

**BE MARINE ENGINEERING**

**YEAR IV**

**SEMESTER VIII**

**ME804**

**MARINE ENGINEERING PRACTICE**

**QUESTION BANK**

**PART A**

What is the weight of an anchor?

What is the weak link in a life raft?

What is the lifeline in a lifeboat?

What is the painter line in a lifeboat?

What is an outboard motor?

What is a sea anchor?

What is an earth lamp in a MSB?

What is a PV valve?

What is inert gas?

What is deck seal?

What is foam applicator?

What is venturi effect?

Why the centrifugal pump discharge is involute?

What is the use of diffuser in turbocharger?

What is the purpose of nozzle rings in turbocharger?

What is ICCP? Where it is used?

What is MGPS? Its principle?

Which is the thrust bearing in the turbocharger?

How fuel injection pressure is adjusted?

Can Air starting valve opening pressure is adjusted or not?

Cylinder relief valve pressure for two stroke engine?

What is opening pressure of relief valve?

What precaution you will take while tightening bottom end bearing bolt and nut?

How will you take bottom end bearing clearance?

What is ovality of a connecting rod ?

What is ovality of a cylinder head cover?

What is guide clearance of a valve stem?

What will happen if alarm is more than normal?

How the guide bush is removed?

How the four stroke cylinder head valves are secured?

Why you have to keep the hydraulic jack slightly slack before giving the hydraulic pressure?

What do you meant by hydraulically operated nut?

Why you have to purge the hydraulic system?

Why you use gaskets in between flanges?

How the leak between the flanges prevented?

Give simple sketch of fitted bolt?

How will you slacken a nut which is not becoming slack by using the spanner?

What is insert?

What is doubler in welding?

Give simple sketch of Locking plate between two nuts?

How a flange is secured to the shaft? (By using GRUB Screw)

What is the thread seal tape and where it is used?

How will you repair a damaged thread in the bolt and nut?

What do you mean by gassing a safety valve and what is done?

How will you set a safety valve?

When do you operate an easing seal of an auxiliary boiler?

What are the types of gaskets used in engine room?

How the four stroke cylinder valves are dismantled and assemble?

Why do you need pre lubrication?

## **PART B**

A) What are the different types of materials used for gaskets used onboard a ship?

B)What is reinforced jointing?

What are the safety precautions to be taken before starting electric arc welding?

Briefly explain the procedure of lapping an air compressor valve.

How a ball bearing is removed from the pump shaft and fitted back?

Briefly explain the procedure of calibrating the piston ring.

What is ovality of a liner and how it is measured?

What is ovality of a connecting rod and how it is measured?

What are the methods of finding out gas leak in a refrigeration plant?

Briefly explain the procedure of cleaning of the turbine side of the 2 stroke engine turbo charger.

Briefly explain the procedure of cleaning of the blower side of the 2 stroke engine turbo charger.

Name the 2 types of indicator diagram taken and the purpose of that.

How an auxillary boiler is blown down partially?

What is back fire in an auxillary boiler and how to prevent the same?

What may be the causes for vaccum not coming up in fresh water generator and how it is detected?

What are the basic difference in starting the centrifugal pump and reciprocating pump?

What is the meaning of arresting cylinder liner and how it is carried out?

How the gas charging is carried out in a refrigeration plant?

If stern tube oil is leaking through the stern,what temporary action can be taken either to stop or reduce the leak?

Explain briefly the method of removing 4 stroke engine liner from place.

Explain briefly the precautions to be taken before lifting the 2 stroke engine liner as well as lowering the liner in place.

What is the purpose of telltale hole in a cylinder jacket as well as in the stuffing box?

What is the simple method of cutting a rubber gasket for the flanges of a valve body?

Why can't you use a same old steam gasket after removal?

How will you check a lube oil cooler tube leakage?

What is the special care to be taken for the cast iron welding?

How main engine air cooler air side is cleaned and placed?

What is bilge keel? What is the use of it?

What is the duct keel? And its uses?

What is the bitter end of the anchor cable? How the cable length is measured?

What are the reasons for misalignment of crankshaft?

Briefly explain the working principle of Hydraulic nut?

How will you remove a broken stud and normal stud?

What are different types of coupling used in engine room?

What are the methods of checking the foundation bolts of main engine?

How insulated megger value is maintained/improved during cold climate?

What is effect of slackness of chain in the two stroke engine? And actions to be taken

What is the purpose of intermediate shaft bearing?

What is the uses of thrust block?

What is the purpose of fitted bolts ?

Where Pilgrim nut is used ?

What is castle nut ?

If the split pin hole is not in line with the nut how the pin is fitted ?

What is a telescopic gauge ?

What is a sacrificial anode ?

What is the material of the shell of a related tube type heat exchanger ?

If one or two tubes leaking, what action to be taken for continuing the use of the heat exchanger ?

What is the use of baffle plates in the tube stack,?

What is a quick closing valve and where it is used ?

How a ball bearing is secured to a shaft ?

What is the difference between a 'Z' & 'ZZ' ball bearings ?

What is the purpose of 'Tell Tale' hole in the shaft bearing end cover ?

How the brake lining is fitted to the arm of the brake unit of deck machinery ?

What is 'White metal ' combination ?

What are the methods of measuring shell type bearing clearances ?

What is a back flush method adopted in cleaning a plate type heat exchanger ?

### **PART C**

Explain the systematic procedure of cleaning a Shell & Tube type heat exchanger.

Explain the systematic procedure of cleaning a Plate Type heat exchanger.

Explain decarbonising of one unit of 4 –S engine,

Describe centrifugal pump over hauling.

Describe reciprocating pump overhauling.

Describe air compressor overhauling.

Describe self cleaning purifier overhauling.

Discuss in detail scavenge space inspection.

Discuss in detail crankcase inspection.

Explain overhauling of fuel injector.

Describe decarbonising of one unit of 2-stroke engine.

Explain stuffing box overhauling procedure.

Explain hydraulically operated exhaust valve of 2 stroke engine overhauling.

Explain 3 types of repairing for leaking sea water pump.

What are the safety cut offs of aux engine and main engine and how they are tested?

Explain in detail aux engine turbocharger overhauling.

Discuss routine deck crane maintenance and testing.

Write the procedure of sea suction filter cleaning and putting in use.

Where and how the propeller drop, rudder drop and pintle bearing clearances .

Explain fresh water generator routine maintenance.

Explain any 2 types of defrosting methods of refrigeration chamber.

Describe the systematic procedure of firing an auxillary boiler and bringing upto normal working pressure.

How the reciprocating bilge pump suction failure is detected and explain the action to be taken

What are the equipments supplied from ESB?

What is the safety provided to isolate the ESB from MSB?

What is the safety precautions to be followed while connecting international shore supply?

What is the voltage of a) megger b)boiler electrode c) welding transformer?