## **Y4**

## Auxiliary Equipment and Basic Ship Construction Sept 09/02/2011

- 1 a Sketch a bilge injection valve labelling all the parts
  - b Explain how the valve is tested
- 2 a centrifugal pump is found not to be pumping, The water ring was tested and found to be working. List 5 faults that may be the cause and how to fix
- 3 a List 5 safety devices in a medium speed gearbox explaining how they work b List 4 contaminates in a medium speed engine gearbox oil and state why
- 4 Explain the procedure for an inspection of a medium speed engine gearbox
- 5 a Explain how misalignment of the shaft is allowed for in a plain bearing type b Explain why the longatrudal movement appears in the shaft
- 6 Explain why the aft most shaft bearing is a full bush type.
- 7 The shaft bearing appears to be over heating and is running at normal speed and load, explain what the fault maybe and how to fix.
  - 8 Sketch a hydraulic stabilizer system labelling all the parts.
  - 9 Explain speed droop on a generator.
- 10 Explain what happens when two generators are in parrel and one has a higher droop than the other generator.