Merchant Marine Academy of Macedonia **NAME:**
School of Engineers
Course: Maritime English
Semester: ST **June 2013**
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Final Exam

A. Fill in the gaps using the words below. There are <u>two extra words</u>. (15 p.)

rate guide treatment grind cooling planks quality machining scores conditions intervals duct dismount schedules results overhauls inspect

--The checking and maintenance _____ indicate the intervals at which it is appropriate to _____ the individual components of the engine and to carry out _____.
--The recommended hours of service should only be used as a _____, as differences in the actual service _____, the _____ of the fuel oil or lubricating oil, the _____ of cooling water, etc. will influence the service results and thus the _____ between the necessary overhauling.
--When you want to check the cylinder liner you should first _____ the cylinder cover, the piston cleaning ring and the piston.
--Carefully scratch over any _____ or marks on the liner and _____ away the wear ridges.
--Clean any blocked lubricating _____.
--Lower the cooling jacket by means of the tackles and land it on the wooden _____.
--When the ring is in good condition you can still see the _____ marks on its surface.
--The centrifuge must operate with the proper flow _____.

B. Fill in the gaps using the words below. There are <u>two extra</u> words. (15 p.)

executed contingency deposits carbon inlet punch exhaust dismantled sulphur completion barge bunkering wear delivery tolerance mounting refinery

--When you take deflections, _____ marks are normally present to indicate the correct _____ position of the measuring tool.
--If the crankshaft deflection approaches the _____ limits, the bearing shells of the two adjacent main bearings must be _____ and inspected.
--The fuels which go through extensive _____ processing are left with high _____ content.
--The centrifuge should always be operated with a(n) _____ temperature of 98 C.
--On _____ of loading, all hoses and lines should be drained to the tank or, if applicable, to the _____.
--All _____ operations should be carefully planned and _____ as per MARPOL regulations.
--The procedures regarding the _____ of fuel should address _____ arrangements in the event of a spill.
--Vanadium combined with sodium may lead to _____ valve corrosion and turbocharger _____.

C. Fill in the gaps with a word/phrase of your own choice. (22.5 p.)

--Clean the cylinder liner and scavenge air _____.
--Apply a thin _____ of grease on the contact surface of the liner.
--The screws are too tight here. You need to _____ them.
--Corrosive wear may be the result of the formation of _____ acid on the cylinder wall.
--In order to reduce the risk of corrosion, use _____ cylinder oils to _____ the acids that may be formed.

--Abrasive cylinder wear may be caused by hard _____ which enter the cylinder via the fuel oil.
--The ability to separate water from the oil depends largely on the _____ gravity of the fuel oil in relation to that of water.
-- A mixture of _____ fuels in the tanks can result in rather large amounts of _____ being taken out of the centrifuges.
-- Marine fuel oils must be _____ on board before use.
-- Temperatures below the _____ result in wax formation.
-- Part of the ash which is present in the fuel could be _____ particles from the cracking process.
-- Two-way communication with _____ vessel or facility should be established before bunkering starts, including _____ stop.

D. Choose the correct option. (5 p.)

--Design modifications may _____ a revision of the instructions and change in the overhauling intervals.
a. influence b. change c. necessitate d. check
--We need to check the axial vibration _____.
a. damper b. catcher c. bearing d. tightener
--We replaced the moment _____
a. camshaft b. compensator c. tightener d. distributor
--The starting air _____ had a problem.
a. chain b. lubricator c. distributor d. compensator
--The exhaust valve _____ was OK.
a. actuator b. pipe c. tightener d. distributor
--Drain the water mist _____
a. turbine b. guide c. cooler d. catcher
--The fuel pump _____ valve is new.
a. puncture b. chock c. torque d. spanner
--You need a tightening _____ for this job.
a. pump b. gauge c. thermostat d. switch
--These holding down _____ are not the right size.
a. spanners b. valves c. gears d. bolts
--VIT stands for _____
a. variable inflection timer b. various injection timer c. variable injection timing
d. volatile inflection timer

E. Fill in the gaps with a suitable form of the words in parentheses. (10 p.)

--You should always pay attention to the manufacturer's _____. (recommend)
--What are the entry _____ for this school? (require)
--The _____ of the lube oils according to their viscosity is an important parameter for their use. (classify)
--_____ checks are needed to make sure the lube oil system centrifuge is working properly. (add)
--You have to make _____ for the engine to work properly. (adjust)
--There were several _____ problems we had to solve. (function)
--They checked the _____ of the crankshaft. (align)
--Maintain the proper temperature to avoid the _____ of the steam. (condense)
--Fuels often contain _____ to be of better quality. (add)
--We need to clean the various _____ through centrifuge. (pure)
-- The water _____ (separate) ability of the fuel oil is ensured by limiting the _____ (dense) for reasons of centrifuging.
-- The sulphur content of a fuel has a _____ (neglect) effect on the combustion process.
-- As heavy fuel oil is more _____ (viscosity) than marine diesel oil, it cannot be pressed through the _____ (inject) without proper treatment.

-- Fuels which are produced on the basis of _____ (differ) crude oils tend to be _____ (stability) when mixed.
-- Marine fuel oils should be thoroughly cleaned to remove solid and liquid _____ (contaminate) before use.
-- Ash represents non- _____ (combustion) solid material as well as metals bound in the fuel.
-- The fuel oil system consists of a cleaning plant and a _____ (pressure) fuel oil system.

F. Match the words in column A to their synonyms in column B, and write the pairs below. (7.5 p.)

A	B
discard	micro-seizure
indicate	serious disagreement and argument
assess	prove that something is true
bores	deviation
circumferential	holes
scuffing	throw away
implement	on the sides/perimeter
deflection	put into force
verify	evaluate
conflict	show
access	

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G. Match the words in column A to their opposites in column B, and write the pairs below. (7.5 p.)

A	B
actual	imprecise
vertical	unable
significant	reduction
appropriate	insufficient
thorough	improve
deteriorate	careless
accurate	theoretical
adequate	unsuitable
capable	horizontal
increase	unimportant
operational	

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H. How do the following parameters of fuels affect the combustion process and/or the engine parts? (7.5 p.)

1. Water: _____

_____

2. Carbon residue: _____

_____

3. Sulphur: _____

_____

4. Aluminium and silicon: _____

_____

I. Choose <u>one</u> of the two topics and write a paragraph of about 120 words (10 p.)

a) Discuss <u>why</u>, <u>when</u> and <u>how</u> you take crankshaft deflections.

b) Discuss some of the procedures which, according to MARPOL, must be followed so as to minimize the risk of spillages and leakages during bunkering.

GOOD LUCK!!!