**EXERCISE PHYSIOLOGY 2**

1. Which of the following statements is correct about fast twitch fibres:
2. They have a relatively large number of mitochondria and low ATPase activity
3. They have a relatively small number of mitochondria and low ATPase activity
4. **They have a relatively small number of mitochondria and high ATPase activity**
5. They have a relatively large number of mitochondria and high ATPase activity
6. Which of the following statements represents the true characteristics of type I muscle fibers:
7. White, glycolytic, slow, contracting
8. White, oxidative, slow contracting
9. Red, glycolytic, slow contracting
10. **Red, oxidative, slow contracting**
11. The initial energy source for very high force contractions lasting 1-2 seconds is from:
12. Glycolysis
13. Creatine phosphorylation
14. Phosphocreatine stores
15. **ATP stores**
16. The most rapid method to resynthesize ATP during exercise is through
17. Glycolysis
18. **Phosphocreatine breakdown**
19. Krebs cycle
20. Glycogenolysis
21. Which of the following exercises is predominantly anaerobic
22. Jogging
23. Swimming
24. Stair climbing
25. **Weight lifting**
26. During exercise, skeletal muscle blood flow increases 15 to 25 times the resting value. This is mainly due to:
27. Increased arterial blood pressure
28. Increased secretion of catecholamines
29. **Local metabolic factors**
30. Decreased arterial blood pressure
31. The trigger to initiate the contractile process in skeletal muscle is:
32. Potassium binding to myosin
33. Calcium binding to tropomyosin
34. **Calcium binding to troponin**
35. ATP binding to the myosin cross bridges
36. It is correct that during the process of excitation-contraction coupling:
37. Acetyl choline binds to muscarinic receptors
38. The transverse tubules release calcium ions in response to deporalization of the cell through an unknown mechanism
39. Cross bridges form when ATP binds to myosin
40. **Release of calcium ions causes the binding sites on the thin filaments to be uncovered**
41. Which of the following statements about endurance training is true?
42. It increases the muscles breakdown phosphocreatine
43. **It increases the muscles burn fat and carbohydrate**
44. It increases the muscles capacity to contract faster
45. It increases the muscle’s ability to generate energy anaerobically
46. Which of the following components of fitness is defined as the body's ability to sustain prolonged exercise
47. Muscle endurance
48. Body composition
49. **Cardiorespiratory endurance**
50. Muscle strength