

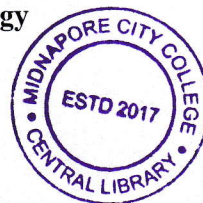
The West Bengal University of Health Sciences
B.Sc. in Medical Microbiology 1st Semester March, 2023
Examination

Subject : Basics of Physiology

Time : 2 hrs.

Full Marks : 50

Attempt all questions



1. Tick the correct answer : 10 x 1
- a) HCl is secreted in stomach from :
 - i) Peptic cell.
 - ii) Parietal cell.
 - iii) Mucous cell.
 - iv) Serous cell.
 - b) The sphincter present between esophagus and stomach is :
 - i) Pyloric.
 - ii) Oddi.
 - iii) Ileo-coecal.
 - iv) Cardiac.
 - c) Lacteal is found in :
 - i) Stomach.
 - ii) Heart.
 - iii) Villi.
 - iv) Salivary gland.
 - d) Sympathetic nervous system originates from :
 - i) Cranio-sacral division.
 - ii) Glossopharyngeal area.
 - iii) Thoraco-lumber division.
 - iv) None of the above.
 - e) Ptyalin help in partial digestion of :
 - i) Monosaccharide.
 - ii) Polysaccharide.
 - iii) Peptide.
 - iv) Disaccharide.
 - f) Pacinian corpuscle is a :
 - i) Thermoreceptor.
 - ii) Touch receptor.
 - iii) Pain receptor.
 - iv) Pressure receptor.
 - g) Sertoli cell secretes :
 - i) Oxytocin.
 - ii) Inhibin.
 - iii) ADH.
 - iv) GH.
 - h) Deficiency of thyroxin in children is called :
 - i) Cretinism.
 - ii) Myxedema.
 - iii) Goitre.
 - iv) Grave's disease.
 - i) Baroreceptor is found in :
 - i) Carotid sinus.
 - ii) Aortic body.
 - iii) Carotid body.
 - iv) Ganglia.
 - j) Auditory receptors are located on :
 - i) Tectorial membrane.
 - ii) Plasma membrane.
 - iii) Basilar membrane.
 - iv) None of these.
2. Answer **any four** of the following questions : 4 x 2
- a) What is myasthenia gravis?
 - b) Calculate cardiac output when heart rate and stroke volumes are 70 beats/ min and 80 ml. respectively.
 - c) Differentiate between HbA and HbF.
 - d) Name the corpuscles engaged in phagocytosis.
 - e) Write the location and function of opioid receptor.
 - f) Mention any two reasons of peptic ulcer.
3. Answer **any four** of the following questions : 4 x 4
- a) What is heparin? Write its role in our body. 1+3
 - b) Discuss the factors controlling erythropoiesis. 4
 - c) What is creatinine clearance test? State its significance. 2+2
 - d) Elucidate Mary's reflex of heart. 4
 - e) What is lung surfactant? State its role. 2+2
 - f) Differentiate between ecrine and apocrine gland. What is sebum? 3+1
4. Answer **any two** of the following questions : 2 x 8
- a) Describe the stepwise transport of oxygen from lung into tissues. What is the significance of chloride shift? 5+3
 - b) What is Cushing's syndrome? Mention briefly the functions of adrenal medullary hormones. 2+6
 - c) Discuss the changes in ovary in different phases of menstrual cycle mentioning the role of hormones. Differentiate between spermatogenesis and spermiogenesis. 6+2