

Function 6 – Marine Engineering Practice

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1. Explain Auxiliary Engine decarb procedure.
2. What checks do you carry out during Auxiliary Engine crankcase inspection?
3. How do you check the tightness of foundation bolts of Main Engine and Auxiliary Engine?
4. What are the indications of slack tie rods during watchkeeping?
5. Explain the function of tie rods in Main Engine.
6. What is NPSH in pumps?
7. Explain the procedure of tappet clearance adjustment.
8. When are Bottom End Bearing bolts changed on Auxiliary Engine?
9. How do you check Auxiliary Engine Bottom End Bearing bolts?
10. Explain the procedure for removal of valve and valve seat from cylinder head.
11. Explain routines for Boiler Pilot Burner maintenance.
12. What are the clearances checked in Boiler Pilot Burner overhaul?
13. Explain SDNR (Stop, Discharge, Non-Return) valve overhaul procedure.
14. What checks are carried out on Steering Gear during routine maintenance?
15. Explain hunting of Steering Gear and corrective actions.
16. Explain MAC (Main Air Compressor) overhaul procedure.

17. What are the safeties provided in air bottles?
18. Explain Crankshaft deflection procedure and its significance.
19. Explain overhauling procedure of Centrifugal Pump.
20. Explain rudder drop measurement and the tools used.
21. Explain rudder clearance check.
22. What is scavenge fire, how do you identify it, and what actions will you take?
23. Explain water hammering in steam lines and types of steam traps.
24. What are the routines for Cylinder Head overhaul?
25. Explain the procedure for Fuel Injector testing on board.
26. How do you detect liner wear down during AE decarb?
27. What action do you take if AE liner surface is polished smooth?
28. Explain Bilge system arrangement and maintenance onboard.
29. Explain Boiler water test procedure and permissible values.
30. What action will you take if Sodium Chloride content is high in boiler water?
31. What is caustic embrittlement in boilers, how do you detect it, and what preventive measures are taken?
32. Explain overhauling of stuffing box and its function.
33. What is a FIVA valve and its role in electronic engines?
34. Explain scavenge space inspection procedure.
35. How do you detect crankcase explosion is about to happen and what preventive actions will you take?

36. Explain the procedure of cold repairs onboard.
37. Explain the function of a liquid primer pump.
38. Explain how to overhaul a Pressure Jet Burner.
39. Explain Boiler safeties in detail.
40. Explain Hydraulic Jack working principle.
41. Explain overhauling of Piston (ME/AE).
42. Explain Stern Tube sealing arrangements.
43. Explain the procedure and precautions during drydock inspection of Rudder.
44. What is Jumping Clearance in rudder inspection?
45. Explain Lube Oil analysis onboard and parameters monitored.
46. Explain T/C washing procedure.
47. What is the function of Shroud Ring and Labyrinth Seal in Turbocharger?
48. What are the duties of 4/E during bunkering operation?
49. What is role of 4/E in NOx technical file entries?
50. Explain scavenge fire precautions and corrective actions.