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 OMR sheet.

(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 क्वांसिभावत अवश्य अन्तर्गतीन सूचना आपेक्षित किए जायें।
O.M.R. Sheet-लाई प्रदान भएको अवसरमा आप्नोले गरिएको व्यवहार गरेको छ।

Important instructions to fillup O.M.R. Sheet
is given on back side of the provided O.M.R. Sheet.
1. Epithelial tissue is characterized by each of these traits, except that ______.
   (A) epithelial cells are loosely packed and have much intercellular material.
   (B) it lacks blood vessels
   (C) it functions in secretion, absorption, and excretion
   (D) it is anchored to a basement membrane

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

3. The innermost layer of GIT is:
   (A) Mucosa  (B) Serosa
   (C) Muscularis  (D) Submucosa

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

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

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

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

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

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

10. The length of pharynx is:
    (A) 13 cm  (B) 11.5 cm
    (C) 12 cm  (D) 12.5 cm
11 One of the main functions associated with simple squamous epithelium is _____.
   (A) absorption
   (B) secretion
   (C) active transport
   (D) diffusion

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

50 Dental formula of adult man is
   (A) 32/16  (B) 2321/2321
   (C) 1632/1632  (D) 2123/2123