

FULL NAME:
STUDENT NUMBER:
GROUP:
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Instructor's name: Dr M. Tsompanoglou

FINAL TEST in English

- 1. Complete the following text with an appropriate word from the following:**
accumulating, corrosive, mechanical, damage(n), wear(n), crosshead, bearings, oil, efficient, manual, equipment, sensor, operation, water, lube. (15 points)

Countermeasures against corrosion Lube oil system

Water in the lube oil system may lead to wear of the overlayer and, eventually, damage to the bearing, with high costs as a consequence. The higher the water content, the faster the rate. A water content higher than 1% could lead to critical damage within a few days in

The content in the oil system is normally not measured on a regular basis. However, in order to prevent water from in the lube oil and, thereby, causing to the, the oil should be monitored manually or alternatively, automatically by means of an oil condition monitoring system.

..... oil monitoring can be carried out visually, as the changes in appearance when it is mixed with water. Portable can be used as well, but to ensure and constant monitoring, use of a continuous measuring can be used.

- 2. Find the missing words. The first letter is given. (20 points)**

Worn main bearing and vibrating forces are the most common reasons for crankshaft **d**.....

Since 2008, all produced low speed engines with crosshead bearings are in-line **c**.....

Before starting any kind of overhauling, it is advisable to have the required **t**....., the instructions **m**..... and some **s**..... parts ready.

A feeler gauge is used to measure **c**.....

The diesel cycle has the highest thermal **e**..... of any regular internal or external **c**..... engine, due to its very high **c**..... ratio.

Before engaging the turning **g**....., check that the starting air supply is shut off.

In an air compressor, air is compressed by pulling in atmospheric air, reducing its **v**..... and increasing its **p**.....

In the double stage reciprocating air compressor, there are two **p**..... for air compression.

**3. Complete the sentences with an appropriate preposition from the following:
down, at, with, without, in, off, on, below, at, to, of, into, above.
(15 points)**

Slow the rate of oil being pumped and top tanks with extreme caution.

The speed of the turbocharger is variable depending the engine load. At full power it may be rotating speeds of 10000 rpm.

Keep clear off space crane with load.

Cargo and bunker hose pipes should be handled care and stored bends that may fracture the hose.

When you have found abnormal conditions of the machinery, or when you are doubt, take proper measures immediately.

Since 2008, all produced low speed engines crosshead bearings are line configurations.

A 2-stroke engine must be supplied with air atmospheric pressure in order to work.

Fuel consists mainly carbon and hydrogen. By burning the fuel in oxygen, the energy in the fuel is released and converted work and heat.

If any part of the fire detection system is temporarily disengaged due any repair, mention thisthe work permit.

**4. Complete the sentences with the correct form of the words in parentheses.
(15 points)**

2-stroke engines can over 2,000 short tons. (weigh)

If combustion is poor, there will be an accumulation of residues. (viscosity)

Water in the lube oil system may lead to wear of the overlayer. (corrode)

The Chief Engineer sends information to the company about fuel (consume)

The fitter does all the for the pipes, because they have holes due to (weld, corrode)

The of the vessel is 20 metres and the overall is 200 metres. (broad, long)

The 2nd engineer reports to the Chief Engineer about the daily of the engine department. (maintain)

No of material is permitted in the engine room. (store, flame)

All parts of the compressor should be carefully inspected for signs of, damage, or (wear, operate)

The 3rd engineer is in charge of electrical systems, generators, boilers, fuel, and systems. He is typically in charge of (food, bunker)

5. Fill in the following sentences with the names of the appropriate tools. (15 points)

A **f**..... gauge is used to measure narrow gaps and clearance.
A hand tool that tightens and loosens nuts and bolts: **w**..... or **s**.....
A power tool used to bore holes: **d**.....
The mechanic used the open end of the **c**..... wrench.
The plumber used an adjustable **p**..... wrench
A screw with a flat slot on the head needs a **f**..... **s**..... .
He shaped the metal fitting with a ball-pein **h**..... .
Where are the sockets for this **r**..... wrench?
Place a **w**..... between the nut and surface.
He used a **l**..... to carve the table legs.

6. Transform into Passive. (10 points)

The piston compresses the air in the cylinder.
The chief engineer disengaged the turning gear.
The second engineer has replaced the piston rings.
Shipbuilders divide a ship into several compartments.
You should use a scraper to remove scale.

7. Answer one of the following groups of questions. (10 points)

1.
 - What kind of engine is a diesel engine?
 - How does such an engine work?
 - How does it differ from gasoline engines?

2.
 - How does an air compressor work?
 - How many types of air compressors are there?
 - Why is the reciprocating compressor also called piston air compressor?
 - How many kinds of such compressors are there depending on the number of compression stages?