

NAUTICAL SCIENCE

GRADE 10

COMMUNICATIONS

OPEN BOOK TEST

Before starting please number the pages of the communication notes sent to you, ie 1,2,3,4 etc.

1. Name all the means of communication used at sea. (page 1 middle) (8)
2. How many flags do the merchant navy use and how are they divided into categories/groups?
(page 1 near bottom) (5)
3. How do the crews of different nationality vessels communicate with one another when they do not have a common language? (page 1 at bottom) (1)
4. Study appendix A and indicate in what order flags are read. (page 2 middle) (5)
5. You only have one set of flags. By using the substitute flags show how you will hoist the following signal: MM22 (page 2 near bottom) (4)
5. Describe how the answering pennant is used when a ship sends a message using flags.
(page 3 near top) (4)
6. Give the advantages and disadvantages of using flags. (page 3 middle) (7)
7. What is the name of the international code used communicating with flashing light?
(page 4 near top) (1)
8. Describe the procedure used when sending and receiving a message by flashing light.
(page 4 middle) (6)
9. What are the advantages and disadvantages of using flashing light? (page 5 bottom & page 6 top) (8)
10. Different coloured flares are used as a means of signaling by the "military" navy but there is only one coloured flare used by the merchant navy. What is it? (page 6 pyrotechnics) (1)
11. Ships' sirens are used for a particular purpose. What is it? (page 6 ship's siren) (1)
12. The underwater telephone is used by two groups only, the one is the military and the other?
(page 6 underwater telephone) (1)
13. Radio can be used for a number of different modes of communication. Name them.
(page 6 radio comms) (5)
14. What are the advantages and disadvantages of using radio as a means of communication?
(page 7 at top) (10)
15. What are the four components (parts) of a signal message? (page 7 radio procedures) (4)
16. How do ships identify one another? (page 9 vessel identities) (2)

17. Why do we make use of a phonetic alphabet when spelling a word over radio? (page 9 phonetic alphabet) (4)
18. Spell the following sentence in the phonetic alphabet: "The quick brown fox jumps over the lazy dog". (page 14 phonetic alphabet/morse code table) (37)
19. What are the single meanings of the following letters/flags:
- a. A.
 - b. B.
 - c. C.
 - d. E.
 - e. F.
 - f. G.
 - g. H.
 - h. I.
 - i. K.
 - k. N.
 - l. O.
 - m. P.
 - n. Q.
 - o. S.
 - p. U.
 - r. V.
 - s. W.
 - t. Y.
 - u. Z.
- (page 12 single meanings of flags) (19)
20. Which clock is used at sea, 12 hour or 24 hour? (page 9 time) (1)
21. Write the following times in sea time:
- a. Half past two in the morning.
 - b. Midday.
 - c. Quarter to three in the afternoon.
 - d. Twenty past nine at night.
 - e. One minute to midnight. (page 9 time) (5)

22. To prevent confusion at sea the transmission time recorded on all signals is that of Fill in the missing word. (page 9 time) (1)
23. When you transmit a message and you want the recipient to reply, how do you end your message? (page 7 radio procedure) (1)
24. When you transmit a message and you do not want the recipient to reply, how do you end your message? (page 7 radio procedure) (1)
25. You are the officer of the watch (OOW) onboard the vessel SUNNY DAWN and you are passing another vessel called AFRICA SUNSET. You want to establish communications with her. Write down exactly what you would say. (page 7 radio procedure) (3)
26. Now write down exactly as the other ship would answer you. (page 7 radio procedure) (3)
27. Having established communications with AFRICA SUNSET, ask her what her destination is. (page 7/8 radio procedure). (3)
28. The AFRICA SUNSET answers and says "my next port of call is Cape Town" and waits for any more messages. Write down how it would transmit this with an ending indicating she is waiting for anymore messages. (3)
29. Acknowledge the message and thank her. Since you do not have any further message end with the right word indicating you are finished. (3)
30. Would you ever end your transmission with the words "over and out"? (page 8 near end) (1)