

## NOVEMBER 2024 EXAMINATION SESSION THURSDAY 21<sup>st</sup> NOVEMBER 2024 - AFTERNOON OFFSHORE SUPPORT INDUSTRY

Time allowed – three hours Answer any FIVE questions – all questions carry equal marks Please read the questions carefully before answering

- 1. Answer **BOTH** parts of the question.
  - a) Describe the general arrangement of a semi-submersible drilling rig. Use diagrams to support your answer.
  - b) Explain the operational concept of these units, in particular how they maintain station and are transported both 'in field' and over longer distances.
- 2. A commercially viable offshore oil field has been discovered.

Discuss the key considerations the exploration company will assess when deciding on the optimal method of production and export.

- 3. Discuss how a charterer would issue an Invitation to Tender for vessel sourcing and identify the important details that would be included in the tender.
- 4. Explain **FOUR** of the following terms.
  - i. Stinger
  - ii. Waiver of Subrogation
  - iii. J-Hook
  - iv. Shark Jaws
  - v. Dodging
  - vi. Joy-Stick
- 5. Discuss how the intention to transition away from oil and gas production will affect the offshore support industry.
- 6. Discuss cabotage relative to OSV operations using examples from **TWO** areas where the practice is prevalent.

PLEASE TURN OVER.

- 7. Outline the development of the most common types of OSV vessel, discussing the most significant changes that have occurred, describing the reasons behind them.
- 8. Offshore windfarms are constructed using both fixed and floating foundations. Describe each of these concepts and contrast and compare the different type of construction, support and service vessels that will be utilised by each type.