

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

STUDENT'S FULL NAME:

STUDENT NUMBER:

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Exam period: February

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Semester: A

Instructor's name: M. Tsompanoglou

FINAL TEST in English (Retakes)

1. Find which of these engine parts do the following: (10 points)

exhaust valve, piston, push rod, bedplate, crosshead, crank pin, gudgeon pin, cylinder head, cylinder liner, piston rod

It connects the piston rod to the connecting rod:

It connects the crankshaft to the connecting rod:

It reciprocates in the cylinder:

It reciprocates in the stuffing box:

It protects the cylinder reducing friction:

The gases go out through this valve:

The camshaft opens the valves with the help of this rod:

It connects the piston to the connecting rod:

All the valves are fitted in it:

It supports the whole engine:

2. Write which of these tools perform the following functions: (10 points)

cutting torch, centre punch, mallet, fitter's vice, tap, reamer, pliers, feeler gauge, bench grinder, tin cutters

It marks the spot you will drill:

After you drill a hole, it shapes and enlarges it:

It rotates a grindstone to sharpen tools:

It cuts or bends wire:

A metal tool with movable jaws. It is used to hold an object firmly while work is done:

A hammer with a large plastic or wooden head:

It measures narrow gaps or clearances:

It uses fuel gases and oxygen to cut metals:

It cuts internal threads in metal for inserting a screw:

It cuts sheet metal:

3. Underline the correct choice. (10 points)

For hexagonal screws we use a(n) (Allen key, open-ended spanner, ratchet wrench).

With a (screw-pitch gauge, feeler, reamer) we measure very small distances.

In order to hold an object firmly in its place while work is done, we use a (grinder, fitter's vice, lathe).

In order to cut internal threads we use (cutters, taps, snips).

In the 2-stroke diesel engine one cycle of operation is completed in (one, two) revolutions of the crankshaft.

The camshaft is connected to the rocker arm with the (push rod, piston rod, connecting rod).

We use a (screwdriver, spanner, hammer) to tighten or loosen a nut.

A pair of (pliers, calipers, dividers) is used to measure thicknesses.

We smoothen and shape a surface with a (scraper, reamer, file).

Diesel engines are (spark-ignited, compression-ignited) engines.

4. Find the kinds of vessels that do the following: (15 points)

Ro-Ro, SAR vessel, Lightship, Tug, General cargo ship, Bulk carrier, Cable layer, Pilot tender, LPG, Reefer, Container, Clean-product tanker, Crude carrier, Icebreaker, Paxcar ferry

Serves as a beacon for navigation:

Carries any type of cargo in "boxes":

Carries refrigerated cargo:

Carries liquified petroleum gas:

Assists with the pilotage of another vessel:

Carries loose cargo such as grain, iron, ore etc.:

Carries vehicles:

Tows other vessels:

Any type of packaged cargo or pieces of machinery:

Carries crude oil:

Carries refined petroleum products:

Lays cables on the bottom of the sea:

Crushes a way through ice:

Searches and rescues ships in distress:

It carries passengers and cars:

5. Find the crew member who is responsible for the following duties: (10 points)

Representative of the company and responsible for the safety of the crew and the ship:

Responsible for all machinery on board:

Responsible for the daily smooth operation of the engine room:

Head of the deck department:

Lubricates and greases parts of the machinery:

Cuts and welds pipes:

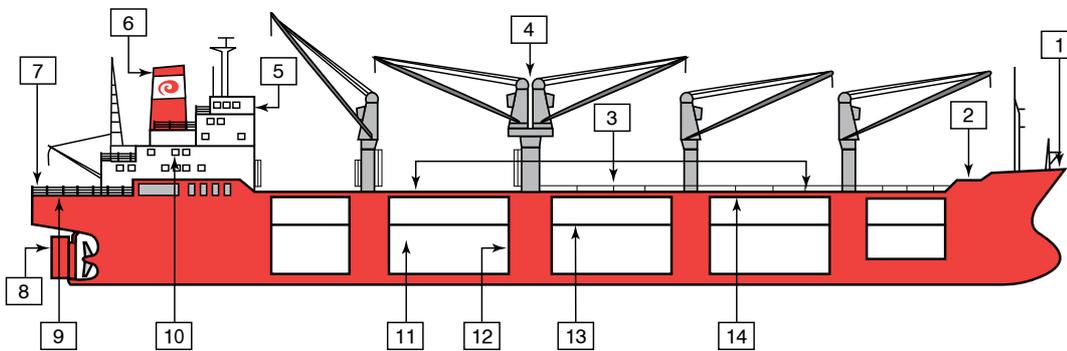
Cleans the engine room:

Supervises the O/S and the A/B:

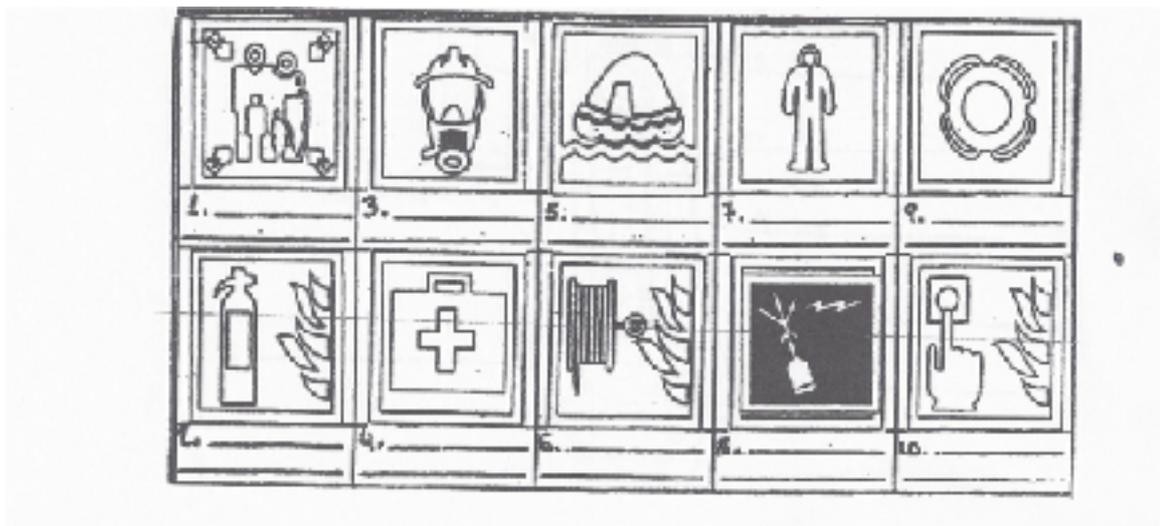
Second in command after the master:
Keeps engine room crew overtime:

6. Name the following parts of the vessel: (14 points)

- | | |
|----|-----|
| 1. | 8. |
| 2. | 9. |
| 3. | 10. |
| 4. | 11. |
| 5. | 12. |
| 6. | 13. |
| 7. | 14. |



7. Name the following life saving equipment. (10 points)



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

- 6.
- 7.
- 8.
- 9.
- 10.

8. Name the parts in the following diagram of a 2-stroke diesel engine. (21 points)

