الجامعة الوطنية
National University
Science & Technology للعلوم والتكنولوجيا
كلية عمان البحرية الدولية
International Maritime College Oman

ACADEMIC YEAR 2023 – 2024

Program	Term	Semester	Paper
FOUNDATION	2	2	MAIN1

MODULE NAME:	INFORMATION TECHNOLOGY-II		
MODULE CODE:	FCOM002	EXAM DATE:	17/7/2024
TEACHER'S NAME:	Mitha AL-khazimi	DURATION:	2 hrs.

Questions to be answered on:	Allowed requirements	Number of pages
Computer	Computer	(Incl. Cover Page): 4

Points of Attention:

- For each question, the maximum earned points are mentioned between brackets at the end of each question.
- Make sure your answers are written to the point.
- All answers must be written **in English**.
- When finished, save your answer on Moodle or hit the submit button.
- Cheating /copying is not allowed and will result in failing the exam.

STUDENT NAME:	
STUDENT ID:	
CLASS:	

FINAL MARKS	
	40
	10

Number of answer scripts: ……

Invigilator: ……

Student's signature: ……

Time of receipt: ……

Question 1 [12 Marks]

Download the file **FCOM002.docx** from Moodle onto your desktop and do the following tasks:

1. Open the file **Machine Learning.docx.**
2. Change the **Text format** of the whole file as given below:

- Font Type Name: **Times New Roman**
- Font size: **14**
- Colour: **Black**
- Set **Bold, Italic**
- Set to **Justify**
- Alignment: **Right**
- Line spacing: **2.5**
- Set the **Narrow Margins**
- Insert '**Machine Learning**' in the **header**
- Insert '**date, time, and page number**' in the **footer.**
- Insert the comment '**Machine Learning and New Technology**'**.**
- **Capitalize each word** of the **Title**.
- Search for the word '**Application**' and replace it with '**site**'.

Question 2 [6 Marks]

Insert a picture related to Machine Learning to the right side of the above paragraph.

- **Crop** a small part of the picture.
- Set the picture's **height to 1.33 and wight 7.76 pt**.
- Set the Brightness to - **60%** and the Contrast to - **60%**.
- Set picture style '**Drop Shadows Rectangle**'.
- Set picture border with **weight 1pt.**
- Apply **full reflection** effect to the picture: **2 points offset**.
- Add the custom **watermark** '**Machine Learning**' to the page.

Question 3 [12 Marks]

1. Insert **a table** with **4 columns** and **5 rows**, and enter the data as shown below.

Machine Learning Model	Description	Applications	Advantages
Linear Regression	Statistical method for modeling the relationship between a dependent variable and one or more independent variables.	Predictive analytics, forecasting, and trend analysis.	Simple to implement, interpretable results.
Random Forest	Ensemble learning technique that builds multiple decision trees and merges their predictions to improve accuracy and reduce overfitting.	Classification, regression, and feature selection.	Handles high-dimensional data, resistant to overfitting.
Convolutional Neural Networks (CNNs)	Deep learning models specifically designed for processing structured grid-like data such as images.	Image classification, object detection, and image segmentation.	Automatically learn hierarchical features, state-of-the-art performance in image-related tasks.
Recurrent Neural Networks (RNNs)	Neural networks specialized for sequential data by maintaining an internal state or memory.	Natural language processing, time series analysis, and speech recognition.	Captures temporal dependencies, handles variable-length sequences.

R., & Friedman, J. (2009).

1. The **font type** and **size** of the heading must be **Times New Roman and 16.**
2. The **font type** and **size** of the text must be **Times New Roman and 14.**
3. In the table, all text must be aligned to the **Right**.
4. Change the **text direction 'Machine Learning Model'** to be **vertical.**
5. Apply the following **Borders** option to the first row:
   - **Setting:** all
   - **Border Style:** 3 lines
   - **Color**: dark black
   - **Width:** 1pt

Question 4 [10 Marks]

- Insert from SmartArt **Basic Cycle** graphic
- Insert the following text in clockwise order **Gaming, Computer, Devices**
- Change the SmartArt Layout to **Block Cycle**
- Change the **colors** of the SmartArt to **colorful Range - Accent colors 2 to 4.**
- Change the Smart Art Style to **Intense Effect**
- Use **Screen shot** to insert **google chrome** inside SmartArt.
- Insert beside Microsoft Edge icon **WordArt** of any style and type **google chrome**
- Use **hyperlink** to connect the google chrome Icon image to the website. www.googlechrome.com

Reference:

Hastie, T., Tibshirani, R., & Friedman, J. (2009). The Elements of Statistical Learning: Data Mining, Inference, and Prediction. Springer.

Morrison, C., Pusins, D. and Ruffolo, L. (2015). *Computer Literacy Basics*. 5th ed. USA: Cengage Learning.

MLO & Bloom's Level of Complexity

#Q	MLO Addressed	Complexity Level
1	1, 2, 3	Understand / Apply/ /Create
2	1, 2, 3	Understand / Apply/ /Create
3	1, 2, 3	Understand / Apply/ /Create
4	1, 2, 3	Understand / Apply/ /Create