

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

**Academic year:** 2013-2014  
**Semester:** D

**Exam period:** February  
**Duration:** 2 hrs

**NAME:**

**Student Number:**

**1. Fill in the gaps with the right word from the list. (20 points)**

gudgeon, screw, in, through, speed, crankcase, pressure, drain, led, filtered
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The oil is taken from the \_\_\_\_\_(1) tank usually underneath the engine by a \_\_\_\_\_(2) type pump. It is cooled, \_\_\_\_\_(3) and supplied to the engine via the oil inlet pipe at a \_\_\_\_\_(4) of about 4 bar. On a medium \_\_\_\_\_(5) engine the oil is supplied \_\_\_\_\_(6) drillings in the engine frame to the crankshaft main bearings. Drillings \_\_\_\_\_(7) the crankshaft then take the oil to the crankpin bearing. The oil is then \_\_\_\_\_(8) up the connecting rod to the piston or \_\_\_\_\_(9) pin and from there to the piston cooling before returning to the \_\_\_\_\_(10).

**2. Choose the correct answer (15 points)**

1. Change in the bearing geometry

a) Will obstruct the oil film formation      b) Will cause fouling c) Will trigger an alarm in the system.

2. Fuel consists mainly of carbon and

a) Helium      b) Lithium      c) Hydrogen

3. The governor

a) Injects the fuel      b) Controls the amount of fuel injected to the engine  
c) Operates the fuel pumps

4. The element which causes oxidation to the engine is

a) silicon      b) carbon      c) sulphur

5. Thick particles sink down in the

a) service tank      b) settling tank      c) buffer tank

6. The fuel needs heating when it is close to its

a) flash point      b) pour point      c) injection point

7. Scuffing is

a) Dust      b) Soot      c) Scraping

8. VIT is

a) Various included tuning      b) Variable injection tolerance c) Variable injection timing

9. The VIT rack is connected to the:

a) governor      b) turbocharger      c) sump tank

10. The plunger has a:

- a) flange    b) insulation band    c) helix

**3. Turn the following sentence into the Passive voice.(10 points)**

- a) The fuel vapors produce a flash  
A flash.....
- b) We store the fuel in the bunkers  
The fuel .....
- c) That hospital doesn't treat patients very well  
Patients.....
- d) He bought a new car last month.  
A new car.....
- e) We will post the letter tomorrow.  
The letter.....

**4. Complete the sentences in the passive voice, using the verbs in brackets (10 points)**

- This room \_\_\_\_\_ now. (clean)
- The letters \_\_\_\_\_ by the postman at 8 every day. (deliver)
- The box \_\_\_\_\_ tomorrow. (send)
- Coats \_\_\_\_\_ in the cloakroom. (must leave)
- This file \_\_\_\_\_ in the bus yesterday. (find)
- That shirt \_\_\_\_\_ in hot water. (must not wash)
- This repair \_\_\_\_\_ in time if you didn't help me. (not finish)
- These problems \_\_\_\_\_ today. (cannot solve)
- Why \_\_\_\_\_ the TV \_\_\_\_\_? (turn on)
- This house \_\_\_\_\_ since the 1940s. (not reconstruct)

**5. Complete the sentences with WHO, WHICH, WHOSE (10 points)**

- a) My friend Jack \_\_\_\_\_ parents live in Glasgow invited me to spend Christmas in Scotland.
- b) He is the kind of person \_\_\_\_\_ loves an argument.
- c) What was the name of your friend \_\_\_\_\_ tent we borrowed?
- d) She has a job \_\_\_\_\_ most people would hate.
- e) Tony works for a company \_\_\_\_\_ makes fridges.
- f) You should choose the clothes \_\_\_\_\_ suit your personality.
- g) I don't know the people \_\_\_\_\_ live there.
- h) My bike, \_\_\_\_\_ I had left at the gate, had disappeared.
- i) The woman \_\_\_\_\_ lives next door is a dentist.
- j) The hotel \_\_\_\_\_ caught fire has been rebuilt.

**6. Match the synonym words from column A with column B (15 points)**

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|-------------|-----------|
| Consequence | State     |
| Contaminate | Measure   |
| Accumulate  | Finally   |
| Calibrate   | Pollute   |
| Examine     | Check     |
| Remove      | Intention |
| Purpose     | Gather    |
| Excessive   | Result    |
| Condition   | Withdraw  |
| Eventually  | extreme   |

7. **Write a report to the Superintendent of your company** describing an incident concerning a damage that occurred and the repairs you made. (100-150 words). **(20 points)**