


Merchant Marine Academy of Macedonia- School of Engineers		
Course: Maritime English	Academic year:2021-22	Exam period: June
Semester: D	Date: 08/06/22	Instructors: A. Birbili, E. Xenitidou
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	Exam paper grade:	Instructor's signature

State whether the following sentences are True (T) or False (F). (10 p.)

- The Chief Engineer can use new fuel oil, even if s/he has not received the analysis results. ---
- Low ignition quality can mean poor combustion and diesel knock. ---
- There are two bilge pumping systems. ---
- When the "finished with engine" order is given from the bridge, change over from engine room control to bridge control. ---
- Ballast is taken on board in order to increase the list of the ship. ---
- A new blending on board concept makes it possible to add chemicals to the engine circulating oil and then use it as cylinder oil. ---
- The main purpose of the ballast system is to pump excess water out of the ship. ---
- According to MARPOL regulations, the residue of oil in the water that is pumped overboard must not exceed 15 ppm. ---
- Engines operating on high Sulphur fuels use special lubricants with high TBN to minimize the effects of Sulphur. ---
- Lube oil that has been used is clean and does not need to be centrifuged. ---
- Water must be added to the lube oil when centrifuging. ---
- Distillate fuels cannot be centrifuged. ---
- Lube oil quality can cause problems to the engine. ---
- There are no standards for the ignition quality of fuel, you can only have some indications you can take into account. ---
- Homogenizers must be placed before the centrifuge. ---
- A grinding tool can remove vanadium deposits from the turbocharger nozzle ring. ---
- Cat fines do not cause abrasive wear. ---

Complete the sentences with the correct form of the words in the parentheses. (15 p.)

- You have to obtain _____ (**permit**) from the bridge to test main engine ahead and astern on air.
- Report _____ (**ready**) of the engine to the bridge.
- One of the world's largest marine diesel engines burnt untested fuel containing cat fines which are _____ (**cat**) aluminium/ silicon fines
- . -- Ejectors are _____ (**rely**) in operation, as they don't have any _____ (**move**) parts. This is why _____ (**maintain**) is minimal.
- The _____ (**clean**) of cooling water has to be checked.
- Homogenizers can also deal with _____ (**incompatible**) problems.
- _____ (**add**) are used to improve lube quality.

- High _____ (**accumulate**) of ash and other solid contaminants can be removed through a fine filter.
- Are minimum of two _____ (**alternate**) running and in parallel?
- Stop _____ (**add**) running generator.
- Cat fines are highly _____ (**abrade**).
- Check the _____ (**suitable**) of lube oil in the sump tank.
- Sulphuric acid is highly _____ (**corrode**).

Match the words to their synonyms/definitions. There is one (1) extra word. (15 p.)

*Miscellaneous replenish excess obstruct trim ullage comply with dismantle
sounding condensation emerge interval disengage component device box*

- take apart, disassemble.....
- apparatus
- refill.....
- chest.....
- several, various.....
- obey a rule, an order.....
- the process of measuring the depth of a fluid in a tank.....
- come out.....
- let go.....
- period of time between two events/activities.....
- the process of steam or warm air changing to liquid.....
- more than is acceptable or necessary.....
- block sth so that things cannot move through easily.....
- part.....
- the difference between the fore and aft draughts.....

Fill in the gaps with the following words: shifting/ stringent/ flow/ pitch/ heeling/ discharge/ distribution/ priming/ distillate/ rate/ adherence/ mud/ gravity/ mounted/ contaminated (15 p.)

- Ejectors are self -and easily activated by turning theof the driving water.
- The most probable cause of the flooding was lack of communication between the deck side and the engine room and lack ofto proper procedures regarding the sound alarm.
-box is an appropriate box which contains valves, each of which controls the flow of bilge water from a bilge compartment of a bilge well.
-box is a kind of filter on the suction line head which is a perforated basket, necessary to prevent ashes and other particles from entering the pumps and choking them.
- Several suction lines areon a manifold.
- Presentof the propeller is 90 degrees.
- An anti-..... system is used to minimize the list (in port).
- We willdouble bottom tank.
- The rules for the ballast system are lessthan the rules for bilge systems.
- There are many reasons for taking ballast on board orballast, once it is on board.
- Heavy fuel (residuals and mixtures of residuals and) must be purified in an efficient centrifuge before entering the service tank. There are several key points.
 1. Ensure that the correctdisc is used.
 2. Never exceed the flowrecommended for the grade of fuel in use. The lower the flow rate the better the efficiency. Consider using two or three centrifuges in series/ parallel as purifier/clarifier.
 3. Centrifuging is still recommended for the distillate fuels. MDO/MGO, as the fuel may bein the storage tanks.

-- When the ship is about to arrive in port, you must close the ____ for exhaust gas boiler and open bypass.

- a) valves b) dampers c) indicators

-- It indicates the coke-forming tendencies of a fuel.

- a) sodium b) carbon residue c) sediment

-- Chemical element which contributes to air pollution. Its compounds can severely damage the engine parts they come in contact with.

- a) sulphur b) sodium c) vanadium

-- They indicate the presence of tiny particles of aluminium and silicon used in the refining process and carried over into the residual fuels.

- a) acids b) cat fines c) sediments

-- The ____ box is a kind of filter on the suction line head which prevents solid particles from entering the pumps and choking them.

- a) strum b) filter c) sludge

-- Damage to ____ electrical equipment occurred because the engine room was flooded by 2.5 m forward and 3m aft.

- a) sunk b) emerged c) submerged

-- During pre-departure preparations, you must check if the starting air ____ are running, and set to auto start.

- a) bottles b) valves c) compressors

-- Regarding bunkering, check the ship supplier's paperwork to ensure the delivery ____ in terms of quality and specification with what has actually been ordered.

- a) applies b) requires c) conforms

-- Regardless of whether the service of an independent fuel analysis contractor is utilised or not, the C/E should take a continuous ____ sample at the manifold throughout the entire bunkering procedure.

- a) drip b) drop c) drizzle

-- Always order fuel according to the engine maker's ____ using the industry fuel oil standard ISO 8217.

- a) recommendation b) prescription c) approval

-- The corners of the lowest ____ of a ship constitute a bilge.

- a) component b) compartment c) department

-- An automatic viscosity controller or viscometer should be in ____ working order to maintain correct viscosity of the fuel at the engine.

- a) adequate b) proper c) enough

Complete the following sentences with an appropriate word. The first letter is given.

(10 p.)

-- The bilge **h** _____ tank is a huge tank where bilge water is pumped into from the bilge wells.

-- **F** _____ up the fuel oil service tank with purified fuel oil.

-- Present **o** _____ of the main engine is 1,000 kilowatts.

-- The depth and the number of bilge **w** _____ depend on the ship's size, its capacity and the amount of bilge it generates.

-- **F** _____ and aft bilge tanks, deep tanks, double bottom tanks and wing tanks are usually used for ballast water, depending on the ship's size.

-- Do not exceed a minimum _____ of 20 degrees centigrade.

-- Do not exceed a _____ of 4 bars.

-- **W** _____ up the engine gradually using the circulating pumps to circulate the system.

-- **P** _____ up the starting air reservoirs to their maximum pressure and **d** _____ them of water.

