

CHECK YOUR PROGRESS WEATHER

NAME:
(answers)

Question 1 (1 Mark) Validates to TDMMH1307B element 1a

On marine weather charts a three and a half feathered arrow indicates a wind speed of:

- a. 35 knots
- b. 53 knots
- c. 15 knots
- d. 25 knots

Question 2 (1 Mark) Validates to TDMMH1307B element 1a

A strong wind warning indicates average winds over:

- a. 35 knots
- b. 53 knots
- c. 15 knots
- d. 25 knots

Question 3 (1 Mark) Validates to TDMMH1307B element 1a

A cold front is drawn on a weather chart as a curve with black semi circles lining its eastward edge.

TRUE

FALSE

Question 4 (4 Marks) Validates to TDMMH1307B element 1a

List four sources of current weather forecasts:

Question 5 (1 Mark) Validates to TDMMH1307B element 1a

The weather forecast for your State's or Territories coastal waters warns that a cold front is expected soon. Describe the four conditions you would expect ahead of the cold front's passage.

Question 6 (1 Mark) Validates to TDMMH1307B element 1a

The term "significant wave height" used in Bureau of Meteorology forecasts describes the:

- a. average height of the highest one-third of the waves
- b. a big wave
- c. the average height of the highest waves
- d. rogue waves

Question 7 (1 Mark) Validates to TDMMH1307B element 1a

The Bureau of Meteorology "coastal waters forecasts" are for areas within 60nm of the coast.

TRUE

FALSE

Question 8 (4 Marks) Validates to TDMMH1307B element 1a

List four pieces information included in a cyclone warning.

Question 9 (4 Marks) Validates to TDMMH1307B element 1a
 Answer the following questions with regard to Eastern Bass Strait.

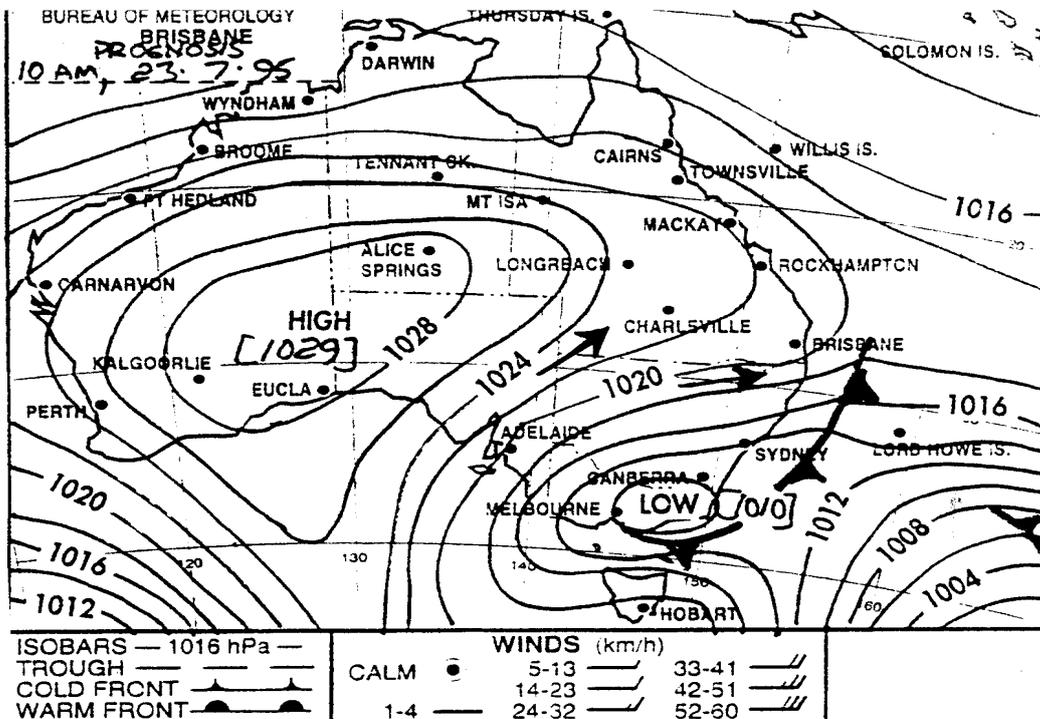
What is the atmospheric pressure? _____

What is the probable wind direction? _____

What is the probable wind speed? _____

What is the state of the sea? _____

Weather Chart © Australian Bureau of Meteorology [1997]



Question 10 (1 Mark) Validates to TDMMH1307B element 1a

The term “Wind speed” used in Bureau of Meteorology forecasts describes the:

- a. highest wind speed including gusts.
- b. lowest wind speed apart from gusts.
- c. highest wind speed, gusts may be up to 40 per cent lower.
- d. average wind speed, gusts may be up to 40 per cent stronger.

Question 11 (1 Mark) Validates to TDMMH1307B element 1a

A high pressure area is also called:

- a. a frontal zone
- b. cyclonic
- c. a polar front
- d. an anticyclone

Question 12 (1 Mark) Validates to TDMMH1307B element 1b

Swell waves are described by the BOM as moderate if their height is:

- a. from 2.00 to 4.00 metres
- b. over 4.00 metres
- c. over 5.00 metres
- d. from 0.00 to 2.00 metres

Question 13 (1 Mark) Validates to TDMMH1307B element 1b

A barometer measures the:

- a. atmospheric temperature
- b. rise and fall of atmospheric humidity
- c. changes in atmospheric pressure
- d. wind speed

Question 14 (1 Mark) Validates to TDMMH1307B element 1b

If an observer in the Southern Hemisphere stands facing the wind, the centre of a low pressure system will lie to the observer's:

- a. left
- b. right
- c. rear
- d. front

Question 15 (1 Mark) Validates to TDMMH1307B element 1b

The wind travels anticlockwise around a low pressure system in the Southern Hemisphere.

TRUE

FALSE

Question 16 (3 Marks) Validates to TDMMH1307B element 1b

Describe the cause and localised affect of a “sea breeze” on your coast.

Question 17 (3 Marks) Validates to TDMMH1307B element 1b

Describe the cause and localised affect of a “land breeze” on your coast.

Question 18 (1 Mark) Validates to TDMMH1307B element 1b

A generally stationary barometer indicates:

- a. the conditions suggesting a broken spring
- b. quickly improving weather conditions
- c. quickly deteriorating weather conditions
- d. continuing present weather conditions

Question 19 (1 Mark) Validates to TDMMH1307B element 1c

A barometer is useless for local forecasting if uncorrected for altitude/index error.

TRUE

FALSE

Question 20 (1 Mark) Validates to TDMMH1307B element 1c

You should lightly tap the face of an aneroid barometer before reading it to:

- a. reset the pointer
- b. centre it to zero
- c. earth the static build up
- d. activate the oiling plunger

Question 21 (1 Mark) Validates to TDMMH1307B element 1c

The wind direction and speed shown by your ships anemometer indicates:

- a. the true direction and speed
- b. the true direction only
- c. the apparent wind only
- d. the true speed only

Question 22 (1 Mark) Validates to TDMMH1307B element 1d

In the southern hemisphere winds travel around a high pressure system:

- a. anti-clock wise & outward
- b. anti-clock wise & inward
- c. clockwise & inward.
- d. clockwise & outward

Question 23 (1 Mark) Validates to TDMMH1307B element 1d

The term 'pressure gradient' refers to the:

- a. rate of change of barometric pressure over a given area
- b. the same pressures over a given area
- c. gradually changing pressure systems from area to area
- d. the pressure difference between mountains and valleys

Question 24 (1 Mark) Validates to TDMMH1307B element 1d

Additionally to radio forecast services, meteorological information is published in:

- a. the "Mariners Handbook"
- b. the "Ocean Passages of the World"
- c. the "Bureau of Meteorology" website
- d. all of the choices

Question 25 (1 Mark) Validates to TDMMH1307B element 2a

Towering Nimbostratus clouds formations accompanied by violent wind gusts, thunder and lightning are typical of the:

- a. approach of an anticyclone
- b. onset of a severe land breeze
- c. passage of a warm front
- d. passage of a cold front

Question 26 (1 Mark) Validates to TDMMH1307B element 2a

The term “moderate breeze” is a wind speed of:

- a. 17 to 25 knots
- b. 7 to 10 knots
- c. 0 to 6 knots
- d. 11 to 16 knots

Question 27 (3 Marks) Validates to TDMMH1307B element 2a

List four weather observations which can be made onboard, which would assist in weather prediction.

Question 28 (1 Mark) Validates to TDMMH1307B element 2b

If in cold climates the sea surface temperature is consistently falling and the dew point consistently rising, you may anticipate that you are approaching an area of:

- a. lighter winds
- b. stronger winds
- c. fog
- d. rain

Question 29 (1 Mark) Validates to TDMMH1307B element 2b

The diurnal variation of pressure causes atmospheric pressure to be lower at about 0400 & 1600 and higher at 1000 & 2200 each day.

TRUE

FALSE

Question 30 (4 Marks) Validates to TDMMH1307B element 2b

List four precautions to prepare your vessel for heavy weather:

Question 31 (1 Mark) Validates to TDMMH1307B element 2b

During severe electrical storms it is advisable for personal not to:

- a. use earthed electrical equipment
- b. operate radios
- c. be exposed on open decks
- d. have a shower

Question 32 (1 Mark) Validates to TDMMH1307B element 2b

In a cyclone's vortex the conditions include:

- a. confused seas and little wind.
- b. low swell and strong winds.
- c. limited visibility.
- d. torrential rain.

Question 33 (1 Mark) Validates to TDMMH1307B element 2b

The distance over water that limits the size of waves that the wind can develop is called the:

- a. stretch
- b. fetch
- c. wind scale
- d. reach

Question 34 (2 Marks) Validates to TDMMH1307B element 2b

In determining a safe haven to seek to avoid a cyclone in remote tropical regions, estuaries with low _____ may be a preferred option.

Question 35 (1 Mark) Validates to TDMMH1307B element 2b

While steering east off Cairns in the vicinity of an approaching cyclone you experience an increasing wind which is backing slowly. You are in the:

- a. path of the storm
- b. eye of the storm
- c. navigable semicircle
- d. dangerous semi circle

Question 36 (1 Mark) Validates to TDMMH1307B element 2b

To take avoidance action if in the situation described in question 35, you should:

- a. heave to
- b. steer to maintain the wind 10 to 45 degrees on port bow
- c. steer to maintain the wind on port quarter
- d. steer to maintain the wind 10 to 45 degrees on starboard bow

Question 37 (1 Mark) Validates to TDMMH1307B element 2b

In higher latitudes the build up of ice on a vessel's rigging can affect the vessel's stability and cause capsize.

Question 38 (1 Mark) Validates to TDMMH1307B element 3a

Meteorological observations during a passage should be recorded in the vessel's navigational logbook.

TRUE

FALSE

Question 39 (2 Mark) Validates to TDMMH1307B element 3a

Describe the routine maintenance of your ship's meteorological instruments:
