Answer a total of 10 questions (each 10%):

1. In animals, the velocity of action potential may vary depending on the type of nerve. Why are they different?

2. Outline the structure of a motor end plate in striated muscle. What is the part most vulnerable to fatigue?

3. Local metabolites can cause relaxation of vascular smooth muscle. Name one of these substances and discuss its mechanism of action.

4. Abnormal change in the level of a neurotransmitter could lead to major neurological disorders. Discuss this statement.

5. How does emptying of the stomach occur and what factors may affect it?

6. Relate the equation describing flow of fluid in tubes to the vascular system.

7. There is a concentration gradient existing in the kidney essential for its function. How is that concentration gradient maintained?

8. Of what physiological value is the form of oxygen dissociation curve?

9. If you suspected that a particular organ served an endocrine function, what experiments would you do to prove it?

10. What is a bioassay?

11. Give an account of the various buffers in the blood.

12. How is the increase in cardiac output during exercise mainly achieved?

-- End of questions --