

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

Course: Maritime English

Academic year: 2014 – 2015

Semester: B' (Retakes)

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Student's name:

Student number:

Exam period: September

Date:

Exam paper grade:

FINAL EXAM

A. Write the names of the four strokes of a 4-stroke diesel engine and describe the third and the fourth stroke. (20 p.)

**Names of the four strokes: 1. _____ 2. _____
3. _____ 4. _____**

B. Write 5 sentences comparing a 4-stroke D.E. with a 2-stroke D.E. (consider the adjectives: small, fast, powerful, expensive, heavy) (7.5 p.)

1.
.....
2.
.....
3.
.....
4.
.....
5.
.....

C. Match the terms to their explanation underneath. (10 p.)

feed check valve main stop valve salinometer mountings crosshead

gudgeon pin main bearings malfunction soot blower lag

- irregular or abnormal function _____
- fittings, such as gauges and valves, of the boiler _____
- a valve which controls the entry of water to the boiler _____
- it connects the piston rod to the connecting rod of a diesel engine _____
- a gauge which checks the salinity of water _____
- delay between two events _____
- it connects the piston to the connecting rod _____
- a valve which controls the passage of steam to the engine _____
- they support the crankshaft within the engine bedplate _____
- it removes the black carbon particles from the tubes of the boiler _____

D. Fill in the gaps with the following words. There are two extra words. (10 p.)

compression crown combustion skirt crosshead impeller

scavenge crankpin B.D.C. T.D.C. exhaust rotor

- At the end of the 1st stroke of a 4-stroke D.E. the piston is at the _____.
- In a 2-stroke D.E. two phases, _____ and _____, happen at the same time.
- The three upper rings of the piston are _____ rings.
- The _____ connects the piston rod to the connecting rod.
- The connecting rod is connected to the crankshaft with the _____.
- The two main parts of a turbocharger are the turbine _____ and the compressor _____.
- The upper part of the piston is called _____ and the lower _____.

E. What must you do when you notice a man overboard? Write 5 (five) sentences. (consider the words: lifebuoy, alarm, lookout, Williamson turn, visual contact) (10 p.)

1. I must _____
2. _____
3. _____
4. _____
5. _____

F. Fill in the correct preposition to complete the following Standard Marine Communication Phrases (SMCP). (10 p.)

- I am _____ attack _____ pirates.

- I have dangerous list _____ port. I am _____ danger _____ capsizing.
- I am flooding _____ the engine room.
- I have collided _____ iceberg. Crew must abandon vessel _____ collision.
- I am _____ fire. I am _____ critical condition.

G. Match the words to their explanation. (10 p.)

- | | |
|--------------------|---|
| 1. simultaneously | a. width of the hull |
| 2. freeboard | b. throw away as garbage |
| 3. beam | c. vertical distance between water line and the highest point of a vessel |
| 4. draught | d. a layer of oil on the sea surface |
| 5. oil slick | e. at the same time |
| 6. dump | f. keep within limits, restrain |
| 7. skimmers | g. the part of the hull of the ship above the water line |
| 8. air draught | h. system used for clearing the water of any floating matter |
| 9. contain | i. the distance over the extremities, from stem to stern |
| 10. length overall | j. the maximum depth underwater |

H. Underline the correct choice. (7.5 p.)

- The restoration of life functions after apparent death is called **response / resuscitation**.
- All vessels, search in **vicinity / district** of position 20 35' North, 060 30' West.
- An emergency reversal operation of the main engine(s) to avoid collision is called a **crash-stop / collision-stop**.
- Steam transmits **mechanical / heat** energy to the engine.
- When the temperature of the steam falls below permissible limits, **evaporation / condensation** takes place.
- The main part of a steam turbine is the **piston / rotor**.
- You can **contain / absorb** an oil slick with booms.
- Every vessel must have a **reaction / response** plan in case of oil pollution.
- You can **break up / burn** an oil slick with dispersants.
- The emptying of oil into the sea is called an **oil spill / oil discharge**.

I. Supply the correct form of the word in parenthesis. (10 p.)

- There is a great _____ (**vary**) of liquids on board.
- Fire _____ (**detect**) warn us of a fire in a place.
- You must wear full _____ (**protect**) clothing when dealing with fire.
- You must test the atmosphere for toxic and _____ (**flame**) gas _____ (**concentrate**).
- I require medical _____ (**assist**).
- The _____ (**neglect**) or _____ (**accident**) dumping of oil into the sea is a serious offence.

-- As _____ (**prevent**) is better than cure, it is important to obey the international anti-pollution _____ (**regulate**).

J. Fill in the gaps with the following words. (5 p.)

pilot controllable sea blasts manned

- Do you have a fixed or _____ pitch propeller?
- Give two prolonged _____ on the whistle.
- I require the _____ card.
- What is the full _____ speed?
- Is the engine room _____ or is the engine on bridge control?

GOOD LUCK!!!