

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

Academic year: 2012-2013

Semester: D

Instructors' names: Papadopoulou A- Ploumistou A

STUDENT'S FULL NAME:

Exam period: September

Duration: 2 hrs

A.Γ.Μ:

1. Fill in the gaps with the right word from the list. (10 points)

crankcase, pressure, drain, led, filtered, gudgeon, screw, in, through, speed

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 (15 points)

1. The element which causes oxidation to the engine is

a) silicon b) carbon c) sulphur

2. Thick particles sink down in the

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

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

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

4. Scuffing is

a) Dust b) Soot c) Scraping

5. Change in the bearing geometry

a) Will obstruct the oil film formation b) Will cause fouling

c) Will trigger an alarm in the system

6. Fuel consists mainly of carbon and

a) Helium b) Lithium c) Hydrogen

7. The governor

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

c) Operates the fuel pumps

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 passive voices with the verbs in brackets (10 points)

Lettersby the postman at 8 every day. (deliver)

This bagin the bus yesterday. (find)

The dressin hot water. (cannot wash)

Bagsin the cloakroom. (must leave)

.....your motorbikeyet? (repair)

The messagetomorrow. (send)

These officesnow. (clean)

This reportin time if you didn't help me. (not finish)

Whythe TV.....? (turn on)

This buildingsince the 1930's. (not reconstruct)

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

