

**MERCHANT MARINE ACADEMY OF MACEDONIA**

**SCHOOL OF ENGINEERS**

**STUDENT'S FULL NAME:** \_\_\_\_\_

**A.Γ.M.:** \_\_\_\_\_

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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.**  
**(10 p.)**

**A.**

*furnace      place      operation      feedwater      tube      energy*  
*boiler      chamber      combustion      mountings      space      air*

A boiler is used to heat \_\_\_\_\_ in order to produce steam. The \_\_\_\_\_ released by the burning fuel in the boiler \_\_\_\_\_ is stored as temperature and pressure in the steam produced. All boilers have a furnace or combustion \_\_\_\_\_ where fuel is burnt to release its energy. \_\_\_\_\_ is supplied to the boiler furnace to enable \_\_\_\_\_ of the fuel to take \_\_\_\_\_. There must be a number of fittings or \_\_\_\_\_ which ensure the safe \_\_\_\_\_ of the boiler. Two basically different types of \_\_\_\_\_ exist, namely the watertube and the firetube.

**2. 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 CO<sub>2</sub> indicator measures the percentage of the \_\_\_\_\_ gases that go up the funnel.

condensation  
combustion  
steam

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 low resistance to an electric current is a(n) \_\_.**

- breaker
- insulator
- conductor

**The lubricating grease is a mixture of petroleum oil and \_\_\_\_.**

- soap
- paraffin
- water

**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

**3. Match the words to their synonym or explanation. Write the pairs in the lines below.**

**There is an extra word. (10 p.)**

crosshead	Empty
gauge	set free
collision	the main component of a diesel engine which transmits power to the flywheel
water jacket	meter, indicator
release	Coil
gudgeon pin	connects the piston rod to the connecting rod of a reciprocating engine
bedplate	when two ships crash
loop of wire	maintains the desired temperature of the cylinder
hollow	shows the presence of sea water in the fresh water system
salinometer	a structure which holds the crankcase and supports the cylinder block
crankshaft	

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4. **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	_____

5. **Circle the correct choice.** (10 p.)

1. The 3<sup>rd</sup> Mate **demonstrates** / **is demonstrating** the use of fire extinguishers at the moment.
2. The Chief Engineer always **is spending** / **spends** his summers on Ios.
3. The vessel **has left** / **left** the dry dock two days ago.
4. They **are sailing** / **were sailing** the Corinth Canal now.
5. **Have you ever worked** / **Do you ever work** on a tanker?
6. They **were sailing** / **are sailing** to Calcutta when the pirates **attack** / **attacked** them.
7. He **has been** / **was** Captain on the "Andromeda" since 2002.
8. When the fire alarm **has rung** / **rang** the Chief Engineer **was checking** / **checks** the suction pump.

6. **Fill in the gaps with the correct word from the list below.** (10 points)

flow condensation conductor cams electricity circular temperature stem wet irregular

- a) There are four kinds of steam: dry, \_\_\_\_\_, saturated and superheated. When the steam \_\_\_\_\_ becomes less than that corresponding to its pressure, \_\_\_\_\_ takes place.
- b) An electric current is a \_\_\_\_\_ of electrons through a wire or other \_\_\_\_\_. All materials conduct \_\_\_\_\_ but some of them offer more resistance than others.
- c) If we want to change \_\_\_\_\_ motion into straight motion we use \_\_\_\_\_. The cam has an \_\_\_\_\_ shape and moves the valve \_\_\_\_\_ up and down.

7. **Complete the dialogue. There are three (3) extra words** (10p.)

side            bill    welcome    dessert    recipe    all            main course  
 appetizer    order            like            dressing            menu            mustard

- May I take your \_\_\_\_\_?
- Yes, please.
- Do you want a(n) \_\_\_\_\_?
- No, just a chef's salad with mayonnaise \_\_\_\_\_.
- What would you have as a(n) \_\_\_\_\_?
- I would \_\_\_\_\_ a steak.
- Anything on the \_\_\_\_\_?
- Sure, bring me some chips and some \_\_\_\_\_, please.

- Would you like a(n) \_\_\_\_\_?
- Certainly, I wish to try the chocolate cake.
- Is that \_\_\_\_\_?
- Yes, thank you very much.
- You are \_\_\_\_\_!

**8. Fill in the table with words from the list. (10 p.)**

honey milk flour soup icecream crisps jam apple juice  
sugar salad orange juice mustard

A bowl of	
A jar of	
A bag of	
A carton of	

**9. Answer any three (3) of the following questions. (20 p.)**

1. What is the use of check valves?
2. What does a steam turbine consist of?
3. a) What is the principle of operation of a diesel engine?  
b) Write the names of the strokes of a 4-stroke diesel engine.
4. Name the main parts of a motor.
5. How many basic types of boilers are there?
6. What are the similarities between an electric motor and an electric generator?

GOOD LUCK!!!