

ACADEMIC YEAR 2023 – 2024

Program	Year	Semester	Paper
ME	3	1	MAIN 2

MODULE NAME:	TECHNICAL WRITING
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MODULE CODE:	MENG-IV	EXAM DATE:	02/01/2024
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TEACHER'S NAME:	MARTIN	DURATION:	2 hrs.
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Questions to be answered on:	Allowed requirements	Number of pages
Space provided on the question paper	Pen	10

Points of Attention:

- For each question, the maximum earned points are mentioned between brackets at the end of each question.
- Write very clearly! Answers that are not readable are not marked and don't get points!
- Make sure your answers are written to the point.
- All answers should be written **in English**.
- Write all the answers **in blue or black pen only**.
- When finished, submit the question paper together with the answer scripts and the signed cover page to the invigilator.
- Any cheating/copying may result in an instant failing of the examination.

FINAL MARKS

STUDENT NAME:	
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STUDENT ID:	
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	45
	10

Number of answer scripts:

Invigilator:

Student's signature:

Time of receipt:

READING

[22 Marks]

Read the text and answer the questions that follow.

Synopsis

Costa Concordia disaster, the capsizing of an Italian cruise ship on January 13, 2012, after it struck rocks off the coast of Giglio Island in the Tyrrhenian Sea. More than 4,200 people were rescued, though 32 people died in the disaster. Several of the ship's crew, notably Capt. Francesco Schettino was charged with various crimes.

Construction and maiden voyage

The Costa Concordia was owned by Costa Crociere, a Carnival Corporation & PLC subsidiary. When launched in 2005, it was Italy's largest cruise ship, measuring 951 feet (290 metres) long with a passenger capacity of 3,780; by comparison, the Titanic was 882.5 feet (269 metres) long and could accommodate up to 2,435 passengers. The Concordia was known for its luxuries. It featured four swimming pools, a casino, and reportedly the largest spa on a ship. In July 2006, the vessel undertook its maiden voyage, a seven-day cruise of the Mediterranean Sea, with stops in Italy, France, and Spain. That became its standard route.

Collision and rescue

On January 13, 2012, the Concordia left Civitavecchia, Italy, at approximately 7:18 PM. On board were 1,023 crew members and 3,206 passengers. As the Concordia approached Giglio Island several hours later, it deviated from its standard course, moving closer to the small Tuscan Island for a maritime "salute," a common practice that included the cruise ship sounding its horn; the Concordia had performed several in the past. The area was known for rock outcroppings, and at some point, such a formation was noticed in the ship's path. Schettino, a captain of more than seven years, ordered a change in course, but due to language issues, the Indonesian helmsman steered the boat in the opposite direction. It reportedly took 13 seconds to correct the maneuver. The boat's bow ultimately swung clear, but the stern collided with the reef at approximately 9:45 PM. Confusion on the bridge resulted in conflicting orders, but the damage had been done: the Concordia's port (left) side had suffered a 174-foot (53-metre) tear.

An assessment of the damage revealed that five compartments, including the engine room, were flooding, and the ship soon lost power. In addition, the boat could not be steered with either the engines or the rudder functioning. However, the wind and the stuck position of the rudder caused the Concordia to turn back toward the island. While the change in direction made the later rescue easier, it caused the ship to start listing to the starboard side. The drifting Concordia eventually ran aground near the shore. During this time, a panicked passenger contacted her daughter in Italy, and the Italian coast guard called the Concordia at about 10:14 PM. Schettino, however, downplayed the damage, only noting that the vessel had experienced a blackout. Some 10 minutes later, the Coast Guard contacted the ship again, and at this time, the crew admitted that the boat was taking on water. However, Schettino's only request was for tugboats. At 10:39 PM, the first rescue vessel arrived. Approximately 15 minutes later, Schettino finally ordered the Concordia abandoned, though according to reports, lifeboats had already been launched. At around 11:20 PM, Schettino left the bridge and soon after abandoned the ship; he subsequently claimed that he fell off the Concordia and landed in a lifeboat. Some 13 minutes later, the last crew member departed the bridge, even though approximately 300 people were still on the ailing vessel. By 12:00 AM on January 14, the Concordia had a severe list, making the release of lifeboats difficult and forcing many to use ladders. At 12:40 AM, a Coast Guard captain, Schettino, who was in a lifeboat with other Concordia officers, ordered him to return to the vessel and oversee the evacuation. He refused. By this time, however, the rescue operations included 25 patrol boats, 14 merchant vessels, and numerous helicopters, and by early morning, 4,194 people were evacuated from the Concordia and taken to Giglio Island, which had a permanent population of less than 1,000. At 6:17 AM on January 14, search efforts were temporarily suspended, but divers rescued three more from inside the Concordia the following day. They were the

remaining survivors. Thirty-two people died in the disaster, and the last body was not recovered until November 2014.

Environmental concerns and salvage

With Giglio Island lying in a protected marine area, environmental issues relating to the Concordia wreck were of particular concern. The vessel was on the edge of an underwater cliff, leading to worries that the ship might slip and break apart, causing an oil spill. To lessen any potential damage, oil booms were placed around the wreckage, and in February 2012, salvage workers began removing more than 2,000 tons of fuel; the undertaking was completed the following month.

During this time, work also began to remove the vessel in the largest maritime salvage operation in history. It was not until September 2013 that the 114,000-ton Concordia was finally righted. The 19-hour process involved specially built underwater platforms, cranes, and some 500 people. In July 2014, the Concordia—outfitted with several steel containers serving as flotation devices—was towed to Genoa, Italy, where it was dismantled for scrap (Disaster | Definition & Types | Britannica, 2023).

Question 1. Answer the following questions. Write complete sentences.

(10 Marks)

grammar 0.5 mark	spelling 0.5 mark	content 1 mark
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1. What was the reason behind the Concordia approaching Giglio Island differently than its usual route?

2. How did the ship's collision with the reef impact its ability to navigate?

3. Describe the captain's initial response when the damage was detected.

4. How did the ship's change in direction affect the rescue operation?

5. What measures were taken to mitigate potential environmental damage caused by the wreck?

Question 2. Choose which of the following statements are True / False or Not Given.

- Write T if the statement agrees with the information in the text, F if the statement contradicts the information or NG if there is no information in the text. (5 marks)

1. The collision caused damage to the Concordia's starboard side. _____
2. The ship's loss of power was primarily due to engine failure. _____
3. Schettino immediately ordered the Concordia abandoned when the damage was detected. _____
4. Schettino's only request was for tugboats. _____
5. The salvage operation involved floating the ship to another location for repairs. _____

Question 3. Complete the sentences with no more than one word and/or a number. (7 marks)

1. The Concordia was Italy's largest cruise ship, measuring _____ long.
2. On its first ever voyage it sailed for _____ .
3. The number of employed people on the Concordia was _____.
4. The ship's collision with the reef resulted in a _____ foot tear on its port side.
5. Approximately _____ people were evacuated from the Concordia by early morning.
6. The vessel was towed to _____ for dismantling after being salvaged.
7. The largest maritime salvage operation in history to remove the Concordia began in _____ 2013.

KNOWLEDGE

[8 Marks]

Question 1. Read each of the following problem-based scenarios and propose a solution.

grammar 1 mark	spelling 1 mark	content 2 mark
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1. The ship's generators keep tripping, resulting in power outages. It may be caused by an overload, a malfunctioning component, or a short circuit.

2. The ship's refrigeration system is not cooling properly, causing potential spoilage of perishable cargo. Inefficient cooling could result from a refrigerant leak or a malfunctioning compressor.

(OpenAI, 2023a)

WRITING

[15 Marks]

Question 1. Read the scenario and then write an appropriate response in an email.

You are a second engineer onboard the MV Seafarer, and the chief engineer has asked you to write an email to your shore-based supplier for emergency parts for the following reason.

The propulsion system has malfunctioned, halting all operations, and immediate repair is necessary to resume the scheduled voyage. Unfortunately, a shortage of crucial components required to complete the repair are needed.

The required components needed urgently include:

1. Main Thruster Control Module - Model X3B-120
2. Backup Power Coupler - Part No. Y45-A
3. Thrust Directional Sensor - Model Z9E

Addressing this issue is crucial to ensuring the timely completion of the repair and the resumption of our operational duties. You must liaise with the procurement department to expedite the purchase and delivery process of these components to our location. The vessel's operational readiness is dependent on the prompt resolution of this matter.

In your email:

- **Request for Immediate Assistance:** Clearly state the urgent need for resupply, specifying the essential components required for the repair. Specify the parts needed. Maintain an objective and professional tone.
- **Impact of Delay:** Highlight the implications of the delay in acquiring these components on the vessel's operational readiness and scheduled tasks. Describe how you detected the issue during routine maintenance.
- **Urgency and Importance:** Emphasize the critical nature of the situation, expressing the urgency for prompt action to prevent further disruptions.
- **Call for Action:** Politely but firmly request the recipient's support in expediting the procurement process, ensuring the swift delivery of the necessary components to facilitate the repair.
- Use the correct email conventions such as To: / From: / Subject:
- Word Limit: 175 – 250 words

Rubric

Criteria	5 Points	4 Points	3 Points	2 Points	1 Point
Task Achievement & Organisation	The email effectively addresses all aspects of the task.	The email addresses most requirements but may lack clarity or specificity in some areas.	The email partially addresses the task but is lacking in some key respects.	The email briefly touches on the task's requirements and lacks clarity or organisation.	The email does not effectively address the task's requirements.
Grammar and Spelling	The email demonstrates excellent command of grammar and spelling throughout.	The email contains a few minor grammatical or spelling errors that do not impede understanding.	The email has several noticeable grammatical and spelling errors but remains comprehensible.	The email contains frequent and significant grammatical and spelling errors that hinder comprehension.	The email is riddled with severe grammatical and spelling errors, making it difficult to understand.
Tone and Formality	The email maintains a consistently professional and objective tone, adhering to appropriate formal language for this context.	The email maintains professionalism and objectivity but occasionally lapses in tone or formality.	The email sometimes lacks professionalism or objectivity, with notable lapses in tone and formality.	The email often lacks professionalism and objectivity, with significant lapses in tone and formality.	The email is consistently unprofessional, lacks objectivity, or fails to adhere to formal language, making it inappropriate for the context.

(OpenAI, 2023b)

References:

Disaster | Definition & Types | Britannica. (2023). In: Encyclopædia Britannica. [online] Available at: <https://www.britannica.com/science/disaster> [Accessed 1 Dec. 2023].

OpenAI. (2023a). ChatGPT. [online] Available at: <https://chat.openai.com/c/9612785b-f03c-409f-8bbf-34fe91ca1eb9> [Accessed 2 Nov. 2023].

OpenAI. (2023b). ChatGPT. [online] Available at: <https://chat.openai.com/c/9612785b-f03c-409f-8bbf-34fe91ca1eb9> [Accessed 9 Nov. 2023].

MLO & Bloom's Level of Complexity

Q #	MLO Addressed	Complexity Level	Mark	Remark
Reading Section				
1.	2, 3, 4 & 6	Understanding	5	
2.	2, 3, 4 & 6	Application	5	
Vocabulary Section				
1.	2, 3 & 6	Understanding	5	
2.	2, 3 & 6	Application	6	
3.	2, 3 & 6	Understanding	9	
Writing Section				
1.	1, 2, 5 & 6	Application and creating	15	