

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

STUDENT'S FULL NAME: _____

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FINAL TEST IN ENGLISH

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

*drums combustion friction volume salinity machine direction straight stem
size irregular motor pressure circular temperature external condenser between*

Gears can change the _____, speed, or _____ of a force.

Two _____ gears turn in opposite directions.

With gears we have _____ motion and with cams we have _____ motion.

The cam has an _____ shape and moves the valve _____ up and down.

We use bearings to reduce _____ between two metals.

We measure _____ with manometers.

We measure _____ with thermometers.

The _____ indicator shows the presence of sea water in the fresh water systems.

The CO₂ indicator measures the percentage of the _____ gases.

Tonnage is a measurement of _____ not of weight.

The water _____ serve as a reservoir of water.

The _____ converts steam into water.

2. Fill in the gaps with one of the words below. (10 p.)

strainer friction bearing filters loads soap cooler grease sump-tank supplied

Lubricating oil is _____ to the various parts of an engine to decrease _____ and wear. The oil is stored in the _____. It is drawn from the tank through a _____, and before it enters the engine it passes through fine _____ and a _____. First it feeds the main _____. Where there are heavy _____, instead of lub-oil, lubricating _____ is used, which is a mixture of petroleum oil and _____.

3. Underline the correct choice. (10 p.)

_____ are used to reduce friction between two metals.

Cams

Blades

Bearings

_____ tonnage is the carrying capacity of a vessel in tons.

- Net-weight
- Underdeck
- Dead-weight

The steam which is collected in the steam drum of the boiler is _____.

- dry
- superheated
- saturated

The unit of electrical resistance is the _____.

- Volt
- Ohm
- Ampere

The _____ is used to heat the wet steam before it enters the main steam pipe.

- turbocharger
- economiser
- superheater

Steam is _____.

- invincible
- invisible
- invariable

A material which offers high resistance to an electric current is a(n) _____.

- breaker
- insulator
- conductor

In an electric motor we take and give the current with the _____.

- brushes
- collector
- limbs

We use a _____ to permit the flow of the fluid in one direction only.

- reducing valve
- check valve
- regulating

The piston ___ inside the cylinder.

- reciprocates
- rotates
- oscillates

4. Insert the correct derivatives of the words in parentheses (12 p.)

- Volt is the unit of electric _____(press)
- If a current changes its direction periodically is _____(alternate) current.
- Lubricating grease is a _____(mix) of petroleum oil and soap.
- The _____(contaminate) of the lub oil may cause serious damage to the bearings of the engine.

- The _____ (classify) of oils is done by the S.A.E
- During _____ (evaporate) the water changes into steam and during _____ (condensate) it changes into water.
- The chief engineer is responsible for the safe, efficient and _____ (satisfy) operation and _____ (maintain) of all machinery.
- Boilers are used for the _____ (produce) of steam.
- The tachometer measures the _____ (revolve) of the engine and the barometer measures the _____ (atmosphere) pressure.

5. Match the words to their synonym or explanation. Write the pairs in the lines below. There is an extra word. (10 p.)

- | | |
|--------------|---|
| fireproof | it contains water and steam |
| atomizer | filled with moisture |
| water wall | action |
| circulate | part of the oil burner which sprays the fuel |
| saturated | coil |
| impulse | change into something else |
| bedplate | be in motion, move around |
| loop of wire | wall made of tubes of water |
| convert | not affected by fire |
| Steam drum | a structure which holds the crankcase and supports the cylinder block |
| crankshaft | |

6. Fill in the gaps with either the simple present or the present continuous (10 p.)

- The chief mate _____ (watch) a movie at the moment.
- The cook always _____ (go) ashore for supplies.
- The engineers usually _____ (meet) in the office on Fridays.
- The second officer _____ (steer) the vessel now.
- Where is the steward? He _____ (clean) the officers' cabin.
- How often _____ (you eat) chicken for dinner?
- Look out! The cargo _____ (fall)!
- We _____ (listen) to the radio every night at 7 o'clock.
- When you _____ (hear) the alarm, go to the muster station.
- The cadet _____ (not know) how to do this. You must show him.

7. Circle the correct choice (15 p.)

- The third engineer is *extremely/absolutely* lazy.
- Reading was the most *popular/scientific* way of spending free time.
- A person you know slightly is a(n) *acquaintance/friend*.
- Marco is very *anxious/sociable*. He hangs out with many people.
- The Chief Engineer *supervised/included* the maintenance work on the pumps.
- Baking/Frying* is cooking food in the oven
- Hunting/Pursuing* whales is illegal.
- The meat is *tough/ripe*.
- Eggs and meat have high amounts of *protein/carbohydrates*.
- We need *some/any* bananas.
- We haven't got *some/any* oranges at the moment.
- Can I have *some/any* cake?
- There aren't *some/any* onions in the soup.
- In Japan, people like eating *raw/ripe* fish.
- Do you like *spicy/bitter* food, with a lot of exotic herbs and chilly peppers?

8. Match the words in column A to appropriate ones in column B to form compound nouns. (10 p.)

A	B	
throttle	bearing	_____
scavenge	valve	_____
push	head	_____
cross	tight	_____
cylinder	shaft	_____
flow	ports	_____
air	meter	_____
cam	rod	_____
crank	liner	_____
ball	case	_____

9. Answer one of the following questions: (8 p.)

- a. Name the main parts of the diesel engine and explain how a four-stroke diesel engine operates.
- b. Name the parts of the lube oil system and explain how it works.