

1. When you look at this question and try to understand and answer it, how do your eyes do accommodation in order to see these words clearly? (8%) and which wave can be recorded by electroencephalogram (EEG)? (4%) and which areas in the brain are activated in this response of reading-comprehension-writing, if you are checked by PET scan? (8%)
2. Please explain the underlying mechanism of polyuria occurred in the patients with diabetes mellitus, or with diabetes insipidus, or with glomerular nephritis and a person after drinking two liters of water. (20%)
3. Point out the location of chemoreceptors and baroreceptors, and describe the reflex response triggered by their activation, including what kinds of stimuli and their afferent and efferent pathways. (20%)
4. It is well known that exercise is good for cardiovascular function. Can you explain why do the skeletal muscle blood flow, cardiac output and heart rate increase during the exercise? (15%) what are the cardiovascular changes at rest in persons of trained exercise? (5%)
5. Describe the follicle growth from primordial follicle to dominant follicle. (10%) Diagram the interaction between follicle releasing hormones and gonadotropin secretion during the early, middle, and late follicular phases. (10%)