



UNIVERSITI MALAYSIA TERENGGANU

FINAL EXAMINATION
PEPERIKSAAN AKHIR

SEMESTER I SESSION 2025/2026 (BACHELOR DEGREE)
SEMESTER I SESI 2025/2026 (SARJANA MUDA)

COURSE KURSUS	:	ENGLISH FOR MARITIME STUDIES BAHASA INGGERIS UNTUK PENGAJIAN MARITIM
COURSE CODE KOD KURSUS	:	MNS3013
DURATION TEMPOH	:	2 HOURS 2 JAM

MATRIC NO. NO. MATRIK	:	_____
PROGRAMME NAMA PROGRAM	:	_____
SEAT NO. NO. MEJA	:	_____

INSTRUCTIONS TO CANDIDATES
ARAHAN KEPADA CALON

- i. Answer all questions.
Sila jawab semua soalan.
- ii. All answers must be written in answer booklet provided.
Semua jawapan hendaklah ditulis dalam buku jawapan yang disediakan.

DO NOT OPEN THE QUESTION PAPER UNTIL INSTRUCTED
JANGAN BUKA KERTAS SOALAN INI SEHINGGA DIBERITAHU

THIS QUESTION PAPER CONSISTS OF FOUR (4) PRINTED PAGES
KERTAS SOALAN INI MENGANDUNGI EMPAT (4) MUKA SURAT BERCETAK

SECTION A: Answer ALL questions. (50 Marks)

1. Explain the responsibilities of each rank onboard ship as follow (10 marks):
 - a. Captain
 - b. Chief Officer
 - c. Second Officer
 - d. Bosun
 - e. Chief Engineer
2. Provide five (5) helm orders and explain their meaning. (10 marks)
3. Give five (5) brief points on the most important factors that need to be checked and reassured while taking over a bridge watch (10 marks).
4. Explain the emergency management for a ship. (10 marks)
5. Interpret the purpose of maritime communication (10 marks).

Answer ALL the questions related to the cases. (50 Marks)

CASE STUDY 1: VESSEL GROUNDING

A 50,000 GT RORO vessel had been loading in a European port. The navigation officer had prepared the passage plan for the voyage to the next port of call which was in central America. Prior to departure the Master received weather routing for the passage, which suggested a route over the Silver Bank and via the Windward Passage. The navigation officer planned the route in the ECDIS and on paper charts and discovered that the minimum depth the vessel would encounter was at the Silver Bank where the water depth was 16 metres according to British Admiralty chart 3908. The vessel's draft was 7.5 metres, so a 16-metre water depth was considered acceptable as per the company's ISM under keel clearance procedure. The procedure stated that there had to be a minimum of 20% under keel clearance of the maximum draught. 'Inadequately surveyed' warning On the British Admiralty chart the Silver Bank is marked 'Inadequately surveyed' in three places. On the route planned by the navigation officer there was no specific mention of inadequately surveyed waters.

The navigation officer did not consult the Admiralty Sailing Directions when preparing the passage plan. After checking the entire route on the ECDIS and on the paper charts, the Master decided to follow the route suggested by the weather routing company. The passage was uneventful over the Atlantic from Europe and the vessel maintained a speed of 13.5 knots. Shortly after entering the Silver Bank the vessel's bow suddenly swung to starboard, which caused a list for about 3 to 5 seconds, with excessive vibration. The OOW changed to hand steering. A couple of minutes later the vessel's bow swung to starboard, but this time with less vibration. The vessel's bow swung a third time to starboard and listed for about 3 seconds, with vibrations. After carrying out a damage assessment it was found that the forepeak tank and a water ballast tank had water ingress. All the fuel tanks were intact. Vessel repaired in dry dock and arrived at the destination port; discharged the cargo and carried out an in-water survey. It was found that the tanks had been punctured as the vessel had touched bottom. The vessel had to be repaired in dry-dock.

- a) Assess the above situation and discuss three (3) main lessons learnt. (10 marks)
- b) Assume if there are several crews were injured? and determine who supposed to give the medical assistance on board ship other than the captain? (4 marks)
- c) Based on the case study, identify and explain the function of an equipment that is very important during ship navigation. (6 marks)
- d) Classify two (2) personnel with their responsibilities. (5 marks)

CASE STUDY 2: SHIP COLLISION

MV Kasturi was a small general cargo vessel sailing at night in a busy area in the Baltic Sea. Visibility was not so good, and winds were westerly at Beaufort scale 3. The vessel was maintaining a speed of about 10 knots. MV Kasturi MMSI 54411334 set the S-band ARPA radar in off center, range 12 NM, north up, in relative motion mode, while the X-band radar was on standby. Both radars had similar blind zones as the masts were positioned close to each other on the ship's upper bridge. The bridge equipment included an ECDIS, which the Master who was on the 8-12 watch was monitoring. A lookout was also on the bridge. There were a number of vessels astern of vessel A. Five minutes before midnight the Second Officer came to the bridge for his night watch. During the handover, the Master informed him about the vessels which were astern and advised that they were being overtaken by a number of them. After the handover the Master left the bridge. The Second Officer was aware of a vessel overtaking them on the portside but was not aware of MV Maharani also overtaking them, but on the starboard side. He switched the radar between centered display to off-center several times.

The lookout was on the port bridge wing. One minute from collision, the Second Officer was monitoring the ARPA S band radar when he noticed a target astern on the starboard quarter and it was very close. That was MV Maharani and it was one minute from collision and only a few cables away. The officer turned around and looked out through the aft starboard bridge windows. MV Maharani was almost on top of them. He tried to call the Master but could not reach him. He then switched to manual steering and altered hard to starboard which was towards the overtaking vessel, and the vessels collided. Collision soon after the collision the Master came onto the bridge. On 2130 hours, he noticed that the engines were still full ahead and the rudder was hard to starboard, but the vessel was not turning. He reduced the engines to 60%. MV Kasturi was not moving. MV Maharani had struck MV Kasturi on the starboard side in way of cargo hold 2. After a while vessel B moved astern, and the vessels disengaged. The Master contacted MV Maharani MMSI 53311334 but the OOW on MV Maharani responded that they had only been involved in a near miss. After a while they admitted that they had been involved in a collision. The Master saved the Voyage Data Recorder (VDR). However, only the X band radar was interfaced with the VDR and as that radar was in standby mode, radar screenshots of the developing close quarter situation had not been recorded by the VDR.

- a) You need to assess the above situation. Then, classify five (5) factors that contributed to the incident. (5 marks)
- b) Give five (5) precautions supposed to be conducted by the Officer on Watch keeping (OOW) to avoid the ship collision. (5 marks)
- c) Apply the proper Standard Maritime Communication Phrases (SMCP) from MV Kasturi or MV Maharani to the Coastal Station to inform the accidents. (10 marks)
- d) If the VHF device not functioning well, interpret your strategies. (5 marks)

End of Question Paper