

Answer a total of 5 questions out of the followings (each 20%)

1. What changes stimulate chemoreceptors and baroreceptors? Describe the results after the stimulation of these receptors.
2. List the effects of LH and FSH on the ovary and testis.
3. Draw a flow diagram illustrating the factors that increase the mean arterial pressure?
4. Explain the mechanism that a patient with diabetes mellitus loses glucose from urine? and why the urine excretion increases when we drink a bulk of water?
5. How does the nerve system distinguish the different types of stimuli, different intensity of stimuli, and different location of stimuli? Describe the different ascending pathways between thermo-sensation (warm or cold) and other sensations.
6. Diagram the CRH-ACTH-cortisol system. A person is receiving very large doses of a cortisol-like drug to treat her arthritis. What happens to this system?