

**A****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)

નીચે દર્શાવેલ નિશાનીવાળી વિગતો ઉત્તરવહી પર અવશ્ય લખવી. Fillup strictly the details of signs on your answer book.	Seat No. :
Name of the Examination :	<input type="text"/>
<input type="text" value="Second Year B. Sc. (Sem. III)"/>	<input type="text"/>
Name of the Subject :	<input type="text"/>
<input type="text" value="Medical Tech. : MT-06 : Human Anatomy &amp; Physio.-I"/>	<input type="text"/>
Subject Code No. : <input type="text" value="3"/> <input type="text" value="0"/> <input type="text" value="3"/> <input type="text" value="6"/>	Section No. (1, 2,.....) : <input type="text" value="Nil"/>
	<input type="text" value="Student's Signature"/>

- (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 ભરવા અંગેની અગત્યની સૂચનાઓ આપેલ  
O.M.R. Sheet-ની પાછળ છાપેલ છે.  
Important instructions to fillup O.M.R. Sheet  
is given on back side of the provided O.M.R. Sheet.***

- 1 A brush border is formed in :
  - (A) Distilled convoluted tubule
  - (B) Proximal convoluted tubule
  - (C) Medullary loop
  - (D) None of these
  
- 2 Which cells of stomach secretes intrinsic factor ?
  - (A) Parietal cells
  - (B) Chief cells
  - (C) G-cells
  - (D) Mucous neck cells
  
- 3 The chemical causing the transmission of nerve impulse across synapses is:
  - (A) Acetic acid
  - (B) Cholinesterase
  - (C) Choline
  - (D) Acetylcholine
  
- 4 Which joints permits the movement to signify 'yes' ?
  - (A) Atlanto- axial joint
  - (B) Atlanto-occipital joint
  - (C) Vertebrocostal joint
  - (D) Sacroiliac joint
  
- 5 Bile secreted by liver passes into gall bladder through:
  - (A) Hepatopancreatic duct
  - (B) Cystic duct
  - (C) Hepatic duct
  - (D) Hepato-gall duct
  
- 6 The divisions of the skeletal system include :
  - (A) dorsal and ventral
  - (B) proximal and distal
  - (C) cranial, caudal, and anterior
  - (D) axial and appendicular
  
- 7 Which of the following has the highest speed of nerve impulse ?
  - (A) Non-medullated nerve
  - (B) Medullated nerve
  - (C) Both Non-medullated nerve and Medullated nerve
  - (D) None of these

- 8 The crossbridges involved in muscle contraction are located on the \_\_\_\_\_.  
(A) tropomyosin  
(B) actin myofilaments  
(C) myosin myofilaments  
(D) dystrophin
- 9 Axon part of the neuron is highly modified for which of the following function?  
(A) Reception of stimuli from neuron  
(B) Conduction of impulses away from neurons  
(C) Reception of internal stimuli  
(D) Conduction for neuron
- 10 Which of the following is not one of the four major types of tissues ?  
(A) Epithelial  
(B) Connective  
(C) Nervous  
(D) Skeletal muscle
- 11 The complex food stuffs become simplified by the process of  
(A) Digestion  
(B) Assimilation  
(C) Excretion  
(D) Metabolism
- 12 Smooth ER are involved in :  
(A) protein synthesis in some cells  
(B) lipid synthesis in some cells  
(C) processing and packing of glycoprotein  
(D) ribosome formation
- 13 All the following are functions of the oral cavity except:  
(A) to mechanically digest foods  
(B) to digest certain carbohydrates  
(C) to lubricate foods  
(D) to chemically digest proteins
- 14 The body of urinary bladder is made up of which involuntary muscles ?  
(A) Detrusor muscles  
(B) Circular muscles  
(C) Smooth muscles  
(D) Longitudinal muscles

- 15 The sequence of urine formation is as follows :
- (A) Secretion, reabsorption, filtration
  - (B) Reabsorption, secretion , filtration
  - (C) Filtration, reabsorption, secretion
  - (D) Secretion, filtration , reabsorption
- 16 Hydrolytic enzymes which act on low pH are known as –
- (A) proteases
  - (B) a-amylases
  - (C) hydrolases
  - (D) peroxidases
- 17 Which of the following is Agranular cell ?
- (A) Neutrophils
  - (B) Lymphocytes
  - (C) Basophil
  - (D) Eosinophilis
- 18 Creatinine is the end product of which metabolism ?
- (A) Muscles
  - (B) Protein
  - (C) Carbohydrates
  - (D) Lipids
- 19 All the following are regions of the stomach except:
- (A) the hilus
  - (B) cardia
  - (C) the pylorus
  - (D) fundus
- 20 Lactase breaks lactose molecule into:
- (A) Glucose and Glucose
  - (B) Glucose and Galactose
  - (C) Fructose and Glucose
  - (D) Maltose and Maltotriose

- 21 Largest and strongest bone of face is:  
 (A) Mandible (B) Maxilla  
 (C) Frontal (D) Parietal
- 22 Most absorption occurs :  
 (A) in the esophagus  
 (B) in the lining of the stomach  
 (C) in the jejunum  
 (D) all along the gastrointestinal tract
- 23 The outer layer of the skin is composed of \_\_\_\_\_.  
 (A) transitional epithelium  
 (C) transitional epithelium  
 (B) stratified squamous epithelium  
 (D) stratified columnar epithelium
- 24 Secretion of gastric juice is stopped by  
 (A) gastrin  
 (B) pancreozymin  
 (C) cholecystokinin  
 (D) enterogastrone
- 25 Which type of joint is a shoulder joint ?  
 (A) Hinge joint  
 (B) Pivot joint  
 (C) Saddle joint  
 (D) Ball and socket joint
- 26 Normal Childbirth is an example of -  
 (A) Negative feedback mechanism  
 (B) Positive feedback mechanism  
 (C) Cascade Mechanism  
 (D) None
- 27 An average glomerular filtration done by kidney per minute is -  
 (A) 1100 to 1200 ml/min  
 (B) 1100 to 1350 ml/min  
 (C) 1100 to 1300 ml/min  
 (D) 1100 to 1250 ml/min
- 28 If a man takes large amount of protein he is likely to excrete:  
 (A) Ammonia  
 (B) Urea and uric acid  
 (C) Ketone bodies  
 (D) Glucose
- 29 A twisting motion of the foot that turns the sole inward is termed as:  
 (A) Rotation (B) Eversion  
 (C) Inversion (D) Plantar flexion
- 30 Dental formula of adult man is  
 (A) 2321/2321 (B) 1632/1632  
 (C) 2123/2123 (D) 3216/3216

- 31 Epithelial tissue is characterized by each of these traits, except that \_\_\_\_\_.  
 (A) it lacks blood vessels  
 (B) it functions in secretion, absorption, and excretion  
 (C) it is anchored to a basement membrane  
 (D) epithelial cells are loosely packed and have much intercellular material.
- 32 Which term is the smallest subdivision in this group ?  
 (A) fiber (B) fibril  
 (C) filament (D) actin
- 33 The inner most layer of GIT is:  
 (A) Serosa (B) Muscularis  
 (C) Submucosa (D) Mucosa
- 34 Which selection includes only accessory digestive organs ?  
 (A) salivary glands, thyroid gland, pancreas, liver  
 (B) gallbladder, liver, pancreas, salivary glands  
 (C) stomach, duodenum, pancreas, gallbladder  
 (D) iver, thyroid gland, gallbladder, spleen
- 35 Contraction of gall bladder is stimulated by :  
 (A) Gastrin  
 (B) Secretin  
 (C) Cholecystokinin  
 (D) Both Secretin and Cholecystokinin
- 36 Name the suture which unite the parietal and temporal bone :  
 (A) Sagittal suture  
 (B) Squamous suture  
 (C) Lambdoid suture  
 (D) Coronal suture
- 37 The mucosa of the large intestine is characterized by :  
 (A) lack of intestinal villi  
 (B) numerous goblet cells and intestinal glands  
 (C) many lymphatic nodules and cells in the lamina propria  
 (D) all of these
- 38 The pancreas is located close to the :  
 (A) stomach  
 (B) sigmoid colon  
 (C) cecum  
 (D) Appendix
- 39 Cells are bathed in which fluid ?  
 (A) Intracellular fluid  
 (B) Synovial fluid  
 (C) Intercellular fluid  
 (D) Interstitial fluid
- 40 The length of pharynx is :  
 (A) 11.5 cm (B) 12 cm  
 (C) 12.5 cm (D) 13 cm

- 41 One of the main functions associated with simple squamous epithelium is \_\_\_\_\_.
- (A) secretion
  - (B) active transport
  - (C) diffusion
  - (D) absorption
- 42 What is the mineralized matrix, similar to bone but harder, that forms the primary mass of each tooth ?
- (A) enamel
  - (B) cementum
  - (C) dentin
  - (D) pulp
- 43 Muscles are made up of :
- (A) Calcium and phosphorus
  - (B) Polyester threads
  - (C) Fibres
  - (D) Silica
- 44 Thick filament of A-band is made up of :
- (A) Myosin
  - (B) Actin
  - (C) Both Myosin and Actin
  - (D) None of these
- 45 The large intestine is so-named because it exceeds the small intestine in:
- (A) length
  - (B) diameter
  - (C) number of enzymes produced
  - (D) amount of muscle present

- 46 Choose the correct enzyme – substrate pair :
- (A) carbohydrate – lipase
  - (B) maltase – lactose
  - (C) rennin – casein
  - (D) protein – amylase
- 47 Which is the largest salivary gland in man ?
- (A) Sublingual gland
  - (B) Submandibular gland
  - (C) Parotid gland
  - (D) None of them
- 48 The segment of a myofibril that is called a sarcomere runs from \_\_\_\_\_.
- (A) one Z line to the next Z line
  - (B) one H zone to the next H zone
  - (C) one A band to the next A band
  - (D) one end of a skeletal muscle to the opposite end
- 49 Where is protein digestion accomplished ?
- (A) Stomach
  - (B) ileum
  - (C) Rectum
  - (D) duodenum
- 50 Bone cells capable of breakdown of bonds are termed as :
- (A) Osteoblasts
  - (B) Osteoclasts
  - (C) Chondrocytes
  - (D) None