

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

STUDENT'S FULL NAME:

STUDENT NUMBER:

Academic year: 2017-2018

Exam period: September

Date: 12/9/2018

Semester: A

Instructor's name: Dr M. Tsompanoglou

FINAL TEST in English (Retakes)

1. Find the missing words. Choose from the following: *camshaft, messroom, capacity, cylinder, container, valves, seaman, sign, length, galley, knots*. (11 points)

On a vessel the place where people eat is called:

On a vessel the place where the cook cooks is called:

..... ships carry their cargo in special "boxes".

The Capricorn makes a speed of 14 Her grain is 328500 cubic feet. Her overall is 118 metres.

The liner protects the cylinder by reducing friction.

The carries the cams which operate the fuel pumps and exhaust

You can't go on a training trip, unless you have a 's book.

The vessel's call is AEHQ2.

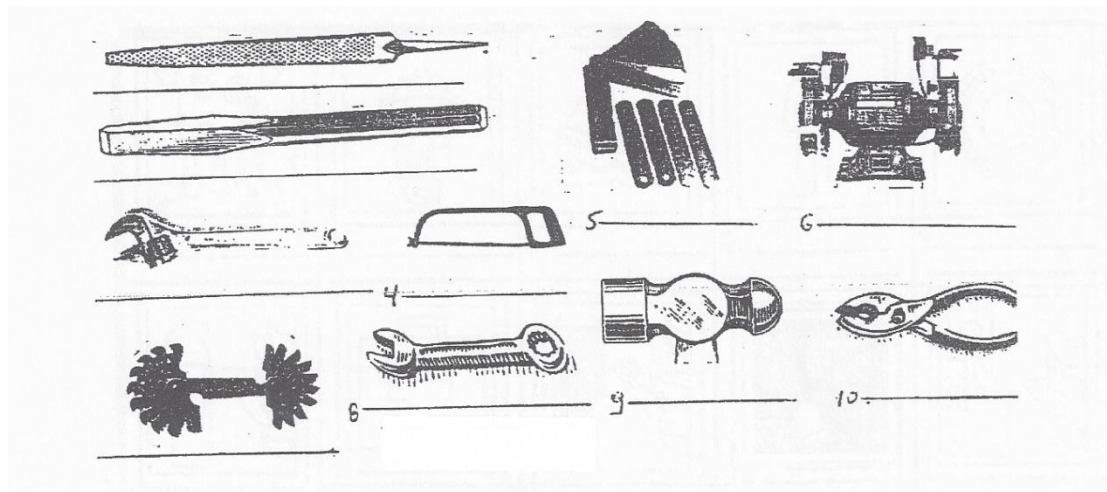
You can't go on a training trip, unless you have a 's book.

The vessel's call is AEHQ2.

2. Match the parts of the diesel engine to their functions. (10 points)

1. crankshaft	a. opens the valves
2. camshaft	b. reduces friction
3. piston	c. compresses the air
4. cylinder liner	d. supports the whole engine
5. piston rod	e. reciprocates in the stuffing box
6. connecting rod	f. rotates and gives motion to the propeller
7. bedplate	g. gives rotating motion to the crankshaft
8. crosshead	h. connects the piston rod to the connecting rod
9. piston pin	i. connects the piston to the connecting rod
10. crank pin	j. connects the connecting rod to the crankshaft

3. Identify the following tools. (15 points)



4. Underline the correct choice. (10 points)

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)**.

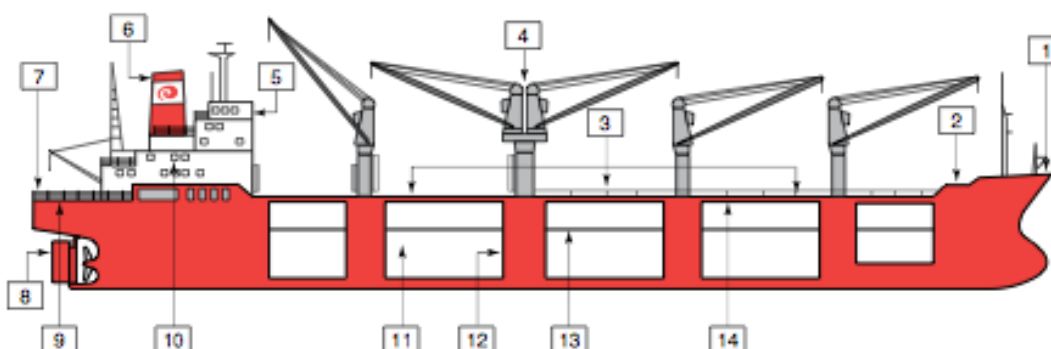
Diesel engines are **(spark-ignited, compression-ignited)** engines.

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.

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

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

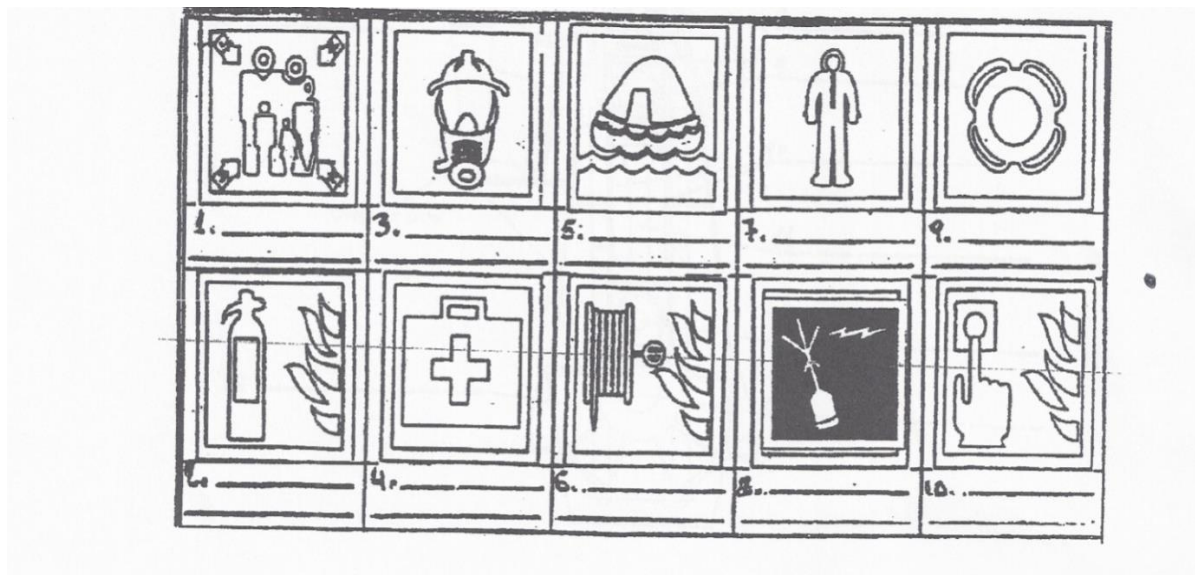


6. Find the kinds of vessels that do the following. (15 p.)

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

- 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:
- Serves as a beacon for navigation:
- Carries any type of cargo in "boxes":
- Carries refrigerated cargo:
- Carries liquified petroleum gas:

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



8. Name the parts in the following diagram of a 2-stroke diesel engine. (15 points)

