

S211 SELF-STUDY TEST

1. The four weather elements that directly influence fire behaviour are:

_____, _____ and _____,
_____, _____

2. Wind tends to: (Select all that apply)

___ blow from hot to cold

___ blow from high pressure to low pressure

___ blow upslope during the day

___ veer at night and back during the day

___ veer with height

3. Extended periods of precipitation or moderate to heavy precipitation will affect fire fighter safety by:

4. A microburst is an intense downdraft from a _____ cloud and may have windspeeds of _____ to over _____ km/h.

5. Define “virga”

6. You see a cumulus type cloud developing over a fire in an otherwise clear sky. This cloud is caused by

and _____

7. A sling psychrometer has two thermometers called the _____ and the _____. Measurements taken with these thermometers are used to calculate the _____

8. What is the minimum information you need to give a forecaster to write a spot forecast?

_____ and _____

Other valuable information includes

_____, _____, _____ and

9. A thunderstorm warning is issued when the forecaster sees the potential for severe thunderstorms. True or false.

10. Under normal circumstances, if the temperature at ground level is 18° C what temperature would you expect 300 metres above ground? _____

11. An inversion is when the atmospheric temperature increases/decreases with altitude. (Circle the correct answer.)

12. Wind blows clockwise/counter clockwise around a high pressure system. (Circle the correct answer.)

13. Would you associate sunny skies and light winds with a low pressure system? Yes or No.

14. Four characteristics of a cold front are:

15. What does TROWAL stand for? _____

16. Large rainfall amounts are likely to occur in areas of upslope. True or False.

17. Air warms and dries as it descends into a subsidence zone. True or False.

18. Why would you be more careful on the fireline when a nocturnal inversion breaks?

19. Land heats faster during the day than water, causing a sea/land breeze. (Circle the correct answer.)

20. What landscape feature would cause a downslope flow both day and night?

21. If the forecaster tells you that a band of subtropical moisture is moving into southern BC, what weather phenomena would you be watching for?

22. How much would you expect the wind to shift during a frontal passage in an open area?

- a. 180°
- b. $45^\circ - 180^\circ$
- c. $45^\circ - 90^\circ$
- d. 0°

23. Cloud types and cloud changes may signal

24. Three weather features that may bring increasing relative humidities are:
