**WAVES PRE-TEST**

Answer T (True) or F (False) to each of the following:

1. **Current technologies associated with information transfer use waves of one kind or another.**
2. **Light and sound are both examples of types of waves.**
3. **A light wave can travel through a vacuum, but a sound wave cannot.**
4. **A wave carries energy but not matter.**
5. **An echo is simply a reflected sound wave.**
6. **Sound waves travel faster through the water than they do through air.**
7. **Light travels about 300 000 km in a single second through air.**
8. **Thick woolen curtains are better absorbers of sound than a concrete wall.**
9. **When light reflects from a surface, the angle of incidence equals the angle of reflection.**
10. **Refraction refers to the bending of waves.**
11. **Transverse and longitudinal are two different types of waves.**
12. **The wavelength of a wave is defined as the distance between two consecutive identical points on the wave eg between two crests.**
13. **Sound waves can interfere with each other.**
14. **Gamma rays and radio waves are both part of the electromagnetic spectrum.**
15. **Short wave radio waves can travel over the observable horizon because they are reflected off the ionosphere.**
16. **Microwaves are used to communicate with satellites due partly to their ability to pass through the ionosphere.**
17. **Infrared radiation can be used to guide missiles and to link computers together in networks.**
18. **Light waves can carry information huge distances through optical fibres with little, if any, loss.**
19. **Lasers are very useful tools in the communications industry.**
20. **Two types of wave modulation are FM and AM.**

**Answers are two pages over.**

**GO NO FURTHER UNLESS YOU HAVE ANSWERED ALL THE QUESTIONS.**

**ANSWERS ARE ON THE NEXT PAGE.**

**ANSWERS**

This test is easy to mark. All the statements are true.