



THE SUPERIOR COLLEGE, LAHORE
2nd YEAR MBBS

ANNUAL EXAMINATION 2020

PHYSIOLOGY

(SEQ's)

Roll No. F18-143

Time Allowed: 2 hours

Total Marks: 45

Instructions

1. The SEQ's part is to be submitted within 2 hours, Extra time will not be given.
2. Neat Hand Writing use of margin and marker for headlines will increase the presentation of your paper.
3. Do not write your name or disclose your identity in anyway.

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- Q1.A) A child was trying to open the disposable syringe, suddenly needle was stuck into his skin, he immediately felt sharp pain followed by dull pain sensation. Draw the pathway from skin to cerebral cortex, of these two types of pain sensations. (3)
- B) Define analgesia system & mention its components. (2)
- Q2.A) Draw Putamen circuit; discuss the different diseases with corresponding lesions. (2)
- B) A 50 years old man came to doctor & told that he had feeling of stiffness in leg & feel difficulty in starting the movement, he had involuntary movement of hands at rest, his gait is also short stepped
- a) What is your diagnosis? (1)
 - b) Explain the pathophysiology of disease. (1)
 - c) What is treatment of such patient? (1)
- Q3. A) Write down the Motor areas of cerebral cortex. (2)
- B) Compare & Contrast the features of Upper Motor Neuron lesions and Lower Motor Neuron lesion. (3)
- Q4.A) Describe all types of error of refraction along with correction of each. (2)
- B) Define Accommodation. Discuss neural pathway of "Accommodation reflex". (3)
- Q5:A 40 years old patient came to physician. On questioning patient told he sleeps 6-8 hours & it is restful sleep. EEG showed mostly Alpha waves in abundance.
- a. Which type of sleep is indicated by EEG tracing? (1.5)
 - b. What change in EEG will be observed during different stages of Sleep? (1.5)
 - c. Enlist different types of EEG waves with their characteristics. (2)
- Q6: A) Amjad is in desert & is dehydrated what different mechanisms will be initiated by the kidney to compensate for this decreased ECF volume? (2)
- B) Describe in detail the counter current multiplier mechanism. (3)
- Q7: Adnan was drinking water hurriedly, he aspirated & start coughing.
- a. In your opinion which stage of swallowing did not occur properly. (1)
 - b. Name the different stages of swallowing. (1.5)
 - c. Explain the series of events which take place during pharyngeal stage of swallowing. (2.5)
- Q8.A) When TSH act on thyroid follicle, what series of reaction occur for the synthesis of Thyroid hormone. (2)
- B) A 50 years old lady came to doctor & complained about husky voice, weight gain & easy fatigability. She also told that she prefer to live in warm room. On Examination, her pulse was 55/min. Non pitting type of edema of legs & features of peripheral vascular disease due to atherosclerosis.
- a. What is most probable diagnosis? (1)
 - b. Cause of edema & atherosclerosis in this patient. (1)
 - c. Name the test which will help out in diagnosis. (1)
- Q9:A) Draw feedback regulation of Hypothalamic- pituitary ovarian axis in female. (3)
- B) Describe endocrine functions of placenta. (2)