

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

Course: Maritime English
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FINAL EXAM

1. Fill in the gaps using the words below. (15 p.)

centrifugal spring sweat viscosity shaft fuel gases flyweights

complete ventilated alignment heating device pitch dilution

- Bulk cargoes are _____ to prevent the formation of cargo _____ which could damage the cargo, to reduce the harmful _____ of the cargo and to remove hazardous _____ from the cargo spaces.
- The principal control _____ on any engine is the governor which works on the principle of _____ force.
- Propeller _____ is the displacement a propeller makes in a _____ revolution of 360 degrees.
- The _____ fitted on the governor spindle acts to return the _____ to their original position.
- _____ leakage into the lubricating oil system will cause _____ of the lubricating oil with a consequent reduction in _____ and lubricating properties.
- The main _____ is supported and held in _____ by bearings.

2. Fill in the gaps using the words below. (15 p.)

envelope crankcase requires radiant extracted pressure stringent fan

combustion extremes cooling spring reference applications measuring

- _____ air refers to the flow of air that removes _____ heat from the engine.
- The ship's _____ and heating and cooling systems should be designed for the _____ of ambient conditions.
- All products and _____ used in marine insulation are tested against _____ safety standards.
- The _____ relief doors are _____-loaded valves which lift up in case there is any rise of _____ inside the crankcase.
- An oil mist detector consists of two tubes: the _____ tube and the _____ tube which has a connection for the oil mist _____ from the crankcase with the help of an electric extractor _____.
- _____ air describes the air the engine _____ to burn fuel.

3. Fill in the gaps with a word of your own choice. (20 p.)

- Structural _____ is required to thermally separate the compartments within a ship.
- A propeller which turns clockwise when viewed from aft is considered _____.

- You must thoroughly _____ the fuel before using it and you must keep the filters clean and intact.
- The presence of oil mist in the crankcase reduces the _____ point of the oil, allowing it to catch fire in presence of a _____ spot.
- Crankcase _____, which are the result of high operating temperatures, have been the cause of many fatal incidents.
- Rapid cooling may _____ a cylinder liner and head or may cause a _____ to seize within a cylinder.
- _____ is the formation and bursting of vapour bubbles near a moving propeller _____.

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

- The screw-type propeller is the _____ (**propel**) device used in almost all ships.
- It is important to carry out routine _____ (**inspect**) of the OMD to prevent false alarms.
- When fuel reaches the _____ (**inject**) system, it should be _____ (**absolute**) free of water and foreign matter.
- If the _____ (**concentrate**) of oil mist in the measuring tube rises, the _____ (**intense**) of light reaching the photo-electric cell reduces.
- The situation in the Middle East is _____ (**explode**).
- The chief engineer got a _____ (**consider**) raise in his salary last month.
- Hold _____ (**ventilate**) are exposed to sea water and spray on deck and require proper _____ (**attend**).
- The workers used a lot of _____ (**explode**) to demolish the old building.
- International regulations try to reduce the _____ (**emit**) of ships' fuels.
- The pneumatic governor is _____ (**respond**) to the air flow in the intake manifold of the engine.
- When the temperature of steam falls below _____ (**permit**) limits, _____ (**condense**) takes place.

5. Write the opposites of the following words. (10 p.)

- | | |
|----------------|--------------|
| -- attention | -- similar |
| -- include | -- equality |
| -- efficient | -- obey |
| -- manned | -- compose |
| -- balance | -- important |
| -- harmful | -- regular |
| -- equal | -- ingress |
| -- experienced | |

6. Match the words of column A to their synonyms in column B and write the correct pairs in the space provided. (10 p.)

- A**
- actually
 - move in order to oppose
 - audible
 - due to
 - adjacent
 - the total of all pipes or tubes
 - particle
 - concern
 - choke
 - surface
 - back
 - the quantity of movement in a body
 - withstand
 - reliable
 - producing the desired result

- B**
- face
 - dependable
 - a very small piece
 - momentum
 - literally
 - owing to
 - able to be heard
 - counter
 - effective
 - resist
 - ductwork
 - nearby
 - worry
 - clog
 - rear

7. Read the following article and answer the questions that follow. (15 p.)

Carnival Splendor returns

By Michelle Baran / February 20, 2011

LONG BEACH, California.— After three-and-a-half months out of service, the damage to the Carnival Splendor has been repaired, and measures have been taken to hopefully prevent fires from incapacitating the ship again, said Carnival Cruise Lines CEO Gerry Cahill. The Splendor welcomed media and travel agents on Saturday, on the eve of her return to service. An engine room fire on November 8, 2010 knocked out power on the ship and forced her into drydock.

The fire broke out while the ship was off the coast of Mexico. Three days later, tugboats towed the ship into San Diego.

Cahill said the fire cost Carnival about \$65 million, including repairs and lost revenue.

The fire was caused by a catastrophic failure in diesel generator No. 5. According to Cahill, the power went out because the heat from the fire melted the insulation around electrical cables and ruined the cables. He said there was heat damage in the switchboard room, as well.

While the fire was in the aft engine room, the Splendor's second engine room should have kicked in.*

"Having two engine rooms like we do, is pretty much the norm in the cruise industry," explained Cahill. "What we have decided to do, and this will go across the Carnival group I'm sure, is we've determined there are certain things that we can do to increase the effectiveness of that redundancy."

Cahill said these measures include additional suppression systems to put out fires more quickly and additional insulation over the cabling and under the switchboard areas.

Cahill said the Splendor re-entered service later than initially planned because damage to the engine room was more extensive than originally estimated and because of the time it took to get spare parts manufactured.

A replacement diesel generator weighing 218,000 pounds was airlifted from Europe. Two 106,000-pound alternators along with 110 miles of electrical cabling were replaced.

All systems have been inspected by Lloyd's Register Group and by the U.S. Coast Guard.

Forensic fire investigators are examining the failed generator, which is currently in San Francisco. An investigation into the cause of the fire is ongoing.

Carnival has created a task force consisting of 18 employees who are working to improve fire prevention, detection, suppression and response capabilities across the Carnival fleet.

Cahill noted that the Splendor's February 20 sailing was full. The 3,006-passenger ship resumes sailing seven-night Mexican Riviera cruises out of Long Beach.

*kick in = become operative

(Retrieved: 7 February, 2015 from www.travelweekly.com/Cruise-Travel/Carnival-Splendor-returns)

True or False?

- Carnival Splendor arrived in San Diego using her own propulsion system three days after the fire.
- The fire was caused by a minor failure in diesel generator No. 5.
- The ship's second engine room started functioning a few minutes after the fire had broken out.
- The switchboard room was also damaged by the fire.
- The investigation into the cause of the fire has been completed.
- The damaged diesel generator is being examined by experts in Mexico.
- A replacement diesel generator was carried by an aircraft from Europe.
- Cruise ships are usually fitted with two engine rooms.

Answer the questions.

1. How long did the Carnival Splendor have to stay in drydock for repairs?
2. As per Gerry Cahill, why did the power on board Carnival Splendor go out?
3. What were the reasons for the ship's delayed return to service?
4. What equipment was replaced during drydocking?
5. Why has Carnival created a task force?

GOOD LUCK!!!