OFFSHORE SUPPORT INDUSTRY

May 2021

EXAMINERS REPORT

Question 1.

Students were expected to defining and explain cabotage in general terms and identify areas where it is applied.
Examples should be given of direct and indirect applications.
The aims/objectives of a cabotage regime should be discussed.
Description of the operation of the specific cabotage regimes should be included.
A good answer will include discussion on:

Flagging of vessel
Control by state oil companies

Exemptions: Relaxed in special circumstances
Effects/consequences.
Protecting local employment.
Increasing local shipbuilding industry.
Restricting technological development.
Limiting innovation.
Increasing costs.
Difficulty in sourcing properly skilled crews.

Question 2.

The answer should include discussion on:

Volatility of spot market rates.
Utilisation rates.
Flexibility v unpredictability.
Relationship development between parties.
Longer term issues: Potential effect on HSE; security of employment/income; attraction for a mortgagee; planning and budgeting.

Question 3.

Students should have a general understanding of each of the terms/acronyms:

i. <u>Casing</u>
Lengths of steel pipe in various diameters used for lining the wall of the well.
Carried on deck of supply vessels and craned up to platform or drilling unit.
Can be a dangerous cargo when not secured adequately.

ii. FSO

Floating Storage and Offloading.
Vessel equipped for storage of crude oil and offloading to a shuttle tanker.
Oil normally supplied from a floating production unit. (FSO not an FPSO)
Often converted oil tankers but can be purpose built.

iii. DPO

Dynamic Positioning system Operator.
Person certified to operate vessels equipped with DP systems.
Training involves time operating systems on DP vessels & training courses.
Two levels of certification: Level 1 & Advanced.

iv. IMDG Code

International Maritime Dangerous Goods Code
Designed to facilitate the safe movement of Dangerous Goods.
Can be solid, liquid or gas and can pose a range of dangers most commonly flammability, toxicity/poisonous, and corrosivity, and these dangers determine transport procedure.
Classified and identified; Packed; Marked & labelled; Documented; Stowed; Segregated.

v. IRM

Inspection Repair and Maintenance.
Activity which covers all sectors of the offshore production process
including wells, wellheads, associated subsea equipment, installation structure, in-field and export pipelines.
Continuous inspection to ensure asset integrity.
Use of DSV/ROV/OCV/Floatel/Heavy lift vessels.

vi. MEG

Mono-ethylene glycol
A substance widely used in the offshore industry as an anti-freeze, hydrate and rust inhibitor.
Transported on OSVs in special tanks usually constructed of stainless steel.

vii. WROV

Work-class Remotely Operated Vehicle.
Used to undertake subsea operations and can operate at great depths beyond that of divers.
Controlled from an ROV support vessel & deployed from a LARS or Moonpool.
Survey and Work categories.

Question 4.

Students were expected to produce a drawing of a Multi-Purpose Platform Supply Vessel and the sketch should provide sufficient detail to demonstrate understanding of the basic structure and equipment incorporated in the vessel.

Suitably annotated sketch showing general arrangement, propulsion, increased accommodation, helideck, ROV/LARS system, moonpool, rescue zone, fire monitors, FRC, Active Heave Compensation Crane (AHC).
Description of features – Minimum of DP2, propulsion arrangement described ie. number and location of thrusters/azimuths.
Appropriate dimensions, capacities/type of bulk cargo, deck area.
Awareness of modern design for harsh weather/arctic operations - size, freeboard, bow shape, de-icing.
Environmental design features, sulphur emission areas, 'Clean Design' class notation.

Question 5.

A good answer will include:

a) Date
b) Vessel Name
c) Vessel Type
d) Owner
e) Charterer
f) Area of Operation
g) Workrole
h) Port of Delivery
i) Port of Redelivery
j) Commencement
k) Firm Period
l) Option Period(s)
m) Notice to extend
n) Mob and Demob Fees
o) Firm Day rate
p) Option Day rate
q) Taxation and Payment
r) Charter Party
s) Subjects
t) Commission

Question 6.

The students are expected to include H&M and P&I and give a description of each including an explanation of their interactions and limitations.
An explanation of collision liability and application of Excess Collision liability Insurance should be included and other liabilities such as:

Wreck removal
Cleaning of the other vessel ie. after oil spillage.
FFO loss/damage.
Wave damage.
Damage caused to subsea cables ie. anchoring/anchorhandling

A good answer will also include explanation of other insurances such as:

Contractual Liability Insurance.

Legal Liability Extension insurance.

Question 7.

Students should be able to give a general description of offshore windfarms - unmanned installations, generally quite close to shore and describe how maintenance concepts ill will involve either an onshore or offshore based strategy.

Onshore based maintenance and service strategy involves day-to-day access to the wind farm using Crew Transfer Vessels (CTVs) operating from a shore base.
Usual for smaller windfarms less than 40 nm from shore.
A description of CTVs should be included – speed, capacity (cargo/persons), operating costs, access/egress arrangements etc.

Offshore based maintenance and service strategies involve Service Operation Vessels (SOVs) which will operate similar to OCV in the O&G sector.
A description of SOVs should be included – capacity (cargo/persons), facilities, workshops, access/egress arrangements (Walk-to-Work), DP capability etc.
Use of Daughter Craft.
An indication of Current charter rates should also be included.

The extent of helicopter operations should be discussed (unusual, being used mainly for emergency). No landing option on WTGs (sometimes on larger offshore sub-stations) personnel deployed by winch onto platforms at WTG tower base.

Onshore logistics - quayside infrastructure, warehousing, workshops, logistics and operational planning should be included.

Major component repair, refurbishment and replacement by specialised OCV vessels should also be discussed.

Question 8.

Students should be able to explain that Classification Societies produce classification rules regarding the design, construction and survey of ships.

They should demonstrate understanding that Class Notations indicate that specific rule requirements that have been met and Class Notations cover:

(i) Construction
(ii) Type and service
(iii) Navigation and operational areas
(iv) Equipment and systems

A good answer will include a number of key notations, indicating the Classification Society of any specific notation listed.