

MAHATMA GANDHI MISSION UNIVERSITY, AURANGABAD

JAWAHARLAL NEHRU ENGINEERING COLLEGE

Mid Semester Examination – March 2024

Course: MCA

Sem: II-Semester

Subject Name: Data Warehousing and Data Mining

Subject Code: 20PMC201D

Max Marks: 20 Marks

Date:- 05/03/2024

Duration:- 1 Hr.

Instructions to the Students:		CO	BL	Marks
1. All questions are compulsory				
Q. 1	Attempt ALL. Question 1,2,3 carries 1 mark and Question 4 carries 3 marks.			6
1.	The pivot operation is also known as _____ a. Dice b. Rotation c. Rollup d. drilldown	CO2	BL2	1
2.	OLAP stands for _____ a. Online analytical processing b. Online analysis processing c. Online transaction processing d. Online aggregate processing	CO2	BL2	1
3.	In web mining, _____ is used to know the order in which URLs tend to be accessed a. clustering b. associations c. sequential analysis d. classification	CO2	BL2	1
4.	Explain Text Mining in detail.	CO2	BL2	3
Q.2	Solve Any ONE of the following. Each Question carries 6 marks			6
(A)	i) Use the z-score normalization methods to normalize the following group of data: 8,10,15,20. (Given Mean= 13.25 and SD= 4.6) ii) Consider the following data (in increasing order) for the attribute age: 13, 15, 16, 16, 19, 20,20, 21, 22, 22, 25, 25, 25, 25, 30, 33, 33, 35, 35, 35, 35, 36, 40, 45, 46, 52, 70: Use smoothing by bin means to smooth the above data, using a bin depth of 3.	CO1	BL2	
(B)	Explain Data integration and transformation in detail	CO1	BL2	
Q. 3	Solve Any TWO of the following. Each Question carries 4 marks			8
(A)	Explain OLAP with its operations.	CO2	BL2	
(B)	Explain the snowflakes schema with suitable diagram	CO2	BL2	
(C)	Explain Web mining with its types.	CO2	BL2	
*** End ***				

MAHATMA GANDHI MISSION UNIVERSITY, Chh. sambhajinagar

JAWAHARLAL NEHRU ENGINEERING COLLEGE

Mid Semester Examination – MAR 2024

Program: MCA

Sem: II

Course Name: Agile Software Development

Subject Code:20PMC202D

Max Marks: 20 Marks

Date:05/03/2024

Duration:- 1 Hr.

Instructions to the Students:				
1. All questions are compulsory				
		CO	BL	Marks
Q. 1	Solve <u>Any TWO</u> of the following. Each Question carries 3marks.			6
(A)	Write about the values of agile	1	BL 2	3
(B)	What is Estimation? Explain it's role in agile product Management	3	BL 2	3
(C)	Explain the concept of product backlog and sprint backlog	2,3	BL 2	3
Q.2	Solve <u>Any ONE</u> of the following. Each Question carries 6 marks			6
(A)	Write down 12 principle of Agile	1	BL 2	6
(B)	Explain the Risk analysis and management in agile	1,2	BL 2	6
Q. 3	Solve <u>Any TWO</u> of the following. Each Question carries 4 marks.			8
(A)	Explain the scrum artifacts	4	BL 2	4
(B)	Explain the sprint burndown chart and its significance	2	BL 2	4
(C)	Explain the velocity as a metrics.	1,2	BL 2	4
*** End ***				

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Mahatma Gandhi Mission University, Aurangabad.

Jawaharlal Nehru Engineering College

Mid Semester Examination – March 2024

Course – MCA

SEM – II

Subject Name : Machine Learning using Python

Subject Code : 20PMC204E

Max Marks : 20

Date : 06-Mar-2024

Duration : 1:00 Hr

Instructions to the Students :

- All Questions are compulsory.

		CO	BL	Marks																																																																																										
Q1.	A. Multiple choice questions : 1. Identify the type of learning in which labeled training data is used. <ul style="list-style-type: none"> • Semi unsupervised learning • Supervised learning • Reinforcement learning • Unsupervised learning 2. Machine learning is a subset of which of the following. <ul style="list-style-type: none"> • Artificial intelligence • Deep learning • Data learning • None of the above 	CO1	BL2	(2)																																																																																										
	B. Solve any one: 1. Explain Learning Multiple Classes with example. 2. Explain PAC with suitable example.	CO1	BL2	(4)																																																																																										
Q2.	1. Explain the following terms with suitable figure (any two) <ol style="list-style-type: none"> a) Entropy. b) Activation Functions. c) Information gain. d) Hypothesis Space . 	CO2	BL2	(6)																																																																																										
Q3.	Answer any one 1. With a suitable example explain back propagation in Artificial Neural Network ? 2. Explain the concept of Decision Tree learning? Discuss the selection of attribute process in ID3 algorithm. Consider the below training instances. <table border="1" style="margin-left: 20px;"> <thead> <tr> <th>Day</th> <th>Outlook</th> <th>Temperature</th> <th>Humidity</th> <th>Wind</th> <th>Play Tennis</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	Play Tennis	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	CO2	BL2	(8)
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Mahatma Gandhi Mission University Aurangabad
Jawaharlal Nehru Engineering College, Aurangabad

Mid Semester Exam March 2024

Class: FYMCA.

Sem:II

Course Name: Basic Cloud Computing Essentials

Subject Code: 20PMC206E

Max Marks:20

Date: 06/03/2024

Duration:- 1 Hr.

Instructions to the Students :

Give suitable example wherever necessary.

Question		CO	BL	Marks
Q 1)	Solve any two questions		2	6
	i) What is infrastructure as a service? What are advantages of it?	CO1		3
	ii) Justify the statement: Hypervisors plays important role in the virtualization concept..	CO2		3
	iii) What is server virtualization? How does it work?	CO2		3
Q2)	Solve any two		2	8
	i) What are various benefits of operating system virtualization?	CO2		4
	ii) Explain memory virtualization with example.	CO2		4
	iii) How Full virtualization is different from Para virtualization	CO2		4
Q3)	Solve any one		2	3
	1. Explain Application virtualization with example	CO2		3
	2. How Input-Output virtualization is beneficial? Explain.	CO2		3
Q4)	Solve following questions		1	3
	1. Select deployment model from the list. a) Identity b) Compliance c) Community d) SOA	CO1		1
	2. _____ image makes a copy of the entire computer system inside a single container such as a file. a) Software b) System c) Hardware d) All of the above	CO1		1
	3. Cloud Computing is an abstraction based on the notion of pooling physical resources and presenting them as a ----- resource. a) Real b) Virtual c) Cloud d) None of the mentioned	CO1		1

Mahatma Gandhi Mission University, Aurangabad

Mid Semester Examination – MAR 2024

Class: FYMCA

Sem: II

Subject Name: Cloud Security & Migration

Subject Code: 20PMC210E

Max Marks: 20

Date:-06-03-24

Duration:- 1 Hr.

Instructions to the Students:

- All questions are compulsory.

Q. 1	Write answers for the following.(1 marks each)	CO	B L	1*6=6
	1. I am using my face means which type of authentication I am using? a.What you are b.Where you are c.What you know d.What you have	1	2	
	2. in _____ stage of data life cycle , data that is no longer actively used but still has value is stored for long-term retention.	1	2	
	3. _____ is an XML-based framework used for exchanging user, resource, and service provisioning information among cooperating organizations a.SAML b.SPML c.XACML d.None	1	2	
	4. _____ is the process of converting plain or readable data into an unreadable format, called ciphertext, using an algorithm and a key	1	2	
	5. _____ refers to the process of creating copies of important data and storing them in a separate location or medium for safekeeping, in case the original data is lost, damaged, or corrupted	1	2	
	6. Define confidentiality and integrity	1	1	
Q.2	Solve Any Two of the following.			3 X 2=6
(A)	Explain data life cycle	1	2	
(B)	How will you implement IAM to add 1 user under JNEC group for accessing EC2 cloud service	3	3	
(C)	Explain application level infrastructure security	2	2	
Q.3	Solve Any Two of the following.			4*2=8
(A)	Explain availability management under Security Management in the Cloud	4	2	
(B)	Explain Changes to privacy risk management and compliance in relation to cloud computing	4	2	
(C)	Case study : XYZ Corporation is a company that provides digital marketing services to its clients. The company has recently started using a cloud-based platform to store and process client data as names, addresses, and email addresses. XYZ Corporation has implemented a data life cycle process to manage the data. Write all stages of data life cycle with the above concern.	4	3	

Mahatma Gandhi Mission University Aurangabad
Jawaharlal Nehru Engineering College, Aurangabad

Mid Semester Exam March 2024

Class: FYMCA.

Sem:II

Course Name: Data Science and Visualization

Subject Code: 20PMC208E

Max Marks:20

Date: 06/03/2024

Duration:- 1 Hr.

Instructions to the Students :

Give suitable example wherever necessary.

	Question	CO	BL	Marks
Q 1)	a) Solve all questions			6
	1. Which of the following is not a part of data science process?? I: Model Planning, II: Discovery , III: Operationalize, IV: Communication Building	CO1	2	1
	2. Business intelligence is used mainly for I: Processing Future data, II: Processing Past data, III: Processing only current data, IV: None Of the above	CO1		1
	3. Satellite images is example of I: Structured data, II: Unstructured data, III: Semistructured data IV: None of the mentioned	CO1		1
	b) Explain process of Business Intelligence.	CO1		3
Q2)	Solve any two		2	8
	i) What are different Data Analysis techniques available? Give example of Statistical Analysis.	CO3		4
	ii) What are different things need to check at the time of data acquisition?	CO2		4
	iii) What is API? Explain various types of APIs.	CO2		4
Q3)	Solve any one		2	6
	i) What are different ways to collect data for analysis?	CO2		6
	ii) What are the features which make R programming very popular?	CO2		6

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