

**MERCHANT MARINE ACADEMY OF MACEDONIA
SCHOOL OF ENGINEERS**

Academic year: 2012 - 2013

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Semester: C (retakes)

Date:

Instructor's name:

Student's full name:

A.F.M.:

FINAL EXAM IN MARITIME ENGLISH

1. Fill in the gaps with an appropriate word from the list. There are some extra words. (30 p.)

A.

*larger reduction slower cheaper high propeller faster slow
efficient medium-speed directly weight low operate slow-speed
tankers cylinders*

Large diesel engines which have _____ nearly 3ft in diameter turn at the relatively _____ speed of about 108 r.p.m. They are known as _____ diesel engines and are used mainly in _____ and bulk carriers. They can be connected _____ to the propeller without _____ gears and they have _____ fuel consumption.

More and more, however, of the _____ merchant vessels are being powered by _____ diesel engines. These _____ between 150 and 450 r.p.m. Therefore, they are connected to the _____ by gearing, since a propeller is more _____ the larger it is and the _____ it turns. These engines are _____ than slow-speed diesel engines and their smaller size and _____ can result in a smaller, cheaper ship.

B.

*displacement gear-wheel device turbine suction piston raise gas
impeller reciprocating interlocking size rotary volume pumping
non-return centrifugal*

A pump is a _____ which is used to _____ liquids from a low point to a high point.

A _____ system aboard ship consists of a _____ branch, a pump and a discharge branch.

In the _____ pump, the increase or decrease of the _____ of the pump chamber causes the suction or discharge of the liquid or _____.

A simple kind of _____ pump is the single-acting ram pump which consists of a _____ moving up and down inside a chamber fitted with _____ suction and delivery valves.

The _____ pump is an example of _____ displacement pump. It consists of _____ gear wheels which rotate.

In the _____ pump there is a(n) _____ rotating at high speed inside the pump casing.

2. Which of the following machinery corresponds to the definitions underneath? Match them. (15 p.)

windlass mooring winch slewing motor lifeboat liferaft cable lifter

bow thrusters stabilisers davits ballast pump distress rockets bilge pump

1. It rotates the crane:
2. It handles the ropes to moor the ship:
3. It handles the anchor:
4. It handles the anchor chain:
5. They reduce rolling of the ship:
6. They lower the lifeboats to the sea:
7. They improve manoeuvrability when the ship is at a standstill:
8. It sucks the unwanted water from watertight compartments of the ship:
9. They are used as flash signals in an emergency:
10. It is inflated when it is thrown overboard:

3. Match the incidents to the reasons which may cause them. (10 p.)

1. Collision	a. Explosion of a chemical container
2. Grounding	b. Lack of maintenance
3. Fire	c. Major flooding
4. Oil spill	d. Poor ventilation
5. Cargo contamination	e. Power failure
6. Engine breakdown	f. Foggy weather conditions
7. Rise of piston temperature	g. Bad cargo management
8. Instability and list of the ship	h. Uncharted rocky or low water
9. Sinking of the ship	i. Overflow during bunkering
10. Blackout	j. Inadequate lubrication

4. Put the verbs into the “Simple Past” tense. (10 p.)

1. They _____ (launch) the new tanker last week.
2. M/V KIRKI _____ (leave) the dry dock two days ago.

3. _____ (Capt. Fokas/ go) on board an hour ago?
4. The Chief Engineer first _____ (meet) his wife when he was twenty years old.
5. You look tired. What time _____ (you/sleep) last night?
6. The ship _____ (ground) in shallow waters a month ago but they _____ (not/manage) to refloat her.
7. There _____ (be) a heavy list to starboard so we _____ (jettison) cargo to make the vessel lighter.
8. Last night we _____ (have) a security breach incident on board.

5. Fill in the gaps with the appropriate derivative of the words in the parentheses. (10 p.)

1. Direct _____ (**inject**) of steam into a water system could cause _____ (**corrode**).
2. Pump up the starting air _____ (**reserve**) to the maximum _____ (**press**).
3. We have to check that the _____ (**mechanic**) lubricators are full and that they work well.
4. The _____ (**remove**) of air from the cylinder is done with the help of air cocks.
5. The cooling water system must be kept in _____ (**operate**) and the inlet temperature of the cooling water should _____ (**various**) between 110 degrees F and 150 degrees F.
6. You should always consult the manufacturer's _____ (**recommend**).
7. Before closing the crankcase door we should make an _____ (**examine**) inside the crankcase.

6. Match the words to their explanation. (5 p.)

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|----------------|------------------------------------|
| 1. combustion | a. firing |
| 2. pitted | b. not leaking |
| 3. capacity | c. burning |
| 4. joint | d. inflammable |
| 5. regulate | e. spotted |
| 6. ignition | f. connection |
| 7. tight | g. preventive measures |
| 8. precautions | h. deposits of substances in water |
| 9. combustible | i. adjust |
| 10. scale | j. cubic content |

7. Answer one (1) of the two questions. (20 p.)

1. Describe the combustion stroke of a 4-stroke diesel engine.
2. Write the devices used to detect fire on board and some precautions against fire.

GOOD LUCK!!!