DF-3036
Second Year B. Sc. (Sem. III) Examination
March / April – 2016
Medical Technology : MT - 06
(Human Anatomy & Physiology - I)

Time : 2 Hours] [Total Marks : 50

Instructions :

(1) Fill up strictly the details of your answer book.

(2) This exam contains 50 multiple choice questions, each worth 1 mark.

(3) Choose only ONE most appropriate answer per question.

(4) Do not crease or fold the answer sheet.

O.M.R. Sheet बरुण अणेवढी अणेवढी सुरुवातो आपले O.M.R. Sheet-वी वाचा घेऊन घेऊ.

Important instructions to fill up O.M.R. Sheet is given on back side of the provided O.M.R. Sheet.
1. One of the main functions associated with simple squamous epithelium is ______.
   (A) active transport
   (B) diffusion
   (C) absorption
   (D) secretion

2. What is the mineralized matrix, similar to bone but harder, that forms the primary mass of each tooth?
   (A) cementum
   (B) dentin
   (C) pulp
   (D) enamel

3. Muscles are made up of:
   (A) Polyester threads
   (B) Fibres
   (C) Silica
   (D) Calcium and phosphorus

4. Thick filament of A-band is made up of:
   (A) Actin
   (B) Both Myosin and Actin
   (C) None of these
   (D) Myosin

5. The large intestine is so-named because it exceeds the small intestine in:
   (A) diameter
   (B) number of enzymes produced
   (C) amount of muscle present
   (D) length
6. Choose the correct enzyme – substrate pair:
   (A) maltase – lactose
   (B) rennin – casein
   (C) protein – amylase
   (D) carbohydrate – lipase

7. Which is the largest salivary gland in man?
   (A) Submandibular gland
   (B) Parotid gland
   (C) None of them
   (D) Sublingual gland

8. The segment of a myofibril that is called a sarcomere runs from _____.
   (A) one H zone to the next H zone
   (B) one A band to the next A band
   (C) one end of a skeletal muscle to the opposite end
   (D) one Z line to the next Z line

9. Where is protein digestion accomplished?
   (A) ileum
   (B) Rectum
   (C) duodenum
   (D) Stomach

10. Bone cells capable of breakdown of bonds are termed as:
    (A) Osteoclasts
    (B) Chondrocytes
    (C) None
    (D) Osteoblasts
11 A brush border is formed in:
(A) Proximal convoluted tubule
(B) Medullary loop
(C) None of these
(D) Distilled convoluted tubule

12 Which cells of stomach secrete intrinsic factor?
(A) Chief cells
(B) G-cells
(C) Mucous neck cells
(D) Parietal cells

13 The chemical causing the transmission of nerve impulse across synapses is:
(A) Cholinesterase
(B) Choline
(C) Acetycholine
(D) Acetic acid

14 Which joints permits the movement to signify 'yes'?
(A) Atlanto-occipital joint
(B) Vertebrocostal joint
(C) Sacroiliac joint
(D) Atlanto-axial joint

15 Bile secreted by liver passes into gall bladder through:
(A) Cystic duct
(B) Hepatic duct
(C) Hepato-gall duct
(D) Hepatopancreatic duct

16 The divisions of the skeletal system include:
(A) proximal and distal
(B) cranial, caudal, and anterior
(C) axial and appendicular
(D) dorsal and ventral

17 Which of the following has the highest speed of nerve impulse?
(A) Medullated nerve
(B) Both Non-medullated nerve and Medullated nerve
(C) None of these
(D) Non-medullated nerve
18. The crossbridges involved in muscle contraction are located on the _____.
   (A) actin myofilaments  
   (B) myosin myofilaments  
   (C) dystrophin  
   (D) tropomyosin

19. Axon part of the neuron is highly modified for which of the following function?
   (A) Conduction of impulses away from neurons  
   (B) Reception of internal stimuli  
   (C) Conduction for neuron  
   (D) Reception of stimuli from neuron

20. Which of the following is not one of the four major types of tissues ?
   (A) Connective  
   (B) Nervous  
   (C) Skeletal muscle  
   (D) Epithelial

21. The complex food stuffs become simplified by the process of
   (A) Assimilation  
   (B) Excretion  
   (C) Metabolism  
   (D) Digestion

22. Smooth ER are involved in :
   (A) lipid synthesis in some cells  
   (B) processing and packing of glycoprotein  
   (C) ribosome formation  
   (D) protein synthesis in some cells

23. All the following are functions of the oral cavity except:
   (A) to digest certain carbohydrates  
   (B) to lubricate foods  
   (C) to chemically digest proteins  
   (D) to mechanically digest foods

24. The body of urinary bladder is made up of which involuntary muscles ?
   (A) Circular muscles  
   (B) Smooth muscles  
   (C) Longitudinal muscles  
   (D) Detrusor muscles
25 The sequence of urine formation is as follows:
   (A)  Reabsorption, secretion, filtration
   (B)  Filtration, reabsorption, secretion
   (C)  Secretion, filtration, reabsorption
   (D)  Secretion, reabsorption, filtration

26 Hydrolytic enzymes which act on low pH are known as –
   (A)  a-amylases
   (B)  hydrolases
   (C)  peroxidases
   (D)  proteases

27 Which of the following is Agranular cell?
   (A)  Lymphocytes
   (B)  Basophil
   (C)  Eosinophilis
   (D)  Neutrophils

28 Creatinine is the end product of which metabolism?
   (A)  Protein
   (B)  Carbohydrates
   (C)  Lipids
   (D)  Muscles

29 All the following are regions of the stomach except:
   (A)  cardia
   (B)  the pylorus
   (C)  fundus
   (D)  the hilus

30 Lactase breaks lactose molecule into:
   (A)  Glucose and Galactose
   (B)  Fructose and Glucose
   (C)  Maltose and Maltotriose
   (D)  Glucose and Glucose
31 Largest and strongest bone of face is:
   (A) Maxilla  (B) Frontal
   (C) Parietal  (D) Mandible

32 Most absorption occurs:
   (A) in the lining of the stomach
   (B) in the jejunum
   (C) all along the gastrointestinal tract
   (D) in the esophagus

33 The outer layer of the skin is composed of ________.
   (B) transitional epithelium
   (A) stratified squamous epithelium
   (C) stratified columnar epithelium
   (D) transitional epithelium

34 Secretion of gastric juice is stopped by
   (A) pancreozymin
   (B) cholecystokinin
   (C) enterogastrone
   (D) gastrin

35 Which type of joint is a shoulder joint?
   (A) Pivot joint
   (B) Saddle joint
   (C) Ball and socket joint
   (D) Hinge joint

36 Normal Childbirth is an example of -
   (A) Positive feedback mechanism
   (B) Cascade mechanism
   (C) None
   (D) Negative feedback mechanism

37 An average glomerular filtration done by kidney per minute is -
   (A) 1100 to 1350 ml/min
   (B) 1100 to 1300 ml/min
   (C) 1100 to 1250 ml/min
   (D) 1100 to 1200 ml/min

38 If a man takes large amount of protein he is likely to excrete:
   (A) Urea and uric acid
   (B) Ketone bodies
   (C) Glucose
   (D) Ammonia

39 A twisting motion of the foot that turns the sole inward is termed as:
   (A) Eversion
   (B) Inversion
   (C) Plantar flexion
   (D) Rotation

40 Dental formula of adult man is
   (A) 1632/1632
   (B) 2123/2123
   (C) 3216/3216
   (D) 2321/2321
41 Epithelial tissue is characterized by each of these traits, except that _____.
(A) it functions in secretion, absorption, and excretion
(B) it is anchored to a basement membrane
(C) epithelial cells are loosely packed and have much intercellular material.
(D) it lacks blood vessels

42 Which term is the smallest subdivision in this group?
(A) fibril
(B) filament
(C) actin
(D) fiber

43 The inner most layer of GIT is:
(A) Muscularis
(B) Submucosa
(C) Mucosa
(D) Serosa

44 Which selection includes only accessory digestive organs?
(A) gallbladder, liver, pancreas, salivary glands
(B) stomach, duodenum, pancreas, gallbladder
(C) liver, thyroid gland, gallbladder, spleen
(D) salivary glands, thyroid gland, pancreas, liver

45 Contraction of gall bladder is stimulated by:
(A) Secretin
(B) Cholecystokinin
(C) Both Secretin and Cholecystokinin
(D) Gastrin

46 Name the suture which unite the parietal and temporal bone:
(A) Squamous suture
(B) Lambdoid suture
(C) Coronal suture
(D) Sagittal suture

47 The mucosa of the large intestine is characterized by:
(A) numerous goblet cells and intestinal glands
(B) many lymphatic nodules and cells in the lamina propria
(C) all of these
(D) lack of intestinal villi

48 The pancreas is located close to the:
(A) sigmoid colon
(B) cecum
(C) Appendix
(D) stomach

49 Cells are bathed in which fluid?
(A) Synovial fluid
(B) Intercellular fluid
(C) Interstitial fluid
(D) Intracellular fluid

50 The length of pharynx is:
(A) 12 cm
(B) 12.5 cm
(C) 13 cm
(D) 11.5 cm