c) Define confusion matrix with an example. Also discuss precision, recall, accuracy and F1-score performance measures.</li> <li>(d) How Bayesian classification is based on Bayes' theorem and probabilistic reasoning? Discuss the application of Bayesian classification in text classification and spam filtering.</li> <li>(e) Explain density-based clustering method based on connected regions (DBSCAN)</li> <li>(c) CO 3</li> <li>(c) 2</li> </ul>	<ul> <li>(c) Define confusion matrix with an example. Also discuss precision, recall, accuracy and F1-score performance measures.</li> <li>(d) How Bayesian classification is based on Bayes' theorem and probabilistic reasoning? Discuss the application of Bayesian classification in text classification and spam filtering.</li> <li>(e) Explain density-based clustering method based on connected regions (DBSCAN)</li> <li>(c) CO 3</li> <li>(c) 2</li> </ul>	(D)	discrem		-
<ul> <li>(c) Define condusion matrix with an example. This clocus precision, recard, accurcy and coordinates of the precision of the preci</li></ul>	<ul> <li>(c) Define confusion matrix with an example. This disease precision, recard, accurcy and probabilistic reasoning?</li> <li>(d) How Bayesian classification is based on Bayes' theorem and probabilistic reasoning?</li> <li>(d) How Bayesian classification of Bayesian classification in text classification and spam filtering.</li> <li>(e) Explain density-based clustering method based on connected regions (DBSCAN)</li> <li>(c) 3</li> <li>(c) 4</li> </ul>	(-)	Define confusion matrix with an example. Also discuss precision, recall, accuracy and	CO 3	2
<ul> <li>(d) How Bayesian classification is based on Bayes' theorem and probabilistic reasoning? Discuss the application of Bayesian classification in text classification and spam filtering.</li> <li>(e) Explain density-based clustering method based on connected regions (DBSCAN)</li> <li>(c) CO 3</li> <li>(c) 2</li> </ul>	<ul> <li>(d) How Bayesian classification is based on Bayes' theorem and probabilistic reasoning? Discuss the application of Bayesian classification in text classification and spam filtering.</li> <li>(e) Explain density-based clustering method based on connected regions (DBSCAN)</li> <li>(c) CO 3</li> <li>(c) 2</li> </ul>	(C)	El soore performance measures		-
<ul> <li>(d) How Bayesian classification is obset on Bayes incoron and production reacting.</li> <li>Discuss the application of Bayesian classification in text classification and spam filtering.</li> <li>(e) Explain density-based clustering method based on connected regions (DBSCAN)</li> <li>CO 3 2 algorithm with an example.</li> </ul>	<ul> <li>(d) How Bayesian classification is obset on Bayes informatic production reasoning.</li> <li>Discuss the application of Bayesian classification in text classification and spam filtering.</li> <li>(e) Explain density-based clustering method based on connected regions (DBSCAN)</li> <li>(c) CO 3 2 algorithm with an example.</li> </ul>		How Bayesian classification is based on Bayes' theorem and probabilistic reasoning?	CO 3	3
<ul> <li>(e) Explain density-based clustering method based on connected regions (DBSCAN)</li> <li>(c) CO 3 2 algorithm with an example.</li> </ul>	<ul> <li>(e) Explain density-based clustering method based on connected regions (DBSCAN)</li> <li>(c) algorithm with an example.</li> </ul>	(u)	Discuss the application of Bayesian classification in text classification and spam		
(e) Explain density-based clustering method based on connected regions (DBSCAN) CO 3 2 algorithm with an example.	(e) Explain density-based clustering method based on connected regions (DBSCAN) CO 3 2 algorithm with an example.		filtering.		
algorithm with an example.	algorithm with an example.	(e)	Explain density-based clustering method based on connected regions (DBSCAN)	CO 3	2
			algorithm with an example.		

0

Q. No 4	Attempt Any Two Parts, Each Question Carries 10 Marks.	СО	BL
(a)	Define logistic regression with example? How logistic regression method is different	CO 4	2
(b)	Definition and the loss function used in logistic regression.		
(0)	Define exploratory data analysis. Also, define the steps involved in exploratory data analysis	CO 4	2
(c)	Elaborate the following:	<u> </u>	-
	a) Web Mining	CU 4	2
	b) Text Mining		
	c) Multimedia Data Mining		

Q. No 5	Attempt Any Two Posts Factor		
(a)	Describe Data warehouse Alea de Carries 10 Marks.	CO	BL
(b)	its with advantages and disadvantages. Elaborate the following OLAP function	CO 5	
	<ul> <li>a) Roll-up</li> <li>b) Drill-down</li> <li>c) Slicing</li> <li>d) Dising</li> </ul>	CO 5	
(c)	Explain online analytical processing (OLAP) tool, How OLAP technologies		
	in the other technology works and	CO 5	

-

0

## -----End of Paper----

67