

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

**STUDENT'S FULL NAME:**

**STUDENT NUMBER:**

**Academic year: 2015-2016**

**Exam period: March**

**Date: 09/3/2016**

**Semester: A**

**Instructor's name: Dr M. Tsompanoglou**

**FINAL TEST in English**

**1. Find the missing words. Choose from the following: (10 points)**

*galley, drill, messroom, capacity, starboard, port, quarter, containers, collision, knots*

On a vessel the place where people eat is called: .....

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

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

The bulkhead near the bow of a ship is called ..... bulkhead.

When you are facing the bow, you have the ..... side on your right, and the ..... side on your left. The right side of the stern is called starboard .....

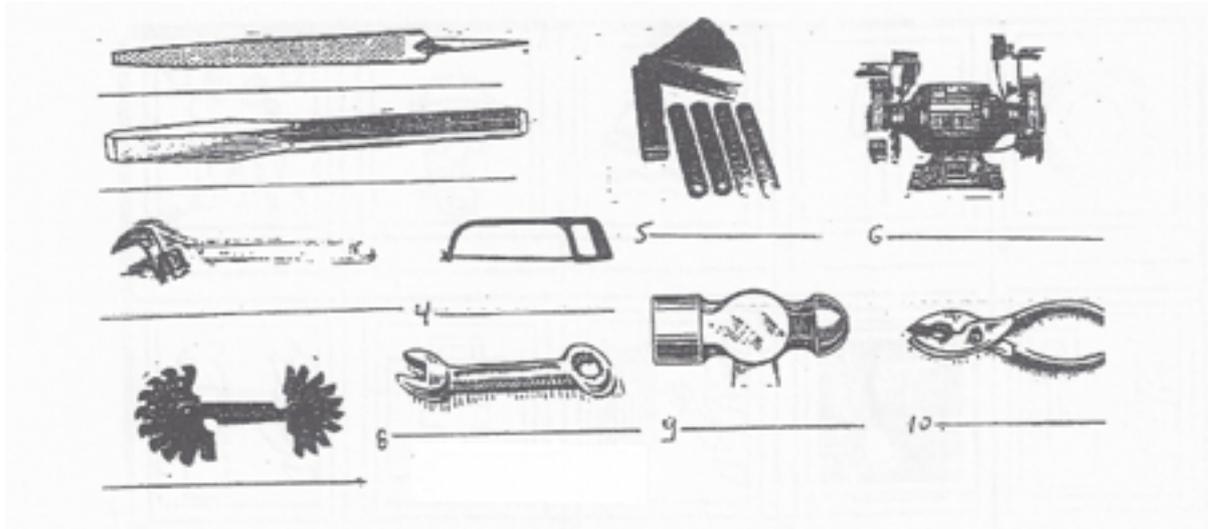
..... ships can make holes on the seafloor.

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

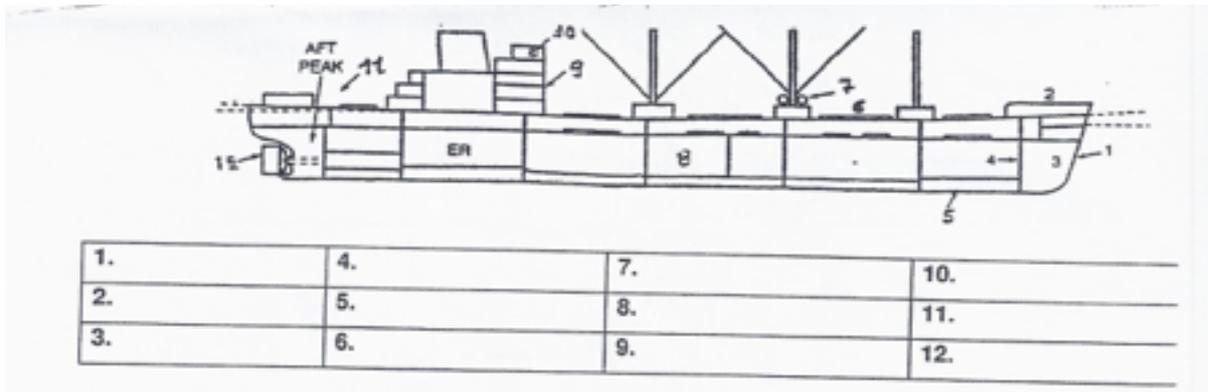
**2. Match the following words. In the 2<sup>nd</sup> column write the correct kind of the vessel from the 1<sup>st</sup> column. (10 points)**

Container	Tows other vessels:
Reefer	Carries liquefied petroleum gas:
LPG	Carries cargo in "boxes":
LASH Vessel	Carries vehicles:
Ice breaker	Carries unpacked cargo:
Tug	Carries refrigerated cargo:
Dry Bulk Carrier	Carries cargo in break-bulk form:
Ro-Ro ship	Carries lighters aboard ship:
General Cargo Ship	Transfers the pilot to the ship:
Pilot boat	Crushes a way through ice:

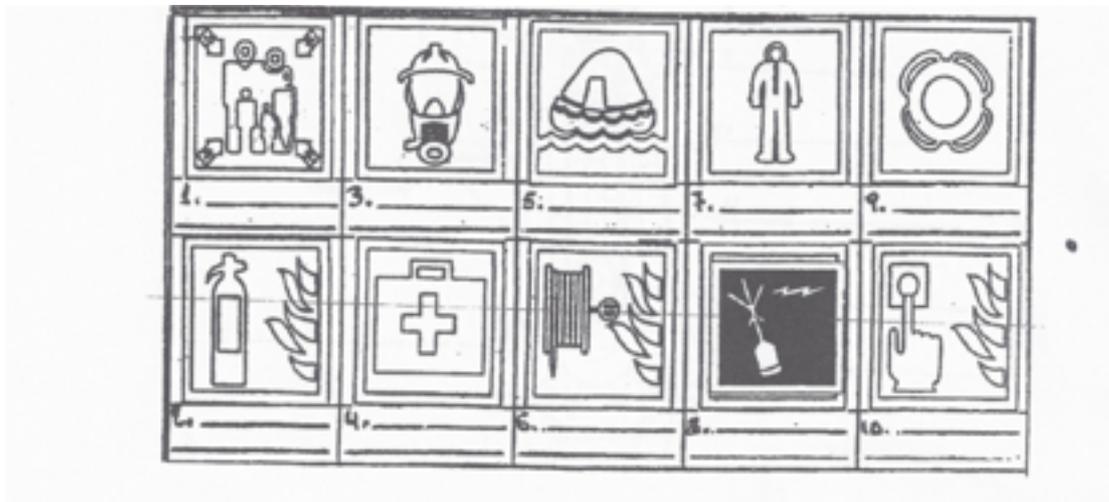
3. Name the following tools. (15 points)



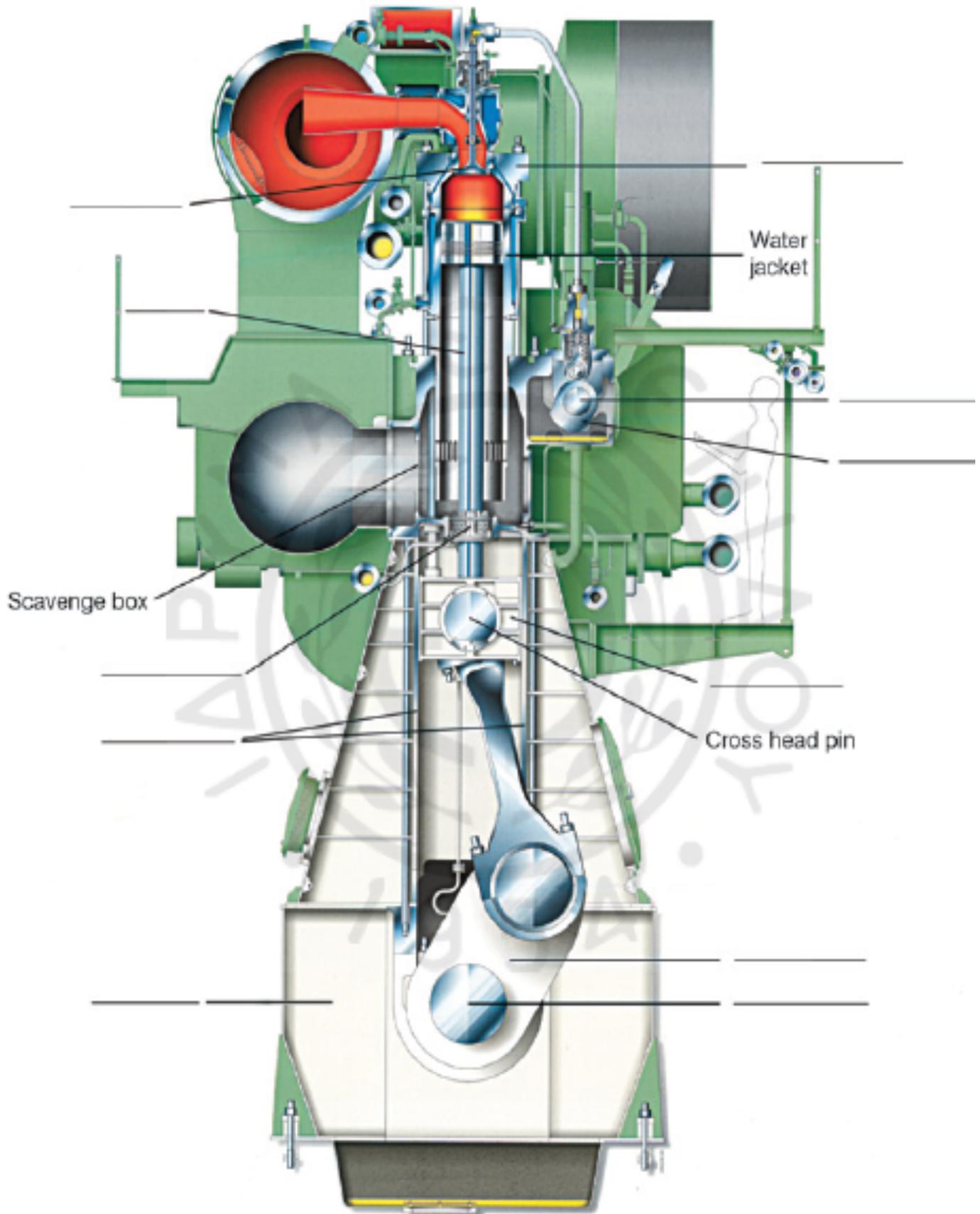
4. Name the following parts of the vessel. (18 points)



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



6. Name the parts in the following diagram of a 2-stroke diesel engine. (18 points)



*Two-stroke Diesel engine*

**7. Match the following parts of the diesel engine:**

*water jacket, gudgeon pin, sump tank, exhaust valve, crosshead, camshaft, cylinder liner, crank pin, bedplate, cylinder head*

**with their function below. (10 points)**

It cools the cylinder externally:

It opens the valves:

It supports the whole engine:

It connects the piston to the connecting rod:

It connects the piston rod to the connecting rod:

It connects the connecting rod to the crankshaft:

It protects the cylinder and reduces friction:

The gases escape through this valve:

The lubricating oil is kept in here:

It houses all the valves:

**8. Underline the correct choice. (10 points)**

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).

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).