

### FINAL EXAM

#### A. Fill in the gaps with one of the words below. (15 points)

*loose acids leaks manufacturers deflections  
thickness jammed residual overhauled average*

1. The alkaline lubricating oils neutralize the \_\_\_\_\_.
2. \_\_\_\_\_ fuels produce carbon.
3. \_\_\_\_\_ show if the axis of the crank journals has deviated from the theoretical axis.
4. Engine \_\_\_\_\_ set the acceptable deflection limits.
5. What is the \_\_\_\_\_ consumption the last two hours of operation?
6. The engine should be \_\_\_\_\_ and cleaned at regular intervals.
7. If you dismantle the running gear, you should make sure that no \_\_\_\_\_ parts are \_\_\_\_\_ when the engine is turned over.
8. Pipes must be pressure tested for possible \_\_\_\_\_.
9. The oil film should have the right \_\_\_\_\_.

#### B. Fill in the gaps with one of the words below. There are three extra words you do not need to use. (15 points)

*viscosity barge ignition sulphur burning flash point watertight  
pour point liquid bunkering erosion discharge ullages*

1. When the Chief Engineer checks all the \_\_\_\_\_ tanks, the most important measurements refer to soundings, temperatures and \_\_\_\_\_.
2. The function of the bilge system is to drain any \_\_\_\_\_ compartment other than ballast, oil or water tanks and to \_\_\_\_\_ the contents overboard.
3. During \_\_\_\_\_ the Chief Engineer takes precaution measures against pollution
4. \_\_\_\_\_ is the measure of the resistance of the \_\_\_\_\_ to movement.
5. Cetane Number indicates the \_\_\_\_\_ quality of a fuel.
6. The \_\_\_\_\_ contained in a fuel is responsible for "low temperature" corrosion which attacks cylinder liners and piston rings.
7. \_\_\_\_\_ indicates the ability of a fuel to flow at cold operating temperatures.

#### C. Fill in the gaps with the correct derivative of the words in parentheses. (10 points)

1. The Chief Engineer can check the level of tanks by means of a remote level \_\_\_\_\_ system. (detect)
2. Sulphur, carbon residues, ash and water are all \_\_\_\_\_ materials in the fuel oils. (harm)
3. The emergency bilge pump is a totally \_\_\_\_\_ unit capable of operating even if it is covered with water. (depend)

4. \_\_\_\_\_ should be paid to all combustible materials in the machinery space. (attend)
5. The sounding tape which is used to measure the tanks before bunkering starts must be \_\_\_\_\_ and not modified. (rely)
6. You should take \_\_\_\_\_ measures against accidents. (prevent)
7. You must \_\_\_\_\_ all nuts and bolts. (tight)
8. Good maintenance guarantees \_\_\_\_\_ readiness. (operation)
9. The \_\_\_\_\_ wear was extensive. (corrode)
10. This system will improve the \_\_\_\_\_ of oil on the liner surface. (distribute)

**D. Match the words in column A to their opposites in column B. (10 points)**

A	B
presence	same
loose	improvement
gradual	reduce
deterioration	put back
increase	absence
remove	tight
internal	automatically
different	quick
manually	net
gross	external

**E. Match the words in column A to their synonyms in column B. (10 points)**

A	B
convert	critical
crucial	scrape off
weaken or make worse	wrong
suitable	important
affect	provide
clearance	turn into
inappropriate	influence
supply	impair
abrade	appropriate
significant	play

**F. Give one word that derives (comes from) the verbs below. (10 points)**

E.g. : consume    consumption

1. reduce    \_\_\_\_\_
2. contaminate \_\_\_\_\_
3. align    \_\_\_\_\_
4. inspect    \_\_\_\_\_
5. indicate    \_\_\_\_\_
6. extend    \_\_\_\_\_
7. access    \_\_\_\_\_
8. expand    \_\_\_\_\_
9. vary    \_\_\_\_\_
10. convert    \_\_\_\_\_

**G. Choose either a or b. (30 p.)**

a. Write a paragraph about crankshaft deflections. More particularly, you should refer to why, when and how you take deflections as well as to any factors which can affect the whole procedure and the recorded readings. (Approximate length: 100 words)

b. During your voyage you noticed excessive fuel consumption. Write a formal letter to the Superintendent Engineer of the shipping company to inform him about the measures you took to find the cause of the problem and solve it.  
(Approximate length: 100 words) (30 points)