

**SCOTTISH QUALIFICATIONS AUTHORITY  
MARKERS REPORT FORM**

SUBJECT: 060-03 Auxiliary Equipment Part I

DATE: 06/11/20

General Comments on Examination Paper

General Comments of Specific Examination Questions.

- Question 1.** The question specifically refers to ship side valves, many give answers based on general properties of cast iron in sea water.
- Question 2.** Poor. Most mention kinetic energy but very few seem to know where the fluid gets the KE from. Nearly all state what priming is but fail to explain why a centrifugal pump is not self-priming, just stating that it can't displace air.
- Question 3.** Although the question asks about air compressors, many answer concerning fusible plugs on receivers. Few actually give the consequences of the devices not being present / not operating.
- Question 4.** Well answered by most.
- Question 5.** Very poor. Many do not understand the term 'block diagram', many simply sketch and describe a steering gear. Of those that try to describe the basics of control, they appear to believe that the rudder angle is fed back to the auto-pilot – i.e that the rudder has a set angle required to maintain the vessel on course rather than the rudder moving from centre to return the vessel to the set course. Rudder feedback is used to limit the rate of change of course but none mention this. Several make no attempt.
- Question 6.** Several answer this question by describing the whole system, the question just asks about the mechanism for changing the blade angle. Of those that describe the mechanism, most mention longitudinal movement and angular but none actually explain how longitudinal is changed to angular. Several make no attempt
- Question 7.** Most are OK with angular movement but struggle to explain how longitudinal movement is allowed. Some explain thrust bearings, several make no attempt.
- Question 8.** Either well answered or no idea – drawing a sort of stern seal oil system. Several make no attempt.
- Question 9.** The question asks about devices for protection of generators, many include pref trip and other devices that are for protection of distribution. Most, when answering about the reason for a device, simply state what it does – i.e over-current protection protects against overcurrent. The question is asking for the reason for the device – i.e what would overcurrent do to the generator.
- Question 10.** Reasonably well answered by most, nearly all struggle with protection should single phasing occur.