AS Miscellaneous 2

1) Describe the transport of water and mineral ions in plants? (4)
2) Describe the structure of a phospholipid bilayer and include the functions of each part? (4)
3) How is tissue fluid formed and drained? (4)
4) Explain the different stages of the cardiac cycle? (6)
5) What is the Bohr effect and why is it advantageous? (2)
6) Explain the shape of the oxyhaemoglobin dissociation curve? (4)
7) Llamas live at high altitudes. How will their haemoglobin be different to humans and sketch a curve to show the effect of this? (3)
8) Describe the causes of variation in meiosis? (4)
9) What are the differences between continuous and discontinuous variation? (3)
10) Describe the process of translation? (4)
11) What is stabilising selection? (2)
12) Describe the process of gas exchange in a fish? (4)
13) How does smoking affect gas exchange in humans? (4)
14) Describe the specific immune response? (4)
15) What happens during interphase? (3)
16) Describe how a competitive inhibitor works? (3)
17) What are the differences between cellulose and collagen? (3)
18) Describe the structure of haemoglobin? (3)
19) Explain the following properties of water (6);
    a. High specific heat capacity
    b. High surface tension
    c. Adhesion, cohesion and tension

20) What is facilitated diffusion? (3)

21) Distinguish between phagocytosis and pinocytosis? (2)

22) What makes HIV difficult to treat? (4)

23) Explain how antibodies work? (6)

Total: **/85**