

**RAVI MATHS TUITION CENTER , CHENNAI- 82. WHATSAPP -
8056206308**

10TH CBSE BIOLOGY MCQS 1

10th Standard

Science

100 x 1 = 100

- 1) The kidneys in human beings are a part of the system for
(a) Nutrition (b) Respiration (c) Excretion (d) Transportation
- 2) The xylem in plants is responsible for
(a) Transport of water (b) Transport of food (c) Transport of amino acids (d) Transport of oxygen
- 3) The autotrophic mode of nutrition requires
(a) Carbon dioxide and water (b) Chlorophyll (c) Sunlight (d) All of the above
- 4) The breakdown of pyruvate to give carbon dioxide, water and energy takes place in
(a) Cytoplasm (b) Mitochondria (c) Chloroplast (d) Nucleus
- 5) Which of the following is a plant hormone?
(a) Insulin (b) Thyroxin (c) Oestrogen (d) Cytokinin
- 6) The gap between two neurons is called as
(a) Dendrite (b) Synapse (c) Axon (d) Impulse
- 7) The brain is responsible for
(a) Thinking (b) balancing the body (c) regulating (d) All of the above
- 8) Asexual reproduction takes place through budding in
(a) amoeba (b) yeast (c) plasmodium (d) leishmania
- 9) Which of the following is not a part of the female reproductive system in human beings?
(a) Ovary (b) Uterus (c) Vas deferens (d) Fallopian
- 10) The anther contains
(a) sepals (b) ovules (c) carpel (d) pollen grains
- 11) A mendelian experiment consisted of breeding tall pea plants bearing violet flowers with short pea plants bearing white flowers. The progeny all bore violet flowers, but almost half of them were short. This suggests that the genetic make-up of the tall parent can be depicted as
(a) TTWW (b) TTww (c) TtWW (d) TtWw
- 12) Which of the following groups contain only biodegradable items?
(a) Grass, flowers and leather (b) Grass, wood and plastic (c) Fruit-peels, cake and lime-juice
(d) Cake, wood and grass
- 13) Which of the following constitute a food-chain?
(a) Grass, wheat and mango (b) Grass, goat and human (c) Goat, cow and elephant
(d) Grass, fish and goat
- 14) Which of the following are environment-friendly practices?
(a) Carrying cloth-bags to put purchases in while shopping
(b) Switching off unnecessary lights and fans
(c) Walking to school instead of getting your mother to drop you on her scooter (d) All of the above

15) Which of the following statements about the autotrophs is incorrect?

- (a) They synthesise carbohydrates from carbon dioxide and water in the presence of sunlight and chlorophyll
- (b) They store carbohydrates in the form of starch
- (c) They convert carbon dioxide and water into carbohydrates in the absence of sunlight
- (d) They constitute the first trophic level in food chains

16) Select the correct statement

- (a) Heterotrophs do not synthesise their own food
- (b) Heterotrophs utilise solar energy for photosynthesis
- (c) Heterotrophs synthesise their own food
- (d) Heterotrophs are capable of converting carbon dioxide and water into carbohydrates

17) In salivary amylase is lacking in the saliva which of the following events in the mouth cavity will be affected?

- (a) Proteins breaking down into amino acids
- (b) Starch breaking down into sugars
- (c) Fats breaking down into fatty acids and glycerol
- (d) Absorption of vitamins

18) In which part of the alimentary canal food is finally digested?

- (a) Stomach
- (b) Mouth cavity
- (c) Large intestine
- (d) Small intestine

19) When air is blown from mouth into a test-tube containing lime water, the lime water turned milky due to the presence of

- (a) oxygen
- (b) carbon dioxide
- (c) nitrogen
- (d) water vapour

20) Which of the following is most appropriate for aerobic respiration?

- (a) Glucose $\xrightarrow{\text{mitochondria}}$ pyruvate $\xrightarrow{\text{Cytoptasm}}$ $\text{CO}_2 + \text{H}_2\text{O} + \text{Energy}$
- (b) Glucose $\xrightarrow{\text{Cytoptasm}}$ pyruvate $\xrightarrow{\text{mitochondria}}$ $\text{CO}_2 + \text{H}_2\text{O} + \text{Energy}$
- (c) Glucose $\xrightarrow{\text{Cytoptasm}}$ pyruvate+energy $\xrightarrow{\text{mitochondria}}$ $\text{CO}_2 + \text{H}_2\text{O}$
- (d) Glucose $\xrightarrow{\text{Cytoptasm}}$ pyruvate+energy $\xrightarrow{\text{mitochondria}}$ $\text{CO}_2 + \text{H}_2\text{O} + \text{Energy}$

21) Which of the following statement (s) is are true about heart?

- (i) Left atrium receives oxygenated blood from different parts of body while right atrium receives deoxygenated blood from lungs
- (ii) Left ventricle pumps oxygenated blood to different body parts while right ventricle pumps deoxygenated blood to lungs
- (iii) Left atrium transfer oxygenated blood to right ventricle which sends it to different body parts
- (iv) Right atrium receives deoxygenated blood from different parts of the body while left ventricle pumps oxygenated blood to different parts of the body

- (a) (i)
- (b) (ii)
- (c) (ii) and (iv)
- (d) (i) and (iii)

22) Choose the correct statement that describes arteries.

- (a) They have thick elastic walls, blood flows under high pressure; collect blood from different organs and bring it back to the heart
- (b) They have thin walls with valves inside, blood flows under low pressure and carry blood away from the heart to various organs of the body
- (c) They have thick elastic walls, blood flows under low pressure; carry blood from heart to various organs of the body
- (d) They have thick elastic walls without valves inside, blood flows under high pressure and carry blood away from the heart to different parts of the body

23) Oxygen liberated during photosynthesis comes from

- (a) Water
- (b) Chlorophyll
- (c) Carbon dioxide
- (d) Glucose

24) Which of the following is an incorrect statement?

- (a) Organisms grow with time
- (b) Organisms must repair and maintain their structure
- (c) Movement of molecules does not take place among cells
- (d) Energy is essential for life processes

- 25) The opening and closing of the stomatal pore depends upon
(a) Oxygen (b) Temperature (c) Water in guard cells (d) Concentration of CO₂ in stomata
- 26) Lack of oxygen in muscles often leads to cramps among cricketers. This results due to
(a) Conversion of pyruvate to ethanol (b) Conversion of pyruvate to glucose
(c) Non conversion of glucose to pyruvate (d) Conversion of pyruvate to lactic acid
- 27) Deoxygenated blood enters the heart through
(a) Right ventricle (b) Right atrium (c) Left ventricle (d) Left atrium
- 28) Cramps caused during sudden activities are due to the formation of
(a) Ethanol (b) Acetic acid (c) Lactic acid (d) Excess of water
- 29) Lymph carries
(a) Digested fats only (b) Absorbed fats only (c) Digested and Absorbed fats (d) Water
- 30) Amphibians have
(a) 1-chambered heart (b) 2-chambered heart (c) 3-chambered heart (d) 4-chambered heart
- 31) Criteria used to decide whether something is alive is
(a) Body structure (b) Movements (c) Cellular organization (d) Both (a) and (b)
- 32) Proteins after digestion are converted into
(a) Carbohydrates (b) Small globules (c) Amino acids (d) Starch
- 33) Heterotroph's survival depends _____ on autotrophs.
(a) Directly (b) Indirectly (c) Directly and Indirectly (d) Directly or Indirectly
- 34) In the experiment to test the presence of starch, why is the leaf dipped in alcohol not heated directly
(a) Alcohol is flammable (b) For better heating (c) Alcohol is acidic in nature
(d) Alcohol is basic in nature
- 35) Closing and opening of pores is a function of
(a) Stomata (b) Chlorophyll (c) Chloroplast (d) Guard cells
- 36) Organisms which breakdown the food outside the body and then absorb it are
(a) Bread moulds (b) Yeast (c) Mushroom (d) All of these
- 37) Temporary finger-like extension of amoeba are called
(a) Cell membrane (b) Cell wall (c) Pseudopodia (d) Cilia
- 38) Pancreas secretes the following pancreatic juices
(a) Trypsin (b) Pepsin (c) Bile juice (d) Both (a) and (b)
- 39) CO₂ is transported in our body through
(a) Haemoglobin (b) Blood (c) Water (d) All of these
- 40) Separation of right and left side of the heart is to
(a) Ensure proper and efficient working of heart (b) Avoid any blockage
(c) Allow highly efficient supply of oxygen (d) All of these
- 41) The loss of water in the form of vapour from the aerial parts of the plants is known as
(a) Evaporation (b) Translocation (c) Transpiration (d) Conductions
- 42) Name the type of blood vessel which carry blood from organs to the heart
(a) Artery (b) Veins (c) Lymph (d) All of these
- 43) Which of the following statement is correct about receptors?
(a) Gustatory receptors detect taste while olfactory receptors detect smell
(b) Both gustatory and olfactory receptors detect smell
(c) Auditory receptors detect smell and olfactory receptors detect taste
(d) Olfactory receptors detect taste and gustatory receptors smell

44) In a synapse, chemical signal is transmitted from

- (a) Dendritic end of one neuron to axonal end of another neuron
- (b) Axon to cell body of the same neuron
- (c) Cell body to axonal end of the same neuron
- (d) Axonal end of one neuron to dendritic end of another neuron

45) Which of the following statements are true about the brain?

- (i) The main thinking part of brain is hind brain
 - (ii) Centres of hearing, smell, memory, sight, etc. are located in forebrain.
 - (iii) Involuntary actions like salivation, vomiting, blood pressure are controlled by the medulla in the hind brain
 - (iv) Cerebellum does not control posture and balance of the body
- (a) (i) and (ii) (b) (i), (ii) and (iii) (c) (ii) and (iii) (d) (iii) and (iv)

46) Spinal cord originates from

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

47) Iodine is necessary for the synthesis of which hormone?

- (a) Adrenaline (b) Thyroxin (c) Auxin (d) Insulin

48) Which of the following statements about transmission of nerve impulse is incorrect?

- (a) Nerve impulse travels from dendritic end towards axonal end.
- (b) At the dendritic end electrical impulses bring about the release of some chemicals which generate an electrical impulse at the axonal end of another neuron.
- (c) The chemicals released from the axonal end of one neuron cross the synapse and generate a similar electrical impulse in a dendrite of another neuron.
- (d) A neuron transmits electrical impulses not only to another neuron but also to muscle and gland cells.

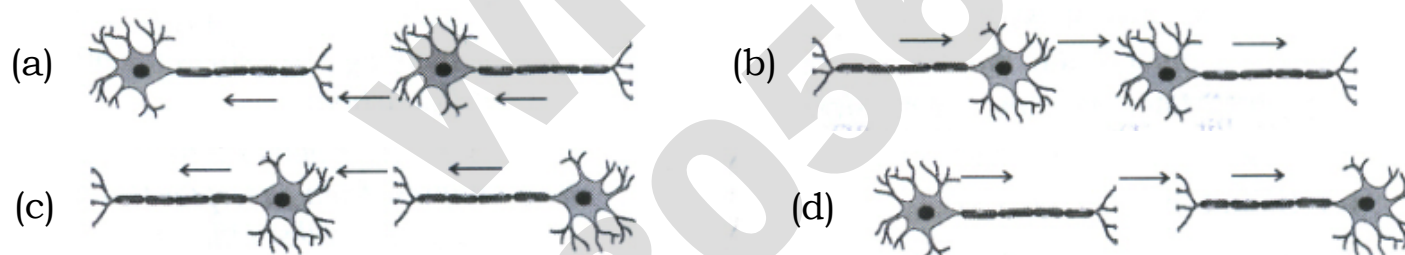
49) Which of the following is not an involuntary action?

- (a) Vomiting (b) Salivation (c) Heart beat (d) Chewing

50) The hormone which increases the fertility in males is called

- (a) Oestrogen (b) Testosterone (c) Insulin (d) Growth hormone

51) What is the correct direction of flow of electrical impulses?



52) Receptors are located in

- (a) tongue (b) inner ear (c) nose (d) All of these

53) Input and output nerves meet at:

- (a) Brain (b) Spinal cord (c) Muscles (d) Heart

54) Plant cells change shape by:

- (a) Breaking down food (b) Changing amount of water (c) Specialised proteins
- (d) Discharging waste products

55) The response of roots and shoots in geotropic movements is as follows

- (a) Roots-positive; shoots-negative (b) Roots-no role; shoots-positive
- (c) Roots-negative; shoots-positive (d) None of these

56) Wilting of leaves is an example of

- (a) Cell division (b) Growth promotion (c) Fix plant hormone (d) Inhibition of growth

57) Deficiency of growth hormone by pituitary gland leads to:

- (a) Dwarfism (b) Gigantism (c) Goitre (d) Both (a) and (b)

58) Insulin helps in

- (a) Promoting growth
- (b) Regulating amount of water
- (c) Regulating fat metabolism
- (d) Regulating blood sugar levels

59) In this list of organisms given below, those that reproduce by the asexual method are

- (i) banana
- (ii) dog
- (iii) yeast
- (iv) amoeba

- (a) (ii) and (iv)
- (b) (i), (iii) and (iv)
- (c) (i) and (iv)
- (d) (ii), (iii) and (iv)

60) Characters transmitted from parents to offspring are present in

- (a) cytoplasm
- (b) ribosome
- (c) golgi bodies
- (d) genes

61) A feature of reproduction that is common Amoeba, Spirogyra and Yeast is that

- (a) they reproduce asexually
- (b) they are all unicellular
- (c) they reproduce only sexually
- (d) they are all multicellular

62) Vegetative propagation refers to formation of new plants from

- (a) stem, roots and flowers
- (b) stem, roots, and flower
- (c) stem, flowers and fruits
- (d) stem, leaves and flowers

63) Length of pollen tube depends on the distance between

- (a) pollen grain and upper surface of stigma
- (b) pollen grain on upper surface of stigma and ovule
- (c) pollen grain in anther and upper surface of stigma
- (d) upper surface of stigma and lower part of style

64) Offspring formed as a result of sexual reproduction exhibit more variations because

- (a) sexual reproduction is a lengthy process
- (b) genetic material comes from two parents of the same species
- (c) genetic material comes from two parents of different species
- (d) genetic material comes from many parents

65) During adolescence, several changes occur in the human body. Mark one change associated with sexual maturation in boys

- (a) loss of milk teeth
- (b) increase in height
- (c) cracking of voice
- (d) weight gain

66) The simple animals like Planaria can be cut into a number of pieces and each piece grows into a complex organism. What is the process known as?

- (a) Budding
- (b) Fragmentation
- (c) Spore formation
- (d) Regeneration

67) Which of the following is not a sexually transmitted disease

- (a) Warts
- (b) Kala azar
- (c) Syphilis
- (d) Gonorrhoea

68) The process of the transfer of pollen grains from the flower of one plant to the stigma of the flower of another plant of the same species is known as

- (a) Cross pollination
- (b) Fertilisation
- (c) Self pollination
- (d) None of the above

69) The two oviducts in a human female unite into an elastic bag like structure known as

- (a) Vagina
- (b) Uterus
- (c) Fallopian tube
- (d) Cervix

70) Spirogyra reproduces by

- (a) Fission
- (b) Regeneration
- (c) Fragmentation
- (d) Budding

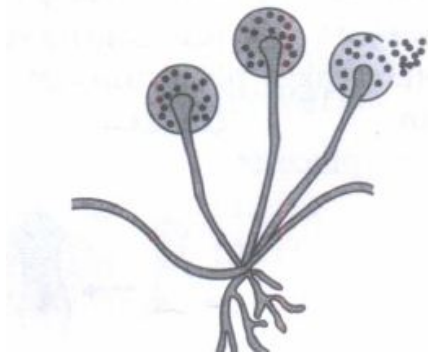
71) Vegetative propagation in potato takes place through

- (a) Stem
- (b) Root
- (c) Leaves
- (d) Seeds

72) The common passage meant for transporting urine and sperms in males is

- (a) Ureter
- (b) Vas deferens
- (c) Urethra
- (d) Anus

73) Identify the organism



- (a) Rhizobium (b) Rhizopus (c) Rhizoid (d) Mushroom

74) An example of homologous organs is

- (a) Our arm and a dog's fore-leg (b) Our teeth and an elephant's tusks.
(c) Potato and runners of grass. (d) all of the above

75) Exchange of genetic material takes place in

- (a) vegetative reproduction (b) asexual reproduction (c) sexual reproduction (d) budding

76) If a round, green seeded pea plant (RR yy) is crossed with wrinkled, yellow seeded pea plant, (rr YY) the seeds produced in F₁ generation are

- (a) round and yellow (b) round and green (c) wrinkled and green (d) wrinkled and yellow

77) Two pea plants one with round green seeds (RRyy) and another with wrinkled yellow (rrYY) seeds produce F₁ progeny that have round, yellow (RrYy) seeds. When F₁ plants are selfed, the F₂ progeny will have new combination of characters. Choose the new combination from the following:

- (i) Round, yellow
(ii) Round, green
(iii) Wrinkled, yellow
(iv) Wrinkled, green
(a) (i) and (ii) (b) (i) and (iv) (c) (ii) and (iii) (d) (i) and (iii)

78) Select the correct statement

- (a) Tendril of a pea plant and phylloclade of Opuntia are homologous.
(b) Tendril of a pea plant and phylloclade of Opuntia are analogous
(c) Wings of birds and limbs of lizards are analogous
(d) Wings of birds and wings of bat are homologous

79) In peas, a pure tall plant (TT) is crossed with a short plant (tt). The ratio of pure tall plants to short plants in F₂ is

- (a) 1 : 3 (b) 3 : 1 (c) 1 : 1 (d) 2 : 1

80) A section of DNA providing information for one protein is called

- (a) Nucleus (b) Chromosomes (c) Trait (d) Gene

81) Amongst which of the following animals, sex of the offsprings not genetically determined

- (a) Humans (b) Snails (c) Birds (d) Dogs

82) With whom we associate theory of evolution

- (a) Charles Darwin (b) Mendel. (c) Stanley Miller (d) Harold Urey

83) Homologous organs have

- (a) Same structure, same function (b) Different structure, different function
(c) Same structure, different function (d) Same function, different structure

84) Which one of the following strongly indicates that bird and dinosaurs are closely related?

- (a) They both have feathers (b) They both respire (c) They both reproduce (d) They both have eyes

85) Organism A recently came into existence while B was formed millions of years ago. What does this indicate?

- (i) A is more efficient than B (ii) A is more complex than B.
(a) Only (i) (b) Only (ii) (c) Both (i) and (ii) (d) Either (i) or (ii)

- 86) Which one of the following is an artificial ecosystem?
(a) Pond (b) Crop field (c) Lake (d) Forest
- 87) Accumulation of non-biodegradable pesticides in the food chain in increasing amount at each higher trophic level is known as
(a) Eutrophication (b) Pollution (c) Bio magnification (d) Accumulation
- 88) Organisms which synthesize carbohydrates from inorganic compounds using radiant energy are called
(a) Decomposers (b) Producers (c) Herbivores (d) Carnivores
- 89) Excessive exposure of humans to U-V rays result in
(1) damage to immune system
(2) damage to lungs
(3) Multi directional
(4) peptic ulcers
(a) 1 and 4 (b) 2 and 4 (c) 1 and 3 (d) 3 and 4
- 90) Which of the following limits the numbers of trophic levels in a food chain?
(a) Decrease in energy at higher trophic levels (b) Deficient food supply (c) Polluted air (d) Water
- 91) Which group of organisms are not constituents of a food chain?
(1) Grass, lion, rabbit, wolf
(2) Plankton, man, fish, grasshopper
(3) Wolf, grass, snake, tiger
(4) Frog, snake, eagle, grass, grasshopper
(a) 1 and 4 (b) 3 and 4 (c) 2 and 3 (d) 1 and 4
- 92) If a grass hopper is eaten by a frog, then the energy transfer will be from
(a) Producer to decomposer (b) Producer to primary consumer
(c) Primary consumer to secondary consumer (d) Secondary consumer to primary consumer
- 93) Name the thing in our body which helps us to digest food?
(a) hormone (b) enzymes (c) stomach (d) mouth
- 94) Which of the following actions may not affect the environment adversely
(a) Plastic bags buried inside the earth (b) Planting of trees
(c) Excessive use of non-biodegradable pesticides (d) Burning of plastic bags.
- 95) Which of the following is an example of human made ecosystem?
(a) Aquarium (b) Sunlight (c) Wind (d) Water
- 96) Which of the following is the full form of CFC?
(a) Chlorofluorine carbon (b) Carbonchlorofluorine (c) Chlorinfluid carbon (d) Chlorofluorocarbons
- 97) Which of the following is the full form of UNEP?
(a) Unique National English Programme (b) United National Enrgy Programme
(c) United Nations Environment Programme (d) Union of Non-Environmental Plan
- 98) Which of the following is proper sequence of trophic levels?
(a) Producers, Herbivores, Top carnivores, Carnivores
(b) Top Carnivores, Carnivores, Herbivores, Producers
(c) Carnivores, Top Carnivores, Producers, Herbivores
(d) Herbivores, Carnivores, Producers, Top Carnivores
- 99) Which of the following is the formula of ozone
(a) O₃ (b) O₂ (c) O₄ (d) O₆
- 100) Which of the following in not an effect of ultraviolet radiations?
(a) Causes skin cancer (b) Causes sun bum (c) Causes eye disease (d) Causes typhoid