

KK 2803

First Year MBBS Examination

I MBBS Physiology Paper 1

Time: 3 hours Date: 06-06-2017 Max Marks: 50

Instructions: 1. Answer to the points. 2. Figure to the right indicates marks. 3. Use separate answer books for each section. 4. Draw diagrams wherever necessary. 5. Write legibly.

Section 1

1. Explain in detail: (any two) (10)
 - a. Write in details about classification and physiological basis of treatment of anaemia
 - b. Write in detail about factors which prevent coagulation in vivo.
 - c. Regulation and mechanism of secretion of HCl in stomach.
2. Write brief notes on (any two) (6)
 - a. Define and give importance of motor unit (A.202) (8.75)
 - b. Explain walk along theory of skeletal muscle contraction
 - c. Type of nerve fibers (A.765) (B.58)
3. Write brief on (any one) (3)

- a. Deglutition reflex (A.270) (8.461)
- b. Functions of bile (A.255) (8.492)
4. Give brief on (any two) (6)
 - a. Osmosis (A.32) (B.19)
 - b. Role of complement system in immunity
 - c. Explain positive feedback mechanism of homeostasis with 2 examples (A.38)

Section 2

4. Explain in detail (any two) (10)
 - a. Write in detail about physiological basis of generation of ECG Enumerate changes seen in myocardial infarction and ischemia
 - b. Write in detail about short term regulation of blood pressure. Write note on postural hypotension
 - c. Write in detail about Cardiac cycle Give correlation of cardiac cycle with heart sounds. (A.534) (8.179)
 5. Write briefly on (any two) (6)
 - a. Diffusion of gases across alveolo-capillary membrane
 - b. Transport of carbon dioxide in blood (A.714) (8.330)
 - c. Acclimatization to high altitude in respiratory system (A.770) (8.359)
 6. Write briefly on (any one) (3)
 - a. Write in detail about receptors of parasympathetic and par sympatholytic
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drugs

b. Heat losing mechanism in body.

7. Answer in 2-3 sentences (any six out of Ten)
(6)

a. What is the cause of hemophilia?

b. Define cardiac output and give its normal value (A.599) (8.215)

c. Define and give normal value of residual volume (A.691) (8.302)

d. Give 2 examples where you see unitary smooth muscle fibers

e. Define peripheral resistance. (A.623) (8.230)

f. Define Frank Starling law (A.575)

g. Name 2 antigen presenting cells

h. What is cause of plateau in action potential of cardiac muscle fiber?

i. Name secretory antibody

j. Give 2 causes of eosinophilia (A.99) (B.129)
