MERCHANT MARINE ACADEMY OF MACEDONIA SCHOOL OF ENGINEERS

Acade Semes Instru	nt's full nam	013 – 2014 (akes) . Botonaki, A. I	Exam period: February Date:					
FINAL EXAM								
1. Fill in the gaps using the words below. (20 p.)								
	barge	pour point	dismoun	t carbon	inlet			
	refinery	piston	emergency	acids	bunkering			
1. The fuels which go through extensive processing are left with high content.								
				akes precautions a	gainst pollution.			
4. Two	e aikaiille lubi o-wav commi	icating ons neut	ranze me ne	 should be e	established before			
		cluding						
				l to flow at cold op	perating			
-	ratures.							
6. The centrifuge should always be operated with a(n) temperature								
	degrees C.	o chock the cyli	ndar linar vai	s should first	tha			
				ı should first	tile			
Cyllina	ior cover, the	piston eleaning	ing the the	·				
2.	Fill in the g	aps using the v	vords below.	(20 p.)				
	abrasive	maintenance	sulphur	manufacturers	leaks			
	liquid	ignition	inspect	overhauled	viscosity			
1. Cetane number indicates the quality of a fuel.								
2. The engine should beand cleaned at regular intervals.								
3 cylinder liner wear may be caused by hard particles which enter								
the cylinder via the fuel oil.								
4 is the measure of the resistance of a to								
movement. 5. Engine set the acceptable deflection limits.								
6. The checking and set the acceptable deflection limits.								
approp	priate to	th	ne individual c	omponents of the	engine.			
7. The contained in a fuel is responsible for 'low temperature'								

corrosion which attacks cylinder liners and piston rings.

8. Pipes must be pressure tested for possible ______.

3. Fill in the	<u>e gaps with a suit</u>	able form of t	<u>he words in parent</u>	<u>heses.</u> (15 p.)		
1 This system w	ill immuoryo tha		(diatributa) of hyl	miaatina ail an		
1. This system will improve the (distribute) of lubricating oil on						
the liner surface.		مملط المسملط المار	11			
		iid de paid to a	ll combustible mate	mais in the		
machinery space		d vyatan ana all	,	(harm) matariala		
-	on residues, asn and	d water are all	((narm) materials		
in the fuel oils.	ringar aan ahaale th	a laval of tank	s by maons of a rom	ota laval		
	(detect) system		s by means of a rem	ote level		
) for marchant mari	na academies?		
5. What are the entry (require) for merchant marine academies?6. The (classify) of the lube oils according to their viscosity is an						
important parame) of the fube of	is according to then	viscosity is all		
		s are needed to	make sure the lube	oil system		
centrifuge is wor		is are needed to	make sure the rube	on system		
8 You have to m	nake	(adiust)) for the engine to w	ork properly		
9 They checked	the	(aujust) (alion)	of the crankshaft	ork property.		
10 Maintain the	nroper temperatur	e to avoid the		(condense) of		
the steam.	proper temperatur	e to avoid the _		_ (condense) or		
	ontain	t (bbs)	o improve their qua	lity		
12. The water	(9	senarate) abilit	ty of the fuel oil is e	nsured by		
limiting the	(de	nse) for reason	s of centrifuging.	110010000		
			viscosity) than mari	ne diesel oil, it		
			(inject) without pro			
1	£			1		
4. Match the	he words in colun	nn A to their s	ynonyms in colum	n B, and write		
the pairs below.	(10 p.)					
A	В					
discard	_					
convert		ment and aroun	ient			
suitable	influence	nom una urgun				
bores	provide					
circumferential	holes					
scuffing	throw away					
implement	on the sides/perin	meter				
supply	put into force					
affect	appropriate					
conflict	turn into					
		_				
		_				
		_				
		_				
		_				
		_				
		-				
		_				

5. How do the following parameters of fuels affect the combustion process							
and/or the engine parts? (15 p.)							
1. Water:							
2. Carbon residue:							
3. Sulphur:							
4. Aluminium and silicon:							

- 6. Choose one of the two topics and write a paragraph of about 100 words. (20 p.)
- a) Discuss why, when and how 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.