NEET BIOLOGY 2018-19 - Chennai

Test ID : 036 **Test date: 13.04.2019**

Number of questions: 50 **Time**: 2HRS

Name: _____

ID No: _____

Negative Marks : 4 marks for correct attempt & 1 mark deducted for every wrong attempt.

1) Duodenum has characteristic Brunner's gland which secrete two hormones called
a) kinase, estrogen
b) secretin, chelecystokinin
c) prolactin, parathrormone
d) estradiol, progesterone

2) Epithelial cells of the intestine involved in food absorption have on their surface
a) pinocytic vesicles
b) Zymogen granules
c) phagocytic vesicles
d) microvilli

3) Which one of the following mammalian cells is not capable of metabolising glucose to carbon dioxide aerobically?
a) Liver cells
b) Red blood cells
c) White blood cells
d) Unstraiated muscle cells

4) Stool of a person is whitish grey coloured due to malfunction of the following organ?
a) Pancreas
b) Spleen
c) Kidney
d) Liver

5) If pancreas is removed, the compound which remain undigested is
a) Proteins
b) Carbohydrates
c) Fats
d) all of these

6) Most of the fat digestion occurs in
a) Rectum
b) Stomach
c) Duodenum
d) Small intestine

7)Where is protein digestion accomplished?
a) Stomach
b) Ileum
c) Rectum
d) Duodenum

8) Which of the following is not involved in the stimulation of release of pancreatic juice?
a) gastrin
b) Secretin
c) Trypsinogen
d) Cholecystokinin

9) What is common among amylase, rennin and trypsin?

a) These are produced in stomach
b) These act at a pH lower than 7
c) These all are proteins
d) These all are proteolytic enzymes

10) Which of the following is correct pairing of site of action and substrate of rennin?

a) mouth-starch
b) stomach-fat
c) stomach -casein
d) small intestine-casein

11) Opening to the trachea is covered by a small flap of tissues termed as the

a) Glottis
b) Trachea
c) Epiglottis
d) Larynx

12) The exchange of gases between inhaled air and blood is referred as _____.

a) Cellular respiration
b) External respiration
c) Internal respiration
d) Circulatory respiration

13) The maximum volume of air contained in the lung by a full forced inhalation is called

a) Vital capacity
b) Tidal volume
c) Total lung capacity
d) Inspiratory capacity

14) Aerobic respiratory pathway is also termed as _____ pathway.

a) Anabolic
b) Catabolic
c) Creatine phosphate
d) Amphibolic

15) The maximum volume of air that can be released from the lungs by forceful expiration after deepest inspiration is called the _____.

a) Total lung capacity
b) Vital capacity
c) Tidal volume
d) Ventilation rate

16) Which one is the cofactor of carbonic anhydrase?

a) Cu
b) Zn
c) Fe
d) Mg

17) The trachea divides into two smaller tubes called _____.

a) Bronchi
b) Trachea
c) Microtrachea
d) Eustachian tubes

18) Inner surface of the bronchi, bronchioles and fallopian tubes are lined by

a) Cubical epithelium
b) Columnar epithelium
c) Squamous epithelium
d) Ciliated epithelium

19) Which one of the following statement is NOT correct regarding trachea?

a) It usually lies posterior to the muscular oesophagus.
b) It splits into the right and left bronchi to supply air to the lungs
c) Opening to the trachea is covered by epiglottis.
d) Tracheal rings are C-shaped

20) Which one of the following statements is incorrect?

a) Tuberculosis is caused by a rod-shaped bacterium, Mycobacterium tuberculosis.
b) Tuberculosis is highly infectious and can be spread by airborne droplets.
c) Tuberculosis can't be treated by antibiotics
d) In Pulmonary Tuberculosis the elasticity of lungs is reduced.

21) The basic functional unit of human kidney is

a) Henle's loop
b) Nephron
c) Nephridia
d) Pyramid

22) Ornithine cycle (also known as the urea cycle) refers to the sequence of biochemical reactions taking place in the

a) Urinary bladder
b) Liver
c) Pancreas
d) Stomach

23) The Bowman's capsules are found in

a) Cortex
b) Medulla
c) Convoluted tubule
d) Loop of Henle

24) The hollow space at the centre of kidney where urine is collected after its formation is called

a) Renal pelvis
b) Glomerulus
c) Distal convoluted tubule
d) Urethra

25) The lungs are important organs for excretion of

a) Ammonia
b) Water
c) Carbon dioxide
d) Urea

26) The main nitrogen-containing waste excreted in urine is

a) Ammonia
b) Creatine phosphate
c) Nucleotides
d) Urea

27) The muscular tubes which take the urine from the kidneys to the bladder are

a) Urinary bladders
b) Ureters
c) Urethras
d) Nephrons

28) The principal nitrogenous excretory compound in humans is synthesised

a) In the liver but eliminated mostly through kidneys
b) In kidneys but eliminated mostly through liver
c) In kidneys as well as eliminated by kidneys
d) In liver and also eliminated by the same through bile

29) The process of dilution of urine takes place in

a) Distal tubule
b) Collecting tubule
c) Loop of Henle
d) Proximal tubule

30) The renal medulla consists of cone-shaped tissue masses called _____.

a) Renal pyramid
b) Adipose capsule
c) Renal cortex
d) Renal pelvis

31) One of the following bones lies in front of the sphenoid and helps forming the orbits and the nasal septum.

a) Zygotmatic bone
b) Lacrimal bone
c) Occipital bone
d) Ethmoid bone

32) Name the joints between the ribs and sternum and the pubic symphysis that tend to be slightly movable.
a) Cartilaginous joints
b) Fibrous joints
c) Hinge joints
d) Ball and socket joints

33) Muscular and nervous excitability is lowered by which of the following?
a) Na
b) Mg
c) Ca
d) K

34) Which one of the followings stands incorrect regarding skeletal muscle?
a) Responsible for voluntary movement
b) Contract and expand slowly
c) Cell fibers have multiple nuclei
d) Stimulated by central nervous system

35) Joint between femur and acetabulum is called
a) Pivot
b) Sliding
c) Ball and socket joint
d) Hinge joint

36) Select the correct statement regarding the specific disorder of muscular or skeletal system:
a) Myasthenia gravis - Auto immune disorders which inhibits sliding of myosin filaments
b) Gout - inflammation of joints due to extra deposition of calcium
c) Muscular dystrophy - age related shortening of muscles
d) Osteoporosis - decrease in bone mass and higher chances of fractures with advancing age

37) Glenoid cavity is present in
a) Xiphisternum
b) Pectoral girdle
c) Pelvic girdle
d) Cartilage

38) Autorhythmicity is a special property of the muscles of the
a) Heart
b) Intestine
c) Liver
d) Kidney

39) ATPase enzyme essential for muscle contraction is found in
a) Actinin
b) Myosin
c) Troponin
d) Actin

40) Statements about the mechanism of muscle contraction are given below:
I. Acetylcholine is released when the neural signal reaches the motor end plate.
II. Muscle contraction is initiated by a signal sent by CNS via a sensory neuron.
III. During muscle contraction isotropic band gets elongated.
IV. Repeated activation of the muscles can lead to lactic acid accumulation.
Identify the correct statements.
a) I and IV are correct
b) I and III are correct
c) II and III are correct
d) I, Il and III are correct

41) Which one of the following pairs of structures distinguishes a nerve cell from other types of cell?
a) Perikaryon and dendrites
b) Vacuoles and fibres
c) Flagellum and medullary sheath
d) Nucleus and mitochondria

42) During the transmission of nerve impulse through a nerve fibre, the potential on the inner side of the plasma membrane has which type of electric charge?

a) First positive, then negative and continue to be negative
b) First negative, then positive and again back to negative
c) First positive, then negative and again back to positive
d) First negative, then positive and continue to be positive.

43) Patients suffering from cholera are given a saline drip because

a) NaCl is an important component of energy supply
b) NaCl furnishes most of the fuel required for cellular activity
c) Na+ ions help in stopping nerve impulses and hence, sensation of pain
d) Na+ ions help in the retention of water in the body tissues

44) Unidirectional transmission of a nerve impulse through nerve fibre is due to the fact that:

a) nerve fibre is insulated by a medullary sheath
b) sodium pump starts operating only at the cyton and then continues into the nerve fibre
c) neurotransmitters are released by dendrites and not by axon endings
d) neurotransmitters are released by the axon endings and not by dendrites

45) If vagus nerve in man is damaged, which of the following will not be affected?

a) pancreatic secretion
b) gastrointestinal movements
c) tongue movements
d) cardiac movements

46) Cornea transplant in humans is almost never rejected. This is because:

a) It is a non-living layer
b) Its cells are least penetrable by bacteria
c) It has no blood supply
d) It is composed of enucleated cells

47) Which one of the followings is the largest portion of the brain in humans?

a) Cerebrum
b) Cerebellum
c) Medulla
d) Pons

48) Which neuroglia cells produce a fatty insulating material called myelin?

a) Satellite cells
b) Schwann cells
c) Both (A) and (B)
d) Neither (A) nor (B)

49) Which of the following does not act as a neurotransmitter?

a) Acetylcholine
b) Glutamic acid
c) Epinephrine
d) Tyrosine

50) Which of the following is not related to the autonomic nervous system?

a) Peristalsis
b) Digestion
c) Excretion
d) Memory and learning