

Practice Questions and Answers

# **BASIC SCIENCE**

FOR

# **Junior Secondary School**

# **2**



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Basic Science Exam Questions and Answers Pack

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# QUESTIONS

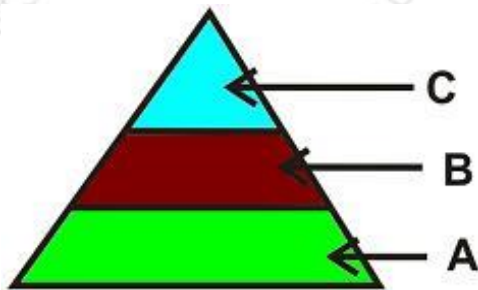
**TOPIC: BALANCED ENVIRONMENT**

**DIRECTION: Choose the correct answer from the lettered options.**

1. Why is it that fossil shells of animals that once lived in the sea can be found many miles from the coast of the ocean?

- A. Animals moved the fossils when they moved to warmer areas
- B. The sea level lowered from where it was.
- C. Strong winds moved the fossils away from the waste.
- D. The sea animals began living on land.

2. The diagram below shows the pyramid of numbers. The part labelled B is referred to as the \_\_\_\_\_.



- A. primary consumers
- B. secondary consumers
- C. producers
- D. tertiary consumers

3. Which one of the following options CANNOT be found in a rainforest?

- A. Tall trees
- B. Monkeys
- C. Protozoans
- D. Very tall grasses

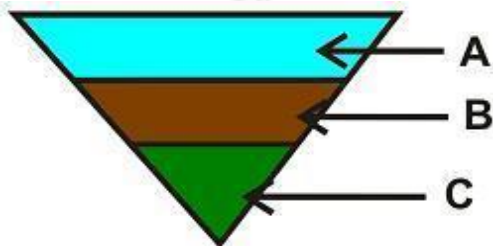
4. When the stored in a pyramid decreases from the producers to the consumers, it is called \_\_\_\_\_.

- A. pyramid of numbers
- B. pyramid of mass
- C. pyramid
- D. potential of the pyramid

5. Nigeria is divided into two major natural habitats namely \_\_\_\_\_ and \_\_\_\_\_.

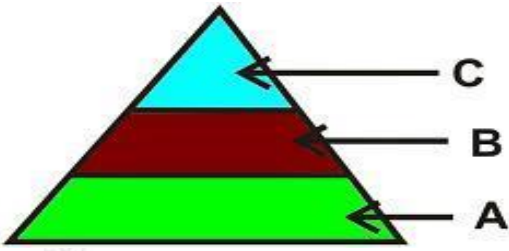
- A. tropical Sahara, tropical savanna
- B. tropical rainforest, tropical Sahara
- C. tropical mangrove forest, tropical savanna
- D. tropical rainforest, tropical savanna

6. The diagram below shows the pyramid of mass. The part labelled C is called \_\_\_\_\_.



- A. producers
- B. primary consumers
- C. secondary consumers
- D. Tertiary producers

7. The diagram below shows the pyramid of numbers. The part labelled A is referred to as the \_\_\_\_\_.



- A. producers
- B. primary Consumers
- C. secondary Consumers
- D. None of the above

8. Which one of the following definitions best describes sustainable development?

- A. The development that destroys the needs of the present generation in order to meet the need of future generation.
- B. The management of the needs of the present generation in order to meet the need of future generation.
- C. The development that takes care of the needs of the present generation without destroying the ability of the future generation to meet their own need.
- D. The management that takes care of the needs of the present generation without destroying the ability of the future generations to meet their own needs.

9. A diagram that shows the rate of flow at different types of food level is called \_\_\_\_\_.

- A. diagram
- B. pyramid
- C. food web
- D. food chain

10. The Yankari Game Reserve is located in which one of the following states in Nigeria?

- A. Niger State
- B. Cross Rivers State
- C. Bauchi State
- D. Benue State

11. \_\_\_\_\_ is the determination of increase in size between producers and consumers.

- A. Pyramid of mass
- B. Pyramid of numbers
- C. pyramid
- D. Pyramid of organisms

12. Which one of the following best defines a pyramid of numbers?

- A. The relationship of the numbers of plants and animals in a food chain of a tropical mangrove forest.
- B. The relationship of the number of plants and animals in a food chain of a tropical savanna and a tropical rain forest.
- C. The number of plants and animals in a food chain.
- D. The number of plants and animals in a food chain of a tropical savanna and rainforest.

13. Where is the tropical rainforest found in Nigeria?

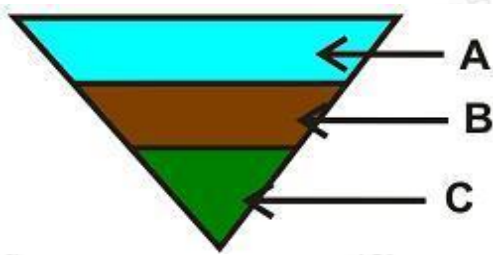
- A. Southern part of Nigeria
- B. Northern part of Nigeria
- C. Outside Nigeria
- D. Eastern Nigeria



14. Which one of the following is the main source of for a community?

- A. Producers
- B. Abiotic substances
- C. Sun
- D. Consumers

15. The diagram below shows the pyramid of mass. The part labelled B is referred to as \_\_\_\_\_.

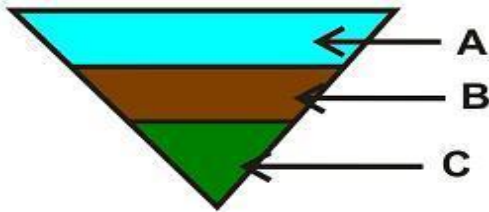


- A. secondary consumers
- B. producers
- C. primary consumers
- D. tertiary consumers

16. The top layer of the tropical rainforest is called \_\_\_\_\_.

- A. scavenger
- B. canopy
- C. community
- D. food web

17. The diagram below shows the pyramid of mass. The part labelled A is referred to as \_\_\_\_\_.



- A. producers
- B. secondary consumers
- C. primary consumers
- D. secondary retailers

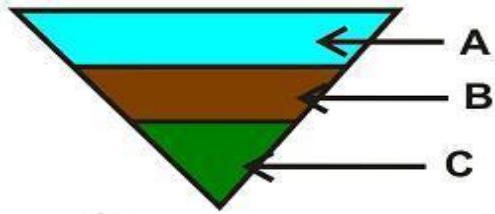
18. The tropical rainforest is subdivided into \_\_\_\_\_ layers?

- A. 3
- B. 2
- C. 1
- D. 4

19. In tropical savanna, the main producers are \_\_\_\_\_.

- A. trees
- B. grasses
- C. monkeys
- D. snakes

20. The diagram below shows the pyramid of numbers. The part labelled C is referred to as \_\_\_\_\_.



- A. tertiary consumers
- B. secondary consumers
- C. primary consumers
- D. producers

21. Which of the following activities will cause a reduction in the population of wild life in the country?

- A. Game reserves
- B. Felling of trees.
- C. Forest reserves
- D. Keeping of animals.

## TOPIC: CIRCULATORY SYSTEM

**DIRECTION: Choose the correct answer from the lettered options.**

1. Which of the following does the right side of the heart pump blood into?
  - A. Liver
  - B. Lungs
  - C. Brain
  - D. Kidney
  
2. The blood vessels which take oxygenated blood from the lungs to the heart are the \_\_\_\_\_.
  - A. vena cava
  - B. renal veins
  - C. renal arteries
  - D. pulmonary veins
  
3. Blood flows to the heart through the \_\_\_\_\_.
  - A. arteries
  - B. capillaries
  - C. veins
  - D. valves
  
4. Which of the following is an organ of the excretory system?
  - A. Lungs
  - B. Femur
  - C. Kidney
  - D. Small intestine

5. Clotting of blood occurs by the activity of \_\_\_\_\_.  
A. platelets  
B. marrow  
C. spleen  
D. plasma
6. The chemical symbols of Gold, Lead and Neon are \_\_\_\_\_, \_\_\_\_\_ and \_\_\_\_\_.  
A. Au, Pb, Ne  
B. G, Ld., N  
C. Au, Ld, Ne  
D. Au, Pb, N
7. The blood cell that is meant to protect or defend the blood against disease germs is referred to as \_\_\_\_\_.  
A. white blood cell  
B. red blood cell  
C. platelets  
D. plasma
8. The liquid part of the blood is called \_\_\_\_\_.  
A. platelets  
B. red blood cell  
C. hemoglobin  
D. plasma
9. In the circulatory system, the main organ that serves as a pump is called \_\_\_\_\_.  
A. liver

- B. bladder
- C. lung
- D. heart

10. The organ that pumps the blood and makes it flow around the body is called \_\_\_\_\_.

- A. veins
- B. artery
- C. heart
- D. lungs

11. The removal of undigested solid food materials from our body is called \_\_\_\_\_.

- A. excretion
- B. defecations
- C. respiration
- D. urination

12. Which of the following is NOT a defect or disease of the blood?

- A. Anemia
- B. Asthma
- C. Sickle cell disease
- D. Leukamia

13. Which one of the following is NOT a composition of blood?

- A. Bile
- B. Plasma
- C. Platelets
- D. Red blood cells

14. Which of the following is NOT transported in the body?

- A. Digested food
- B.
- C. Waste materials from the cells
- D. Feces

15. What separates the right artery from the right ventricle?

- A. Tissue valve
- B. Bicuspid valve
- C. Tricuspid valve
- D. Pulmonary valve

16. Exchange of materials between blood and body cells occurs through the \_\_\_\_\_.

- A. villi
- B. capillaries
- C. lungs
- D. veins

17. Which one of the following is a disease associated with the blood?

- A. Leukemia
- B. Tuberculosis
- C. Myopia
- D. Dysentery

18. The normal pH of the human blood is \_\_\_\_\_.

- A. 7.4
- B. 4.4

C. 5.4

D. 6.4

19. The bronchus divides into smaller windpipes called \_\_\_\_\_.

A. alveoli

B. larynx

C. bronchioles

D. bronchi

20. The instrument used in the measurement of heart rate is called \_\_\_\_\_.

A. heart chart

B. electrocardiograph

C. stethoscope

D. sphygmomanometer

21. Blood is made up of solids suspended in a liquid called \_\_\_\_\_.

A. platelets

B. marrow

C. spleen

D. plasma

22. Which one of the following blood cells has the largest percentage proportion in the blood?

A. White blood cells

B. Red blood cells

C. Plasma

D. Platelets



23. Which one of the following is NOT a blood group?

- A. A
- B. AO
- C. O
- D. AB

24. Which of these is a compound that combines with in the blood?

- A. Plasma
- B. Carbon dioxide
- C. Hemoglobin
- D. Globin

25. The left side of the heart pumps blood into the \_\_\_\_\_.

- A. liver
- B. heart
- C. lungs
- D. body

26. What is the name of the liquid which transports materials around the body?

- A. Fluid
- B. Solution
- C. Urine
- D. Blood

27. Which one of the following is a disease associated with the heart?

- A. Tuberculosis
- B. Hypertension
- C. Myopia
- D. Dysentery

28. There are \_\_\_\_\_ main parts of the circulatory system.

- A. 5
- B. 4
- C. 3
- D. 2

29. The two upper chambers of the heart are called \_\_\_\_\_.

- A. ventricles
- B. auricles
- C. renal arteries
- D. vena cava

30. \_\_\_\_\_ is the blood cell that is responsible for blood clotting.

- A. White blood cell
- B. Red blood cell
- C. Auricle
- D. Platelet

31. The heart has \_\_\_\_\_ major sections.

- A. 5
- B. 4
- C. 3
- D. 2

32. The red blood cell is responsible for the transportation of \_\_\_\_\_ in the body.

- A. carbon (iv) oxide
- B. hemoglobin
- C. oxygen
- D. nitrogen

33. Exchange of materials between blood and cells takes place through the \_\_\_\_\_.

- A. capillaries
- B. veins
- C. ventricles
- D. arteries

34. Blood platelets are referred to as \_\_\_\_\_.

- A. white blood cells
- B. free nuclei cytoplasm fragments
- C. a kind of red blood cells
- D. plasma

35. \_\_\_\_\_ is NOT a disease of the blood.

- A. Anemia
- B. Sickle cell
- C. Short sightedness
- D. Leukemia

36. There are \_\_\_\_\_ kinds of blood cells.

- A. 1
- B. 2
- C. 3
- D. 4

37. The current in a circuit is measured with \_\_\_\_\_.

- A. a voltmeter
- B. an ammeter

- C. a thermometer
- D. a hygrometer

38. Which of the following is NOT a blood vessel?

- A. Heart
- B. Capillaries
- C. Arteries
- D. Veins

39. Which of the following is NOT part of the circulatory system?

- A. Heart
- B. Arteries
- C. Capillaries
- D. Auricle

40. Blood plasma contains \_\_\_\_\_

- (i) Water
- (ii) Hemoglobin
- (iii) Dissolved minerals
- (iv) Dissolved proteins
- (v) Red cells

- A. i, ii and iii
- B. i, ii and iv
- C. iii, iv and v
- D. i, iii and iv

41. The vessel which carries blood from the heart is called \_\_\_\_\_.

- A. artery
- B. vein
- C. capillary
- D. auricle

42. Which of the following is NOT a function of blood in the body?

- A. Distribution of food
- B. Removal of feces
- C. Removal of wastes
- D. Circulation of

43. The blood vessels which carry blood towards the heart are called \_\_\_\_\_.

- A. arteries
- B. veins
- C. capillaries
- D. ventricles

44. + hemoglobin =

- A. oxygenhaemoglobin
- B. oxyhaemoglobin
- C. oxyhaem
- D. ox globin

45. Gases are transported in the body by \_\_\_\_\_.

- A. blood
- B. water
- C. urine
- D. air

46. Where in the human body is the heart found?

- A. Head
- B. Neck
- C. Chest
- D. Abdomen

47. The act of transferring blood from one person to another is known as\_\_\_\_\_.

- A. blood pumping
- B. blood transfusion
- C. blood transfer
- D. blood clotting

48. Doctors take the pulse of their patients to know the \_\_\_\_\_ of the patient.

- A. blood group
- B. genotype
- C. heart rate
- D. physical strength

49. The blood vessels that carry blood towards the heart are known as \_\_\_\_\_.

- A. veins
- B. capillaries
- C. auricles
- D. arteries

50. The chemical in the blood which carries is known as \_\_\_\_\_.

- A. antigens
- B. hemoglobin
- C. plasma
- D. antibodies

## TOPIC: CONTINUITY OF LIFE

**DIRECTION:** Choose the correct answer from the lettered options.

1. Which one of the following fruits can be dispersed by wind?

- A. Coconut
- B. Tridax
- C. Maize
- D. Mango

2. The continuous existence of a specie of animal is maintained by \_\_\_\_\_.

- A. continuity of life
- B. reproduction
- C. death
- D. mating

3. Which one of the following is NOT borne by the stem of a plant?

- A. Terminal bud
- B. Auxiliary bud
- C. Leaf
- D. Node

4. The reproductive organ of a plant is called \_\_\_\_\_.

- A. flower
- B. fruit
- C. leaf
- D. root

5. In flowers the terminal part of a stamen containing the pollen sacs is known as the \_\_\_\_\_.

- A. anther
- B. style
- C. filament
- D. pistil

6. Which one of the following plants CANNOT be propagated by vegetative propagation?

- A. Cassava
- B. Potato
- C. Sugarcane
- D. Mango

7. There are \_\_\_\_\_ types of reproduction.

- A. 5
- B. 4
- C. 3
- D. 2

8. Which of the following structures of a flower forms the seed after fertilization?

- A. Filament
- B. Ovary
- C. Ovule
- D. Sepal

9. Which one of the following is NOT necessary for the germination of seeds?

- A. Maturation



- B. Suitable temperature
- C. Moisture
- D. Ovulry

10. A baby is protected from infection and disease by ensuring cleanliness

And \_\_\_\_\_.

- A. giving immunization
- B. buying expensive drugs
- C. weaning the baby
- D. drug abuse

11. The structure in a flower that forms a seed after fertilization is called the \_\_\_\_\_.

- A. sepal
- B. style
- C. ovule
- D. filament

12. Pollen grains can be transferred to the stigma by \_\_\_\_\_, \_\_\_\_\_ and \_\_\_\_\_.

- A. wind, insects, birds
- B. insects, water, sun
- C. birds, snail, leafs
- D. goat, cow, man

13. The collective name of carpels of a flower is \_\_\_\_\_.

- A. calyx
- B. corolla
- C. gynoecium

D. androecium

14. A hole through which escapes from the leaf is known as \_\_\_\_\_.

- A. stomata
- B. chlorophyll
- C. cambium
- D. petiole

15. A creamy structure in a seed that provides food for growing seedlings is called \_\_\_\_\_.

- A. plumule
- B. radicle
- C. cotyledon
- D. fruit

16. When tips of plants grow towards the source of light, the growth movement is known as \_\_\_\_\_ movement.

- A. tropic
- B. nastic
- C. tactic
- D. general

17. Stamens are collectively called \_\_\_\_\_.

- A. androecium
- B. carpel
- C. gynoecium
- D. pistil

18. The fusion of the male and female sex gamete is \_\_\_\_\_.

- A. fertilization
- B. conjugation
- C. mating
- D. pollination

19. Which of the following insects helps to pollinate flowers?

- A. Tsetse fly
- B. Butterfly
- C. Housefly
- D. Mosquito

20. The transfer of pollen grains from the anther to the stigma is called \_\_\_\_\_.

- A. fertilization
- B. conjugation
- C. mating
- D. pollination

## TOPIC: DIGESTIVE SYSTEM

**DIRECTION:** Choose the correct answer from the lettered options.

1. Which of the following is NOT a digestive juice?

- A. Saliva
- B. Gastric juice
- C. Pancreatic juice
- D. Urine

2. The conversion of excess protein (amino acids) into urea occurs in the \_\_\_\_\_.

- A. kidney
- B. pancreas
- C. villi
- D. liver

3. In the mouth, carbohydrates are broken down by \_\_\_\_\_ enzyme.

- A. lipase
- B. pepsin
- C. ptyalin
- D. rennin

4. Which of the following organs in the human body produces bile?

- A. Gall bladder
- B. Pancreas
- C. Spleen
- D. Liver

5. There are \_\_\_\_\_ digestive juices in the human body.

- A. 5
- B. 4
- C. 3
- D. 2

6. Which one of the following organs produces bile?

- A. Gall bladder
- B. Pancreas
- C. Spleen
- D. Liver

7. Food enters the blood stream through special structures called \_\_\_\_\_ in the walls of the intestine.

- A. villi
- B. duodenum
- C. stomach
- D. fingers

8. Mammals store excess carbohydrates chiefly as \_\_\_\_\_.

- A. glucose
- B. glycogen
- C. fat
- D. peptones

9. Which of the following is NOT secreted during the process of digestion of a balanced diet?

- A. Saliva

- B. Fruit juice
- C. Gastric juice
- D. Pancreatic juice

10. The metabolic process that does not require is called \_\_\_\_\_.

- A. deoxymetabolism
- B. catabolism
- C. anaerobic metabolism
- D. aerobic metabolism

11. Digestion of food takes place in a long tube in the body called \_\_\_\_\_.

- A. stomach
- B. intestine
- C. alimentary canal
- D. mouth

12. What is the process by which food substances are broken down into simpler forms and absorbed by the body?

- A. Respiration
- B. Digestion
- C. Excretion
- D. Reproduction

13. Completely digested food enters the blood stream through special structures called \_\_\_\_\_.

- A. gastric gland
- B. pancreas
- C. villi

D. gall bladder

14. The movement of food along the alimentary canal is commonly described as \_\_\_\_\_.

- A. diffusion
- B. peristalsis
- C. osmosis
- D. digestion

15. The process of digestion helps to \_\_\_\_\_.

- A. acidify our food
- B. add to our food
- C. breakdown our food into smaller molecules
- D. make our food taste sweet

16. The end product of the digestion of protein is \_\_\_\_\_.

- A. glucose
- B. fatty acids
- C. glycerol
- D. amino acids

17. Proteins are broken up into \_\_\_\_\_ acids in the human body.

- A. amino
- B. ethanoic
- C. fatty
- D. formic

18. The digestion of cooked starch starts in the part of alimentary canal called the \_\_\_\_\_.

- A. stomach
- B. small intestine
- C. mouth
- D. large intestine

19. Which one of the following is NOT an organ in the digestive system?

- A. Oesophagus
- B. Kidney
- C. Stomach
- D. Duodenum

20. After digestion, lipid (fats) are converted to absorbable end products known as \_\_\_\_\_.

- A. amino acids
- B. fatty acids and glycerol
- C. glycogen
- D. glucose

21. Which one of the following is NOT a part of the digestive system?

- A. Gullet
- B. Liver
- C. Mouth
- D. Small intestine

22. The finger-like projections found in the intestine provide \_\_\_\_\_.

- A. more for digestion



- B. fluids to ease bowel movement
- C. digestive enzymes for proteins
- D. large surface area for the absorption of food

23. Absorption of food takes place in the \_\_\_\_\_.

- A. large intestine
- B. small intestine
- C. stomach
- D. oesophagus

24. Excess carbohydrates in animals is stored in the liver as \_\_\_\_\_.

- A. cellulose
- B. fatty acid
- C. glucose
- D. glycogen

25. Which one of the following is NOT an organ in the digestive system?

- A. Oesophagus
- B. Kidney
- C. Stomach
- D. Duodenum

26. The process of digestion is quickened by chemical substances called \_\_\_\_\_.

- A. acids
- B. alkaline
- C. colloids
- D. enzymes

27. The long tube forming the basic parts of the is called the \_\_\_\_\_.

- A. alimentary canal
- B. large intestine
- C. oesophagus
- D. small intestine

28. The enzyme ptyalin acts on \_\_\_\_\_.

- A. carbohydrate
- B. fats and oils
- C. mineral
- D. proteins

29. Digestive juices are produced in the \_\_\_\_\_.

- A. blood
- B. glands
- C. lumen
- D. muscles

30. Which of the following food substances is digested in the stomach?

- A. Proteins
- B. Carbohydrates
- C. Fats and oil
- D. Fats and proteins

31. Which of the following takes place in the liver?

- A. Decomposition of fats
- B. Deamination of proteins
- C. Synthesis of proteins
- D. Production of antibodies

32. Glycogen is a carbohydrate as \_\_\_\_\_ is a protein.

- A. urea
- B. alanine
- C. triglyceride
- D. maltose

33. Where in the human body is the stomach found?

- A. Head
- B. Neck
- C. Chest
- D. Abdomen

34. The various chemical reactions in the body that leads to the release of during work is called \_\_\_\_\_.

- A. metabolism
- B. breakdown
- C. catabolism
- D. anabolism

35. The part of the alimentary canal where absorption of takes place is called the \_\_\_\_\_.

- A. stomach
- B. duodenum
- C. small intestine
- D. large intestine

36. In which part of the alimentary canal does digestion of proteins start?

- A. Large intestine

- B. Mouth
- C. Stomach
- D. Small intestine

37. The end product of digestion of protein is \_\_\_\_\_.

- A. glucose
- B. fatty acids
- C. amino acids
- D. sugar

38. Which of the following is NOT an example of the systems in the human body?

- A. Digestion system
- B.
- C.
- D. Nervous system

39. The breakdown of glycogen with is known as \_\_\_\_\_.

- A. metabolism
- B. glycogenesis
- C. aerobic glycolysis
- D. dissolution

40. The name of the digestive enzyme that causes the coagulation of milk proteins is called \_\_\_\_\_.

- A. ptyalin
- B. rennin
- C. pepsin
- D. amylase

41. In man, excess carbohydrates can be stored in the \_\_\_\_\_.

- A. gall bladder
- B. kidney
- C. liver
- D. pancreas

**TOPIC: ENERGY**

**DIRECTION: Choose the correct answer from the lettered options.**

1. Calculate the work done by a ball of mass 40kg which falls freely from a height of 0.8m above the ground ( $g = 10\text{m/s}^2$ ).

- A. 0.31
- B. 0.32
- C. 0.33
- D. 0.34

2. Pressure may be defined as \_\_\_\_\_.

- A. height multiplied by density
- B. normal force per unit area
- C. pounds per square inch
- D. grams per square centimeter

3. Which of these is NOT fuel for cooking?

- A. Electricity
- B. Methane
- C. Wood
- D. Carbon (iv) oxide

4. Which one of these is NOT a source of energy?

- A. Stone
- B. Petrol
- C. Wood
- D. Sun

5. What type of does an orange fruit have while hanging on the tree?

- A. Kinetic
- B. Light
- C. Mechanical
- D. Potential

6. An object which does NOT allow light to pass through it is referred to as \_\_\_\_\_ object.

- A. glass
- B. translucent
- C. opaque
- D. transparent

7. Which of the following statements is NOT true about the image in a plane mirror?

- A. The image is same size as the object.
- B. The image is laterally inverted.
- C. The image is virtual.
- D. The image is magnified.

8. Determine the potential of a body of mass 5kg thrown up to a height of 7m assuming the acceleration due to gravity of the body is 10m/s square.

- A. 150J
- B. 250J
- C. 350J
- D. 450J

9. The line where the incident ray and the reflected ray touch the mirror is called \_\_\_\_\_ line.

- A. refracted

- B. normal
- C. pin hole
- D. mirror

10. A collection of light travelling in the same direction is called \_\_\_\_\_.

- A. ray of light
- B. beam of light
- C. line of light
- D. group of light

11. White light can be separated into a number of different colours by the use of a \_\_\_\_\_.

- A. convex lens
- B. concave lens
- C. glass prism
- D. convex mirror

12. Both kinetic and potential are forms of \_\_\_\_\_ energy.

- A. electrical
- B. chemical
- C. mechanical
- D. hydro

13. \_\_\_\_\_ is the primary source of available on the earth.

- A. Food
- B. Sun
- C. Atomic reactors
- D. Wind



14. Change in direction of light as it passes from one medium to another is referred to as \_\_\_\_\_.

- A. diffraction
- B. refraction
- C. reflection
- D. interference

15. The film of a pin whole camera functions as the \_\_\_\_\_ of the eye.

- A. iris
- B. lens
- C. pupil
- D. retina

16. Which one of these is NOT a form of energy?

- A. Chemical
- B. Electrical
- C. Heat
- D. Fire

17. When light is dispersed by a triangle prism, a \_\_\_\_\_ is formed.

- A. spectrum
- B. mirage
- C. echo
- D. image

18. The separation of white light into a band of colours as it passes through a triangular glass prism is called \_\_\_\_\_.

- A. dispersion

- B. spectrum
- C. reflection
- D. refraction

19. Which of the following is NOT a form of energy?

- A. Hydro
- B. Power
- C. Potential
- D. Kinetic

20. Which one of the following is NOT a property of light?

- A. It can be reflected.
- B. It does not pass through a plane glass.
- C. It helps the eye to see objects.
- D. It is made up of many colours.

21. Which one of the following is a translucent object?

- A. Asbestos
- B. Duster
- C. Oily paper
- D. Plane glass

22. The straight line along which light travels is called a \_\_\_\_\_.

- A. ray of light
- B. ray of sun
- C. ray of
- D. ray of sunlight

23. \_\_\_\_\_ is the ability or capacity of an individual to perform work.

- A. Work
- B. Force
- C. Energy
- D. Power

24. The path and direction taken by light is known as \_\_\_\_\_.

- A. ray of light
- B. slit of light
- C. line of light
- D. star of light

25. The measuring unit of is \_\_\_\_\_.

- A. newton
- B. kilogram
- C. centimeters
- D. joules

26. A reflection in a mirror is called \_\_\_\_\_.

- A. darkness
- B. an image
- C. a shadow
- D. a colour

27. The terminals of a dry cell are \_\_\_\_\_ and \_\_\_\_\_.

- A. negative, neutral
- B. positive, neutral
- C. positive, negative
- D. neutral, normal

28. What travels through space is called \_\_\_\_\_ energy.

- A. heat
- B. radiant
- C. atomic
- D. sun

29. Which one of the following is NOT a natural source of energy?

- A. Battery
- B. Coal
- C. Food
- D. Sun

30. Which of the following is NOT a secondary source of energy?

- A. Food
- B. Sun
- C. Atomic reactors
- D. Wind

31. The colour of an opaque object seen is the colour of light that is \_\_\_\_\_.

- A. absorbed
- B. refracted
- C. reflected
- D. transmitted

32. The image of an object formed in a pin-hole camera is usually \_\_\_\_\_.

- A. upright
- B. inverted
- C. refracted
- D. a real image

33. At work is also called \_\_\_\_\_ energy.

- A. electrical
- B. mechanical
- C. potential
- D. kinetic

34. What happens when a ray of light hits the surface of a rectangular glass block?

- A. It becomes perpendicular to the glass block.
- B. It is reflected.
- C. It is refracted.
- D. It is deflected.

## TOPIC: ENERGY AND MATERIALS FOR COMMUNITIES

**DIRECTION:** Choose the correct answer from the lettered options.

1. Plants get their supply of through the leaves by the process of \_\_\_\_\_.
  - A. absorption
  - B. diffusion
  - C. transpiration
  - D. photosynthesis
  
2. The in food is known as \_\_\_\_\_ energy.
  - A. mechanical
  - B. kinetic
  - C. potential
  - D. chemical
  
3. The following are basic materials that plant uses to make food EXCEPT \_\_\_\_\_.
  - A. calcium
  - B. water
  - C. carbon dioxide
  - D. nitrogen
  
4. Why does an environment need a decomposer?
  - A. For transfer of from one organism to another.
  - B. For absorption of from the sun.
  - C. To clean-up the environment and put nutrients back into the soil.
  - D. To prevent one animal from eating up another.

5. When a house plant is wilting, what vital resource is it most likely lacking?

- A. Plant food
- B. Water
- C. Sunlight
- D. Air

6. Different organisms living together in the same make up the \_\_\_\_\_.

- A. biosphere
- B. community
- C. ecosystem
- D. niche

7. Food chains are composed of \_\_\_\_\_, \_\_\_\_\_ and \_\_\_\_\_.

- A. producers, consumers, decomposers
- B. consumers, sellers, resellers.
- C. decomposers, manufacturers, retailers
- D. consuming, selling, buying

8. In a food chain, which of the following is the producer?

- A. Animal
- B. Plant
- C. Man
- D. Microorganism

9. A community can be defined as \_\_\_\_\_.

- A. a place where any group of plants and animals live together
- B. a place where only plants live together
- C. a village where only humans exist
- D. a free space where no living thing grow

10. A set of food chains is called \_\_\_\_\_.

- A. food chains
- B. food web
- C. food pyramid
- D. biomes



## TOPIC: EXCRETORY SYSTEM

**DIRECTION: Choose the correct answer from the lettered options.**

1. The materials that humans excrete are referred to as \_\_\_\_\_ and \_\_\_\_\_.
  - A. solids, gases
  - B. solids, liquors
  - C. gases, liquids
  - D. solid, waters
  
2. Excreted materials are of \_\_\_\_\_ kinds.
  - A. 5
  - B. 4
  - C. 3
  - D. 2
  
3. Since some of the organs of the urinary system are also used in reproduction, the system is called \_\_\_\_\_.
  - A. circulatory system
  - B. Excretory system
  - C. urogenital system
  - D. respiratory system
  
4. Sweat is an excretory product given out from the body through the \_\_\_\_\_.
  - A. bladder
  - B. kidney
  - C. mouth
  - D. skin

5. Which of the following is an excretory organ?

- A. Lung
- B. Heart
- C. Duodenum
- D. Rectum

6. The main organ of the body responsible for regulating the amount of in the body is the \_\_\_\_\_.

- A. heart
- B. small intestine
- C. kidney
- D. large intestine

7. Which one of the following is NOT an excretory organ?

- A. Skin.
- B. Heart
- C. Stomata
- D. Kidney

8. The organ responsible for the removal of urine from the blood stream is the \_\_\_\_\_.

- A. lung
- B. liver
- C. kidney
- D. skin

9. Which one of the following is NOT a waste product?

- A. Carbon (iv) oxide

- B. Sweat
- C. Urine
- D. Protein

The correct answer is option [D]

10. Which of the following is a reason why a man can die after a couple of days if he does not pass out urine and feces?

- A. The pain would be more than he can bear.
- B. His urinary bladder would be inefficient.
- C. The waste products would be broken down into smaller bits.
- D. The waste products become toxic to the body.

11. The gaseous waste in excretion is \_\_\_\_\_.

- A. carbon monoxide
- B. carbon dioxide
- C. carbon
- D. hydrogen

12. Which one of the following structures is NOT a human excretory organ?

- A. Eye
- B. Kidney
- C. Liver
- D. Lung

13. The body gets rid of it does NOT want through \_\_\_\_\_, \_\_\_\_\_ and \_\_\_\_\_.

- A. boxing, wrestling, running
- B. jumping, running, eating
- C. sweating, urinating, breathing
- D. swimming, drinking, eating

14. Which one of the following is the waste product that goes out of the lungs?

- A. Sweat
- B. Carbon (iv) oxide
- C. Salt
- D. Urine

15. The function of the bladder in the human body is to \_\_\_\_\_.

- A. produce enzymes
- B. produce urine
- C. remove excess salt
- D. store urine

16. Which of the following is NOT an excretory product?

- A. Oxygen
- B. Carbondioxide
- C. Sweat
- D. Urine

17. The process of excretion means \_\_\_\_\_ .

- A. getting rid of waste materials from our body
- B. removing excess mucus through our nose
- C. removing faeces through the anus
- D. spitting out saliva from our mouth

18. The major organs of excretion in man are \_\_\_\_\_, \_\_\_\_\_ and \_\_\_\_\_.

- A. heart, kidney, skins
- B. anus, skin, spleen
- C. skin, lungs, kidneys

- D. lungs, nose, skin
- E. A and B are correct.

19. The long tube that goes from the kidney to the bladder is known as the \_\_\_\_\_.

- A. uterus
- B. urethra
- C. ureter
- D. nephron

20. Which one of the following best describes excretion?

- A. The removal of metabolic waste products from the body.
- B. The removal of undigested food.
- C. The removal of only.
- D. The removal of faeces.

21. The kidney is an organ found in the \_\_\_\_\_ system of the body.

- A. circulatory
- B. digestive
- C. excretory
- D. nervous
- E. respiratory

22. A major function of the human skin is \_\_\_\_\_.

- A. diminution of proteins
- B. elimination of vitamin D
- C. production of glycogen
- D. regulation of body temperature

23. Which one of these is NOT a product of excretion?

- A. Carbon (iv) oxide
- B. Enzyme
- C. Salt
- D. Urea

24. What is the effect of sweat evaporation on the skin on a sunny day?

- A. Heating
- B. Cooling
- C. Drying
- D. Expansion

## TOPIC: GARDENING AND POULTRY KEEPING

**DIRECTION:** Choose the correct answer from the lettered options.

1. The process by which plants loose to their surroundings is known as \_\_\_\_\_.
  - A. respiration
  - B. transpiration
  - C. evaporation
  - D. dehydration
  
2. The replanting of seedlings further apart from each other so as to give them more room for growth to mature plants is known as \_\_\_\_\_.
  - A. transpiration
  - B. transplanting
  - C. cross planting
  - D. electro planting
  
3. The movement of plants from nursery to the field is known as \_\_\_\_\_.
  - A. transpiration
  - B. transplanting
  - C. thinning
  - D. harvesting
  
4. An inorganic matter that is added to the soil to enrich it is known as \_\_\_\_\_.
  - A. fertilizer
  - B. compost
  - C. manure
  - D. animal dropping

5. Which of the following is NOT a basic component of the soil?

- A. Minerals
- B. Water
- C. Fertilizer
- D. Organic matter

6. The loose part of the earth that supports plant life is called \_\_\_\_\_.

- A. humus
- B. sand
- C. soil
- D. silt

7. The practice of growing and caring for plants which are NOT used for food is known as \_\_\_\_\_.

- A. pasteurization
- B. bush cultivation
- C. wild life farming
- D. forestry

8. An organic matter that is added to the soil to enrich it is known as \_\_\_\_\_.

- A. fertilizer
- B. compost
- C. manure
- D. animal dropping

9. Which of the following is NOT a way of caring for growing plants?

- A. Harvesting
- B. Maturing



- C. Mulching
- D. Pruning

10. Which one of the following types of soil is ideal for gardening?

- A. Loamy
- B. Sandy
- C. Clayey
- D. Silty

11. The keeping of chickens for use and profit is called \_\_\_\_\_.

- A. poultry farming
- B. harvesting
- C. farming
- D. weeding

12. Livestock farming is a process by which a farmer rears \_\_\_\_\_ for food and sale.

- A. animals
- B. birds
- C. insects
- D. snakes

## TOPIC: HABITAT

**DIRECTION:** Choose the correct answer from the lettered options.

1. In an aquatic habitat, the biotic factors are \_\_\_\_\_.

- A. dissolved gases
- B. dissolved salts
- C. plants and animals
- D. amount of

2. What use is the gills to the fish?

- A. For digestion
- B. For tasting salt in the water.
- C. For hearing
- D. For taking from water.

3. The frog is likely to be found in \_\_\_\_\_ habitat.

- A. an arboreal
- B. an aquatic
- C. a fresh
- D. a salt

4. The place where plants and animals live is called \_\_\_\_\_.

- A. fresh
- B. niche
- C. soil
- D. habitat

5. Animals that live in and on land are called \_\_\_\_\_.

- A. aves
- B. amphibians
- C. mammals
- D. Pisces

6. Which of the following best explains the adaptation of living things to their environment?

- A. Some animals have structures that help them live successfully in their habitats, while others do not.
- B. Some plants have structures that help them live successfully in their habitats, while others do not.
- C. Plants and animals have structures that help them live successfully in their habitats.
- D. Most big animals have structures that help them live successfully in their habitats.

7. Which one of the following is NOT an abiotic factor?

- A. Competition
- B. Salinity
- C. Humidity
- D. Temperature

8. Which of these is NOT an aquatic environment?

- A. River
- B. Sea
- C. Lakes
- D. Savannah

9. What is the function of plant adaptations such as stinging hairs, thorns, and briars?

- A. Reproduction
- B. Photosynthesis
- C. Protection
- D. Disease prevention

10. Movements in fish is mainly performed by the use of \_\_\_\_\_.

- A. gills
- B. scales
- C. head
- D. fins

11. Which of the following paths shows how humans can get from the sun?

- A. Sun - cow - human
- B. Sun - cow - grass - human
- C. Sun - grass - cow - human
- D. Sun - grass - sheep - cow - human
- E. Sun - sheep - grass - cow - human

12. Which of the following is NOT a fresh habitat?

- A. Pond
- B. River
- C. Sea
- D. Lake

13. There are \_\_\_\_\_ main kinds of habitats.

- A. 5
- B. 4

- C. 3
- D. 2

14. In aquatic animals the special organs that are developed for absorbing are the \_\_\_\_\_.

- A. lungs
- B. air bladder
- C. gills
- D. spiracles

15. What makes up a population?

- A. People
- B. Animals
- C. Plants and animals
- D. Various organisms in an environment

16. The natural dwelling place of an organism is called its \_\_\_\_\_.

- A. population
- B. biome
- C. habitat
- D. ecosystem

The correct answer is option [C]

17. Which of the following characteristics will enable one to identify a sea mammal among other fishes?

- A. Possession of the three body region.
- B. Absence of air.
- C. Absence of tail.
- D. Possession of two types of limbs.

18. The way in which the bodies of plants and animals are structured such that they can survive in their is referred to as \_\_\_\_\_ .

- A. adaptation
- B. irritability
- C. excretion
- D. growth

19. What are some of the non-living things in an ecosystem?

- A. Plants and animals.
- B. Sun, soil, water, rocks and air.
- C. Sun, plants, and animals.
- D. Plants, animals, soil and water.

20. Aquatic organisms are groups of plants and animals that live \_\_\_\_\_.

- A. both in and on land
- B. in
- C. on a piece of deserted land
- D. on land

21. A group of organisms of the same kind living in a given place is called \_\_\_\_\_.

- A. population
- B. habitat
- C. density
- D. community

**TOPIC: HYDROGEN**

**DIRECTION:** Choose the correct answer from the lettered options.

1. When hydrogen is chemically combined with the product is \_\_\_\_\_.
  - A. carbohydrate
  - B. hydrocarbons
  - C. hydrogen
  - D. hydro chemical acid
  
2. \_\_\_\_\_ does not occur freely in air but in a combined state.
  - A. Oxygen
  - B. Carbon
  - C. Sulphur
  - D. Hydrogen
  
3. Which of the following gases is necessary in the preparation of margarine?
  - A. Argon
  - B. Chlorine
  - C. Hydrogen
  - D. Nitrogen
  
4. Which of the following is a gaseous substance that acts as a strong reducing agent?
  - A. Oxygen
  - B. Carbondioxide
  - C. Hydrogen
  - D. Carbon monoxide

5. Removing from an oxide is called \_\_\_\_\_.

- A. reduction
- B. oxidation
- C. substitution
- D. replacement

6. Which of the following is NOT a property of hydrogen?

- A. It allows things to burn in it.
- B. It burns with a pale blue flame.
- C. It is insoluble in water.
- D. It is a light gas.

7. The gas used in filling weather balloon is called \_\_\_\_\_.

- A.
- B. helium
- C. hydrogen
- D. nitrogen

8. Margarine is manufactured in an industry by a process known as \_\_\_\_\_.

- A. oxidation
- B. hydrogenation
- C. dehydrogenation
- D. saponification

9. Hydrogen is regarded as \_\_\_\_\_ agent.

- A. an oxidizing
- B. a reducing
- C. a stimulating
- D. a catalyzing



10. Which of the following is the best gas for filling balloons?

- A. Carbon (iv) oxide
- B. Hydrogen
- C. Nitrogen
- D. Steam

11. Which of the following methods is used in the laboratory preparation of hydrogen?

- A. Dilute calcium metal in water.
- B. Dilute tetraoxosulphate (vi) acid and magnesium.
- C. Dilute magnesium in water.
- D. Mix and zinc.

## TOPIC: OXYGEN

**DIRECTION:** Choose the correct answer from the lettered options.

1. The percentage composition of gas in the air is about \_\_\_\_\_.

- A. 10%
- B. 21%
- C. 30%
- D. 60%

2. What percentage of is contained in the air?

- A. 31
- B. 21
- C. 8
- D. 15

3. \_\_\_\_\_ most readily enhances combustion.

- A. Hydrogen
- B. Chlorine
- C. Oxygen
- D. Nitrogen

The correct answer is option [C]

4. \_\_\_\_\_ relights a glowing splint.

- A. Carbon
- B. Hydrogen
- C. Sulphur
- D. Oxygen

5. Manganese (iv) oxide in the production of is used as \_\_\_\_\_.

- A. a catalyst
- B. a reducing agent
- C. an oxidizing agent
- D. an antioxidant

6. The part of air which does NOT support combustion or burning is called \_\_\_\_\_.

- A. Oxygen
- B. nitrogen
- C. carbon dioxide
- D. rare gases

7. In the laboratory preparation of oxygen, manganese (iv) oxide behaves as a \_\_\_\_\_.

- A. catalyst
- B. reducer
- C. promoter
- D. dehydrator

8. \_\_\_\_\_ keeps us breathing and alive.

- A. Nitrogen
- B. Hydrogen
- C. Carbon dioxide
- D. Oxygen

9. Which of the following individuals will require extra to survive?

- A. Divers in deep sea.
- B. Drivers on the road.
- C. Doctors in hospitals.
- D. Travellers by plane.

10. The addition of two metals or substance is called \_\_\_\_\_.

- A. reduction
- B. addition
- C. substitution
- D. oxidation

11. Any substance which speeds up a chemical reaction without undergoing any chemical change is called a \_\_\_\_\_.

- A. activator
- B. charger
- C. catalyst
- D. inducer

12. \_\_\_\_\_ gas will be produced in the laboratory using potassium trioxochlorate (vi).

- A. Hydrogen
- B. Noble gas
- C. Oxygen
- D. Neon

13. Which of the following explains why high mountain climbers usually carry extra oxygen?

- A. is required for respiration.
- B. More people live on mountain tops.
- C. There is less in the atmosphere the higher you rise.
- D. They are astronauts requiring more oxygen.

## TOPIC: PHYSICAL GROWTH AND DEVELOPMENT

**DIRECTION:** Choose the correct answer from the lettered options.

1. The chemicals in food substances which are essential for growth are called \_\_\_\_\_.

- A. enzymes
- B. fertilizers
- C. foodstuffs
- D. nutrients

2. Iodine is used for testing \_\_\_\_\_.

- A. lactose
- B. maltose
- C. starch
- D. sucrose

3. Protein deficiency causes a disease known as \_\_\_\_\_.

- A. beri-beri
- B. scurvy
- C. kwashiorkor
- D. pellagra

4. The chemical used to test simple sugars is called \_\_\_\_\_.

- A. million's reagent
- B. iodine
- C. osmic acid
- D. benedict's solution

5. Which of the following food nutrients helps the body to form new cells and tissues?

- A. Fats and oil
- B. Proteins
- C. Vitamins
- D. Minerals

6. Human beings require vitamins in their diet because vitamins \_\_\_\_\_.

- A. influence many important chemical processes in the body
- B. contain carbohydrate and fats
- C. stimulate the alimentary canal
- D. prevent kwashiorkor

7. Which of the following factors does NOT affect growth and development?

- A. Food
- B. Glands
- C. Disease
- D. Thinking

8. The name of the gland that produces the growth stimulating hormone is called \_\_\_\_\_ gland.

- A. adrenalin
- B. pituitary
- C. thyroid
- D. gastric

9. Night blindness is caused by lack of \_\_\_\_\_.

- A. vitamin A

- B. vitamin B
- C. vitamin C
- D. vitamin D

10. The gland that produces the growth - stimulating hormone that determines how tall an individual can be is known as the \_\_\_\_\_.

- A. thyroid gland
- B. pituitary gland
- C. adrenal gland
- D. goiter gland

11. Which one of the following can transmit the height of parents to their children?

- A. Cells
- B. Enzymes
- C. Genes
- D. Hemoglobin

12. Which one of the following food substances is needed for body building?

- A. Proteins
- B. Fats
- C. Carbohydrates
- D. Vitamins

13. Which of the following is NOT a factor that affects growth?

- A. Exercise
- B. Water
- C. Gland
- D. Heredity

14. Which one of the following best defines growth?

- A. An increase in size.
- B. A decrease in size.
- C. An increase in height.
- D. An increase in weight.

15. Lack of vitamin D causes \_\_\_\_\_.

- A. rickets
- B. beri-beri
- C. goiter
- D. scurvy

16. The two periods of rapid growth in the process of growth and development in man are \_\_\_\_\_ and \_\_\_\_\_.

- A. from birth to 2 years, 9 years to 16 years
- B. from birth to 1 1/2 years, 7 year to 14 years
- C. from birth to 4 years, 11 years to 20 years
- D. from birth to 3 1/2 years, 10 years to 18 years

17. Living things grow in order to increase in \_\_\_\_\_ and weight.

- A. length
- B. width
- C. size
- D. volume



## TOPIC: PURE AND IMPURE SUBSTANCES

**DIRECTION:** Choose the correct answer from the lettered options.

1. Petroleum components can be gotten through \_\_\_\_\_.

- A. fractional distillation
- B. chromatography
- C. filtration
- D. lubrication

2. The process of separating petrol from crude oil is known as \_\_\_\_\_.

- A. fractional distillation
- B. sublimation
- C. destructive distillation
- D. filtration
- E. decantation

3. Petroleum is a mixture of \_\_\_\_\_.

- A. gases
- B. solids
- C. liquids
- D. hydrocarbons

4. Which of the following is NOT an extract of petroleum?

- A. Kerosene
- B. Palm oil
- C. Bitumen
- D. Lubricating oil

5. Another word for combustion is \_\_\_\_\_.

- A. flaming
- B. burning
- C. smoking
- D. roasting

6. Which of the following is an example of a chemical change?

- A. A piece of rough wood that has been smoothened.
- B. A piece of wood that has been painted.
- C. A sheet of paper torn in half.
- D. A piece of old metal that has rusted.

7. If you have a mixture of iron fillings and humus soil, how best can this mixture be separated?

- A. By the use of a magnet.
- B. By hand
- C. By the use of a filter paper.
- D. By the use of a wire screen sieve.

8. A method of separating liquids which depends on the different speed with which they move through a porous material like filter paper is called \_\_\_\_\_.

- A. filtration
- B. distillation
- C. chromatography
- D. suspension

9. What method would you use to separate mixture of Ammonium Chloride and Sodium Chloride?

- A. Chromatography

- B. Decantation
- C. Filtration
- D. Sublimation

10. The separation of liquids with different boiling points is called \_\_\_\_\_.

- A. filtration
- B. fractional distillation
- C. chromatography
- D. suspension

11. \_\_\_\_\_ is the conversion of liquid into vapor and the condensation of the vapor back into a liquid.

- A. Filtration
- B. Distillation
- C. Decantation
- D. Suspension

12. A mixture of potassium trioxochlorate (v) and sodium chloride can be separated by \_\_\_\_\_.

- A. distillation
- B. crystallization
- C. recrystallization
- D. filtration

13. Iodine can be separated from iodine-sodium chloride mixture by \_\_\_\_\_.

- A. chromatography
- B. sublimation

C. filtration

D. sieving

14. Separation of a mixture of kerosene and sand can be easily carried out by using the difference in their \_\_\_\_\_.

A. physical state

B. solubility

C. size

D. melting point

15. Diesel is obtained from crude oil by\_\_\_\_\_.

A. chromatography

B. condensation

C. evaporation

D. fractional distillation

16. \_\_\_\_\_ is a substance which CANNOT be split into other simpler units.

A. An atom

B. A compound

C. An element

D. A mixture

**TOPIC: RESPIRATORY SYSTEM**

**DIRECTION:** Choose the correct answer from the lettered options.

1. Which of the following is the appropriate sequence for inspiration?

- a. Diaphragm contracts and flattens out.
- b. Air from outside rushes in through the nose.
- c. Rib muscles will contract and ribs raised.
- d. The volume of chest is increased and air pressure in lung is lowered.

A. 1-->2-->3-->4

B. 1-->4-->2-->3

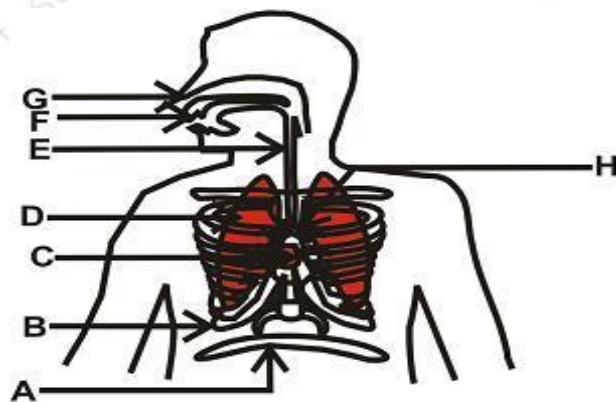
C. 1-->3-->4-->2

D. 1-->4-->3-->2

2. Which of the following is the name of the windpipe that enters the lungs?

- A. Oesophagus
- B. Larynx
- C. Pharynx
- D. Trachea

3. From the diagram shown, the part labelled B is called the \_\_\_\_\_.

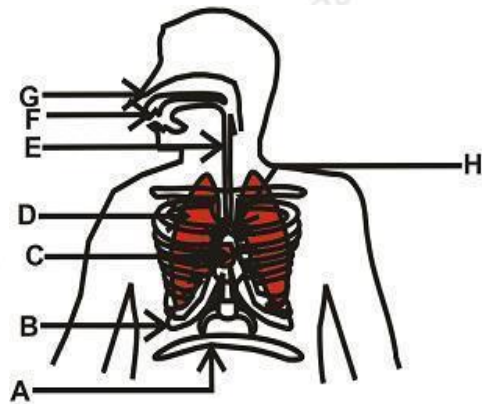


- A. rib
- B. heart
- C. lungs
- D. bronchus

4. Inhaling particles of pollen grains from flowers causes sneezing and headaches which lead to \_\_\_\_\_.

- A. asthma
- B. colds
- C. catarrh
- D. hay fever

5. From the diagram shown, the part labelled D is called the \_\_\_\_\_.



- A. windpipe
- B. heart
- C. lungs
- D. bronchus

6. Which one of the following options is the percentage composition of gas in exhaled air?

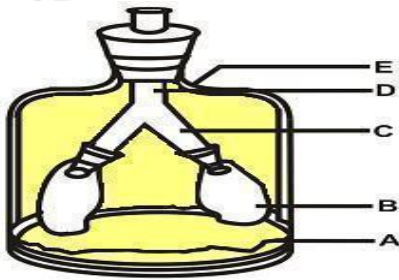
- A. 4.38%

- B. 16.02%
- C. 79.00%
- D. 0.60%

7. Which of the following paths does inhaled air pass through?

- A. Nose-->trachea-->bronchi-->bronchioles-->lungs
- B. Nose-->bronchi-->trachea-->lungs
- C. Nose-->bronchi-->lungs
- D. Trachea-->nose-->bronchi-->lungs

8. From the diagram shown, the part labelled B is called the \_\_\_\_\_.



- A. lung
- B. bronchus
- C. diaphragm
- D. trachea

9. Which of the following is NOT an attribute of both plants and animals?

- A. Photosynthesis
- B. Respiration
- C. Excretion
- D. Feeding

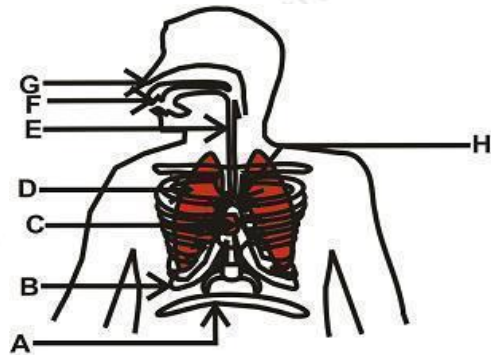
10. Which one of the following is a respiratory organ?

- A. Tongue
- B. Eye
- C. Nose
- D. Lungs

11. Which one of these disease is associated with the respiratory system?

- A. Asthma
- B. Anemia
- C. Malaria
- D. Diarrhoea

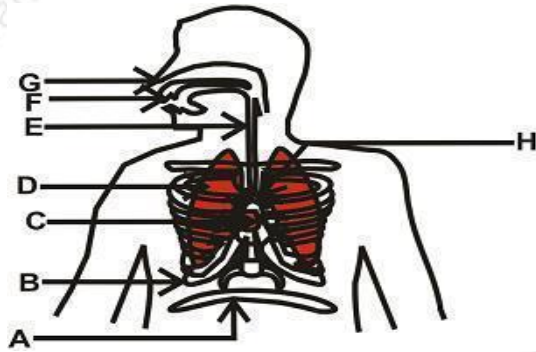
12. From the diagram shown, the part labelled G is called the \_\_\_\_\_.



- A. nose
- B. windpipe
- C. rib
- D. diaphragm

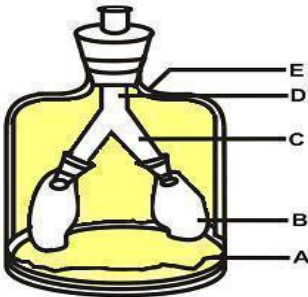


13. From the diagram shown, the part labelled F is called the \_\_\_\_\_.



- A. nose
- B. windpipe
- C. mouth
- D. bronchus

14. From the diagram shown, the part labelled E is called the \_\_\_\_\_.



- A. bronchus
- B. lung
- C. diaphragm
- D. bell jar

15. Which of the following is NOT true of respiration?

- A. It is also known as tissue respiration.
- B. It always takes place in the absence of oxygen.
- C. It takes place in all living cells.
- D. It is also called internal respiration.

16. The process of taking in air is known as \_\_\_\_\_.

- A. inspiration
- B. expiration
- C. respiration
- D. inhalation

17. The center which controls respiratory activities in the mammalian brain is the \_\_\_\_\_.

- A. cerebrum
- B. medulla
- C. olfactory
- D. pituitary organ

18. Metabolism that uses is called \_\_\_\_\_.

- A. ox metabolic
- B. aerobic metabolism
- C. anaerobic metabolism
- D. metabolic oxygenation

19. Which one of the following is given off as a by-product during respiration?

- A. Oxygen
- B. Carbon dioxide
- C. Glucose
- D. Protein

20. The air we breathe out is referred to as \_\_\_\_\_.

- A. inhaled air
- B. inspiration

- C. exhaled air
- D. inspired air

21. Which one of the following are respiratory organs in man?

- i Nose
- ii Trachea
- iii Lungs
- iv Mouth

- A. i, ii, iii and iv
- B. ii and iii
- C. i, ii and iii
- D. i, ii and iv

22. The air we breathe in is referred to as \_\_\_\_\_.

- A. exhaled air
- B. expiration
- C. inhaled air
- D. expired air

23. \_\_\_\_\_ is when the body is sensitive to certain substances.

- A. Antibody
- B. Alergy
- C. Allergy
- D. Antigens

24. The diagram shown is an illustration of the human \_\_\_\_\_ system.

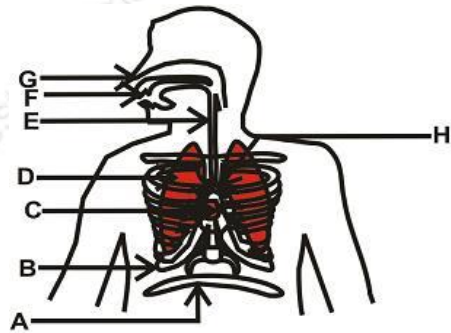
- A. skeletal
- B. circulatory

- C. respiratory
- D. digestive

25. Which of the following is a content of the air we breathe out?

- A. Carbon (iv) oxide
- B. Hydrogen peroxide
- C. Oxygen
- D. Nitrogen

26. From the diagram shown, the part labelled A is called the \_\_\_\_\_.



- A. rib
- B. diaphragm
- C. heart
- D. lungs

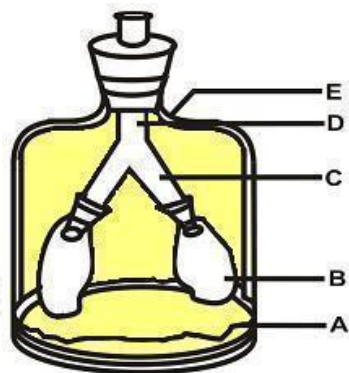
27. The process of taking in air is known as \_\_\_\_\_.

- A. inspiration
- B. expiration
- C. exhalation
- D. suffocation

28. What happens when carbondioxide is put into a solution of lime water?

- A. It turns red.
- B. It turns milky.
- C. It turns blue.
- D. There is no change.

29. From the diagram shown, the part labelled C is called the \_\_\_\_\_.



- A. diaphragm
- B. trachea
- C. bronchus
- D. lung

30. Complete the equation given:

carbohydrate + =

- A. + carbohydrate + glucose
- B. + carbondioxide +
- C. carbondioxide + glucose +
- D. + glucose +

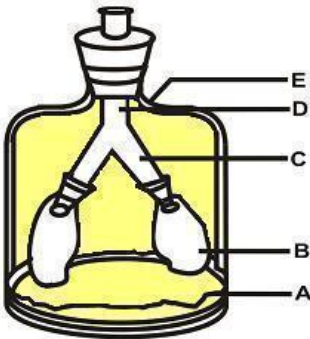
31. Which one of the following is the reason why breathing through the mouth is not good for health?

- A. Because the mouth is not a passage way for air and contains the organs for breathing.
- B. Because the mouth is a passage way for air and contains the organs for breathing.
- C. Because the mouth is not a passage way for air and does not contain the organs for breathing.
- D. Because the mouth is a passage way for air and does not contain the organs for breathing.

32. Which of the following is NOT an organ of the respiratory system?

- A. Stomach
- B. Nose
- C. Trachea
- D. Lungs

33. The diagram shown, illustrates \_\_\_\_\_ - \_\_\_\_.

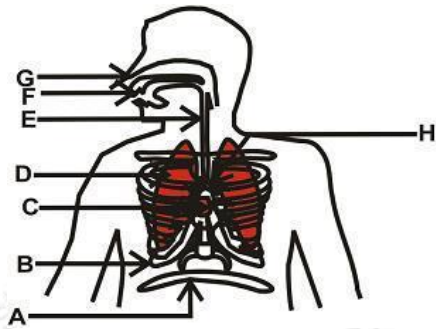


- A. a model of the circulatory system
- B. a model of the
- C. a model of the
- D. a model of the

34. Which one of the following options is correct and better for health?

- A. Breathing through the nose and mouth.
- B. Breathing through the nose.
- C. Breathing through the mouth.
- D. Breathing through one part of the nose.

35. From the diagram shown, the part labelled C is called the \_\_\_\_\_.



- A. windpipe
- B. mouth
- C. bronchus
- D. heart

36. The passing out of used air from the body is called \_\_\_\_\_.

- A. respiration
- B. breathing
- C. expiration
- D. inspiration

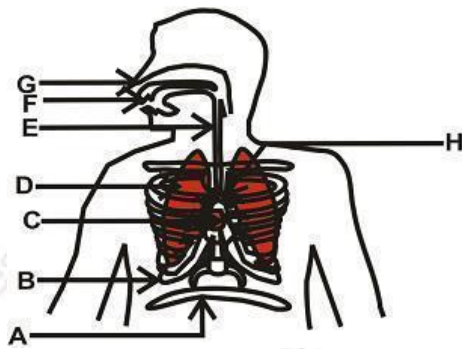
37. Which one of the following is a way to get enough when you are in a building?

- A. There should be cross ventilation.
- B. The building should be without windows.
- C. All the air in the building should be removed.
- D. There should be no ventilation at all.

38. Which of the following is responsible for the process of inspiration and expiration?

- A. Heart
- B. Liver
- C. Brain
- D. Lungs

39. From the diagram shown, the part labelled H is called the \_\_\_\_\_.



- A. nose
- B. bronchus
- C. windpipe
- D. diaphragm

40. Which one of the following is a breathing problem that occurs when particles in the air causes difficulty in breathing?

- A. Hay Fever
- B. Catarrh
- C. Asthma
- D. Cold

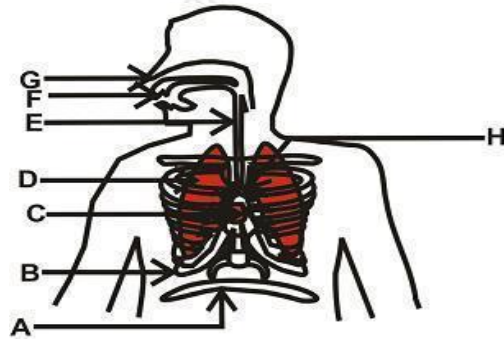
41. Inspiration can also be referred to as \_\_\_\_\_.

- A. breathing
- B. expiration



- C. perspiration
- D. aspiration

42. From the diagram shown, the part labelled E is called tthe \_\_\_\_\_.

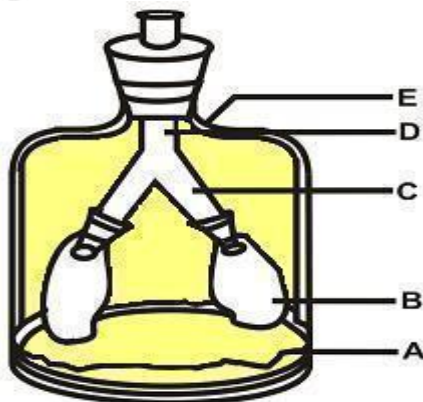


- A. diaphragm
- B. windpipe
- C. heart
- D. mouth

43. What is the composition of vapour in inhaled air?

- A. 0.60%
- B. 16.02%
- C. Trace amount
- D. 95.00%

44. From the diagram shown, the part labelled D is called the \_\_\_\_\_.



- A. bronchus
- B. trachea
- C. bell jar
- D. diaphragm

45. Which one of the following is the reason why is important to living things?

- A. It helps in the release of from digested food.
- B. It aids the release of nutrients from digested food.
- C. It regulates the production of enzymes in the digestive system.
- D. It reduces the production of bile in the body.

46. When dust particles affect our lungs and cause problems in breathing, the condition is called \_\_\_\_\_.

- A. asthma
- B. tuberculosis
- C. catarrh
- D. silicosis

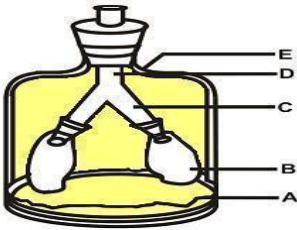
47. The trachea divides into the \_\_\_\_\_.

- A. lungs
- B. alveoli
- C. bronchi
- D. larynx

48. \_\_\_\_\_ in inhaled air helps to burn the food we eat to integrate in our body.

- A. vapour
- B. Oxygen
- C. carbondioxide
- D. nitrogen

49. From the diagram shown, the part labelled A is called the \_\_\_\_\_.



- A. diaphragm
- B. lung
- C. trachea
- D. bronchus

50. Breathing in of air into the body is called \_\_\_\_\_.

- A. inspiration
- B. exhalation
- C. respiration
- D. expiration

51. Respiration is best defined as the process by which \_\_\_\_\_.

- A. animal cells take in
- B. cells and tissues of the body produce
- C. plant cells take in carbon dioxide
- D. animal cells breakdown carbondioxides

52. The center which controls respiratory activities in the mammalian brain is the\_\_\_\_\_.

- A. cerebrum
- B. medulla
- C. olfactory
- D. pituitary organ

## TOPIC: RUSTING

**DIRECTION:** Choose the correct answer from the lettered options.

1. Which one of the following treatments CANNOT be used to prevent rusting?

- A. Coating with oil
- B. Galvanizing
- C. Cleaning
- D. Greasing

2. Which of the following conditions is necessary for rust to take place?

- (i) Iron
- (ii) Water
- (iii) Oxygen

- A. I only
- B. I and ii only
- C. I, ii and iii
- D. I and iii only

3. There is a steel plant in \_\_\_\_\_, Kogi State.

- A. Ajaokuta
- B. Oyo
- C. Rivers State
- D. Warri

4. Rusting is an example of \_\_\_\_\_?

- A. reduction
- B. neutralization

C. substitution

D. oxidation

5. Metallic iron is coated with zinc in order to \_\_\_\_\_.

A. give it a shiny appearance

B. prevent it from

C. make it strong

D. make it denser

6. When an iron rusts, the kind of change that takes place during the is referred to as a \_\_\_\_\_ change.

A. mechanical

B. physical

C. chemical

D. normal

7. The formation of iron (III) oxide is called \_\_\_\_\_.

A. electroplating

B. greasing

C. painting

D. rusting

8. In addition to water, \_\_\_\_\_ is essential for an iron to rust.

A. air

B. germs

C. heat

D. light

9. Which one of the following measures CANNOT prevent iron from rusting?

- A. Galvanizing
- B. Electroplating
- C. Heating
- D. Painting

10. Which of the following is NOT true about iron?

- A. Iron (ii) oxide is formed during rusting.
- B. It can be prevented by painting only.
- C. For to take place, there must be and moisture.
- D. It can be prevented by stopping air and from getting to the iron.

## TOPIC: SIMPLE MACHINES

**DIRECTION:** Choose the correct answer from the lettered options.

1. Which one of the following is NOT an example of a simple machine?

- A. Bicycle
- B. Hoes
- C. Knives
- D. Axes

2. The application of a force is referred to as \_\_\_\_\_.

- A. load
- B. fulcrum
- C. weight
- D. effort

3. Which of the following is NOT a first class lever?

- A. Pliers
- B. Scissors
- C. Bottle opener
- D. Shears

4. Which one of the following is applied to reduce the friction between machines?

- A. Petrol
- B. Gas
- C. Grease
- D. Kerosene

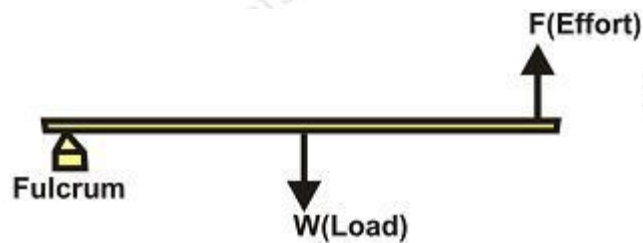
5. In comparing the body with machines, what serves as the load in the forearm?

- A. Palm
- B. Triceps muscles
- C. Bicep muscles
- D. Elbow

6. The force which opposes motion when two surfaces are in contact is called \_\_\_\_\_.

- A. friction
- B. contact force
- C. field force
- D. repelling force

7. The diagram shown is an illustration of a \_\_\_\_\_.



- A. First order lever
- B. Third order lever
- C. Second order lever
- D. last order lever

8. A \_\_\_\_\_ is any instrument that enables us to do work easily.

- A. lever
- B. pulley
- C. machine
- D. plunched plane



9. If the body is compared with machines, what serves as the fulcrum in the forearm?

- A. Triceps muscles
- B. Elbow
- C. Palm
- D. Fingers

10. Which one of the following is the point of pivoting?

- A. Weight
- B. Effort
- C. Fulcrum
- D. Load

11. A force applied in a machine is called \_\_\_\_\_.

- A. force
- B. effort
- C. mechanical advantage
- D. load

12. Which one of the following are the two basic machines from which all others are made?

- A. Lever and jack
- B. Lever and inclined plane
- C. Pulley and jack
- D. Jack and inclined plane

13. Which one of the following is NOT an example of a complex machine?

- A. Sewing machine
- B. Pump

- C. Car break
- D. Axes

14. A device for transferring from one place to another is called a \_\_\_\_\_.

- A. tool
- B. lever
- C. machine
- D. motor

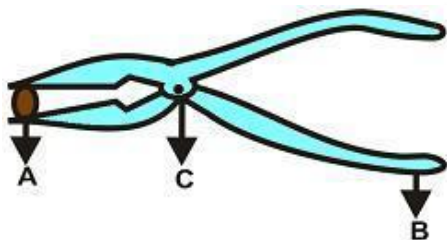
15. Which one of the following is best for maintaining machines?

- A. Servicing with groundnut oil
- B. Cleaning with
- C. Cleaning and servicing
- D. Dusting

16. \_\_\_\_\_ is a type of incline plane.

- A. Axe
- B. Hammer
- C. Screw
- D. Pulley

17. The diagram below shows a plier. The part labelled A is the \_\_\_\_\_.



- A. effort
- B. fulcrum

- C. load
- D. style

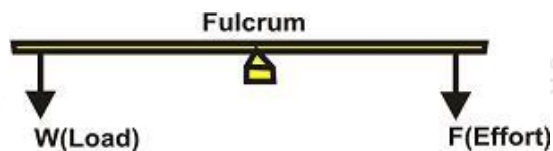
18. Which one of the following is a name given to an object that is being lifted?

- A. Load
- B. Weight
- C. Effort
- D. Fulcrum

19. \_\_\_\_\_ are force multipliers.

- A. Levering
- B. Machines
- C. Wheel and axle
- D. Inclined planes

20. The diagram shown is an illustration of a \_\_\_\_\_.



- A. First order lever
- B. Second order lever
- C. Third order lever
- D. closed order lever

21. When the force ratio is less than 1 it is known as \_\_\_\_\_.

- A. efficiency
- B. mechanical disadvantage
- C. velocity ratio
- D. mechanical advantage

22. Which of these can lift a heavy load to the roof of a building?

- A. Hammer
- B. Jack
- C. Pulley
- D. Screw

23. The force ratio of a machine is \_\_\_\_\_.

- A. the product of the load to effort
- B. the sum of the load to effort
- C. the ratio of the load to effort
- D. the ratio of the effort to the load

24. The diagram shown is an illustration of a \_\_\_\_\_.

- A. Second order lever
- B. Third order lever
- C. First order lever
- D. open order lever

25. A pulley is also a type of \_\_\_\_\_.

- A. load
- B. effort
- C. weight
- D. lever

26. In comparing the body with machines, what provides the effort in the forearm?

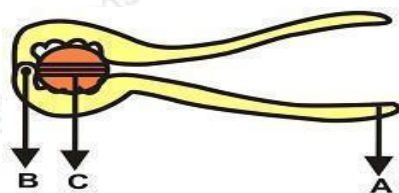
- A. Bicep muscles
- B. Palm

- C. Elbow
- D. Triceps muscles

27. Which one of the following is the correct machine used to split wood?

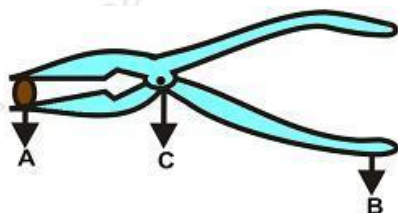
- A. Axe
- B. Wedge
- C. Wheel and axle
- D. Incline plane

28. The diagram below shows a nut cracker. The part labelled B is the \_\_\_\_\_.



- A. load
- B. fulcrum
- C. effort
- D. force

29. The diagram below shows a plier. The part labelled B is the \_\_\_\_\_.

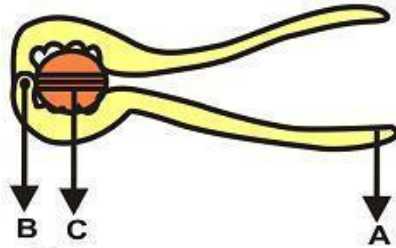


- A. effort
- B. fulcrum
- C. load
- D. joints

30. Which one of the following is the correct machine used to chop wood?

- A. Wedge
- B. Car jack
- C. Axe
- D. Pulley

31. What kind of lever is represented by the diagram below?

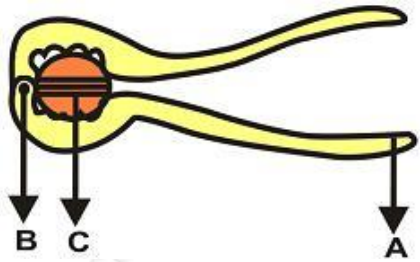


- A. First order lever
- B. Second order lever
- C. Third order lever
- D. Closed order lever

32. Which of the following is the correct machine used to raise a load from the ground into a lorry?

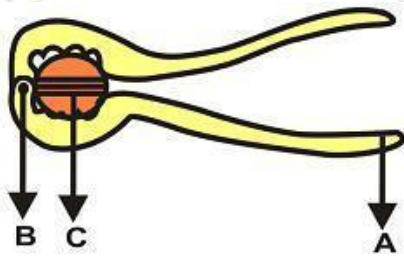
- A. Car jack
- B. Axe
- C. Wedge
- D. Inclined plane

33. The diagram below shows a nut cracker. The part labelled A is the \_\_\_\_\_.



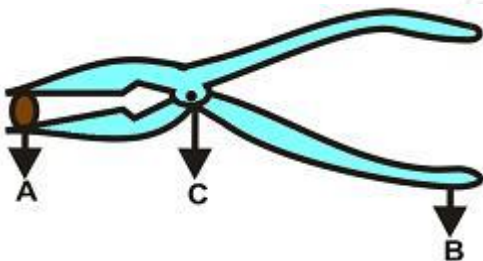
- A. load
- B. effort
- C. fulcrum
- D. weight

34. The diagram below shows a nut cracker. The part labelled C is the \_\_\_\_\_.



- A. fulcrum
- B. effort
- C. load
- D. circle

35. The diagram below shows a plier. The part labelled C is the \_\_\_\_\_.



- A. load

- B. fulcrum
- C. effort
- D. joining

36. When a force ratio is greater than 1 it is known as a \_\_\_\_\_.

- A. mechanical disadvantage
- B. velocity ratio
- C. mechanical advantage
- D. efficiency

37. Friction between two surfaces can be reduced with the use of \_\_\_\_\_.

- A. grease
- B. oil
- C. ball bearing
- D. all of the above



## TOPIC: SKELETAL AND MUSCULAR SYSTEM

**DIRECTION:** Choose the correct answer from the lettered options.

1. A flexible connective tissue present between one vertebra and another is called \_\_\_\_\_.

- A. cartilage
- B. hip
- C. knee cap
- D. spine

2. \_\_\_\_\_ is a disease condition in which the thinning of muscle tissues causes the death of the muscle.

- A. Cramp
- B. Osteomalacia
- C. Dystrophy
- D. Dislocation

3. In the human body, involuntary muscles can be found in the \_\_\_\_\_.

- A. arm
- B. foot
- C. head
- D. heart

4. The bony structure which gives animals rigidity and support is called the \_\_\_\_\_.

- A. ligaments
- B. skeleton
- C. cartilage
- D. joint

5. There are \_\_\_\_\_ kinds of muscles.

- A. 3
- B. 2
- C. 1
- D. 4

6. What is the name of the bony structure which contains the brain of animals?

- A. Sphere
- B. Skull
- C. Head
- D. Neck

7. There are over \_\_\_\_\_ bones and more than \_\_\_\_\_ joints in the human skeleton.

- A. 100,150
- B. 150, 200
- C. 200,150
- D. 200,100

8. The structures which give strength and rigidity to animals are called \_\_\_\_\_.

- A. cartilages
- B. muscles
- C. skeleton
- D. tendons

9. Which one of these is a chemical substance that helps to build the bones?

- A. Potassium
- B. Calcium
- C. Iron
- D. Silver

10. Which of the following is NOT a component of a joint?

- A. Diaphragm
- B. Synovial fluid
- C. Cartilage
- D. Synovial membrane

11. A major function of the skeletal system in the body is \_\_\_\_\_.

- A. digestion
- B. shape
- C. support
- D. excretion

12. The muscles of internal organs are called \_\_\_\_\_ muscles.

- A. cardiac
- B. triceps
- C. smooth
- D. skeletal

13. The curved spine of the skeleton is important because \_\_\_\_\_.

- A. it enables man to stand erect
- B. it makes man to grow old
- C. it enables man to bend
- D. it protects the lungs

14. The appendages consist of all the following EXCEPT\_\_\_\_\_.

- A. shoulders
- B. ribs
- C. pelvis
- D. spine

15. What makes a man stand upright when moving about?

- A. His developed brain
- B. His large skull
- C. His skeletal frame
- D. The muscle cover of the skeleton

16. The human skeleton is made up of \_\_\_\_\_ main parts.

- A. 1
- B. 2
- C. 3
- D. 4

17. What are the names of the bones that make up the back bone of an animal?

- A. Spinal cord
- B. Vertebra
- C. Cartilage
- D. Calcium

18. Which one of the following is NOT an example of exoskeleton?

- A. Hair
- B. Hoof
- C. Skull
- D. Shell

19. The place where bones meet and are connected in such a way as to form a hinge is called \_\_\_\_\_.

- A. ligament
- B. tendon

- C. joint
- D. cartilage

20. Which one of the following is NOT a joint?

- A. Condylloid
- B. Saddle
- C. Gliding
- D. Hoof

21. The hinge joint is found in the following EXCEPT the \_\_\_\_\_.

- A. knees
- B. fingers
- C. shoulders
- D. toes

22. The two main parts of the human skeletal system are the \_\_\_\_\_ and \_\_\_\_\_.

- A. central column of bones, appendages
- B. spine, muscles
- C. vertebral column, ribs
- D. vertebral column, girdles

23 Which of the following is NOT a function of the human skeletal system?

- A. Attachment
- B. Movement
- C. Support
- D. Storage

24. In order to produce movement, the bones and the muscles form a \_\_\_\_\_ system in the body.

- A. lever
- B. chord
- C. pulley
- D. force

25. An upset in the skeletal system in which the bones lose their position at the joints is referred to as\_\_\_\_\_.

- A. porosis
- B. osteomalacia
- C. fracture
- D. dislocation

26. The functions of the skull and ribs includes \_\_\_\_\_.

- A. protection of the delicate organs of the body
- B. giving normal shape to the body
- C. helping in the growth of the body
- D. lubricating the body

27. Joints are held together by brands and sheets of very tough connective tissues known as \_\_\_\_\_.

- A. ligaments
- B. muscles
- C. cartilage
- D. tendons

28. \_\_\_\_\_ is a strong whitish cord which attaches muscles to bones.

- A. Aorta

- B. Bladder
- C. Tendon
- D. Cord

29. A problem of the muscular system in which the muscles contract without relaxing is known as \_\_\_\_\_.

- A. osteoporosis
- B. fracture
- C. muscular dystrophy
- D. muscular cramp

30. There are more than \_\_\_\_\_ joints in the human skeleton.

- A. 150
- B. 170
- C. 200
- D. 250

31. The skeletal and muscular systems work together to enable body \_\_\_\_\_.

- A. enlargement
- B. growth
- C. muscles
- D. movement

32. \_\_\_\_\_ is another name for pelvic girdle.

- A. Cartilage
- B. Hip
- C. Knee cap
- D. Spine

33. Which one of the following is NOT an organ of locomotion?

- A. Cilia
- B. Fins
- C. Gills
- D. Legs

34. Which one of the following is part of the axial skeleton?

- A. Skull
- B. Pectoral
- C. Pelvic girdle
- D. Arms

35. \_\_\_\_\_ is the oily liquid that lubricates all the joints in the body to reduce friction.

- A. Marrow
- B. Blood
- C. Synovial fluid
- D. Cartilage

36. The skeleton is made up of over \_\_\_\_\_ bones.

- A. 150
- B. 200
- C. 250
- D. 300

37. Muscles are attached to bones by means of \_\_\_\_\_.

- A. triceps
- B. biceps



- C. tendons
- D. cartilage

38. What is the name of the bony framework in the human body?

- A. Frame
- B. Spirit
- C. Skeleton
- D. Soul

39. Bones are made mainly of \_\_\_\_\_ .

- A. sodium compounds
- B. calcium compounds
- C. copper compounds
- D. iodine

40. The two kinds of muscles in our body are \_\_\_\_\_ and \_\_\_\_\_.

- A. voluntary, involuntary
- B. rough, smooth
- C. ventricle, auricle
- D. straight, crooked

41. Which one of the following is NOT a function of the mammalian skeleton?

- A. Protection
- B. Movement
- C. Excretion
- D. Support

42. The muscles of the heart are also known as \_\_\_\_\_ muscles.

- A. cardiac
- B. smooth
- C. biceps
- D. voluntary

43. Another name for patella is \_\_\_\_\_.

- A. cartilage
- B. hip
- C. knee cap
- D. spine

44. A joint which allows movement in all directions is called a \_\_\_\_\_ joint.

- A. hinge
- B. ball and socket
- C. compound
- D. slightly movable

45. The individual bones of the spine are called \_\_\_\_\_.

- A. skull
- B. pelvis
- C. ribs
- D. vertebrae

46. Which one of the following joints is formed by the articulation of the tibia, the malleolus of the fibula, and the convex surface of the talus?

- A. Ankle
- B. Knee

- C. Elbow
- D. Wrist

47. The knee is an example of a \_\_\_\_\_ joint.

- A. ball and hinge
- B. fixed
- C. hinge
- D. ball and socket

48. The ball and socket joint can be found between the \_\_\_\_\_ and \_\_\_\_\_.

- A. capsule, cartilage
- B. femur, tibia
- C. muscle, tendon
- D. pelvis, femur

49. A condition in which a bone is broken is known as \_\_\_\_\_.

- A. dystrophy
- B. cramp
- C. fracture
- D. osteoporosis

## TOPIC: WATER

**DIRECTION:** Choose the correct answer from the lettered options.

1. Which of the following best defines a solution?
  - A. A heterogeneous mixture of a solute and a solvent.
  - B. A non-uniform mixture of a solute and a solvent.
  - C. A homogenous mixture of a solute and a solvent.
  - D. A residue obtained during filtration.
  
2. Cycle is defined as \_\_\_\_\_.
  - A. the circulation of in the body
  - B. the maintenance of body with
  - C. the circulation of between the land, bodies and the atmosphere
  - D. the uses of by the primary producers
  
3. Without a constant supply of water, the body can die of \_\_\_\_\_.
  - A. starvation
  - B. malnutrition
  - C. dehydration
  - D. efflorescence
  
4. The process involved for a wet cloth hung under the sun to get dry is called \_\_\_\_\_.
  - A. percolation
  - B. precipitation
  - C. evaporation
  - D. transpiration

5. Why is chlorinated?

- A. To remove dissolved particles.
- B. To destroy disease causing bacteria.
- C. To remove hardness.
- D. To make the taste nice.

6. If potassium tetraoxosulphate (vii) is dissolved in and there is a gradual change in the colour of water, what is the most satisfactory conclusion that you can draw from the experiment?

- A. is a universal solvent.
- B. Matter is made up of particles.
- C. Potassium tetraoxomanganate (vii) is a matter.
- D. is a matter.

7. Two thirds ( $\frac{2}{3}$ ) of the body consists of \_\_\_\_\_.

- A. Water
- B. vitamins
- C. carbohydrates
- D. mineral salts

8. When sugar is dissolved in water, a \_\_\_\_\_ is formed.

- A. solute
- B. solvent
- C. solution
- D. colloid

9. The removal of salt from is known as \_\_\_\_\_.

- A. desolation
- B. salting
- C. salivating
- D. desalination

10. Which one of the statements given below does NOT apply to a solution?

- A. The particles in a solution can pass through a fine filter paper.
- B. The particles are evenly distributed through the solvent.
- C. The solution is clear and transparent.
- D. It is a homogenous mixture of the solute and the solvent.

11. Contaminated is boiled before drinking to get rid of \_\_\_\_\_.

- A. clay suspension
- B. dissolved gases
- C. dust particles
- D. harmful microbes

12. When tiny particles of a solid are distributed in a liquid but NOT dissolved in it, the mixture is a \_\_\_\_\_.

- A. colloid
- B. suspension
- C. solution
- D. solvent

13. \_\_\_\_\_ does NOT easily lather with soap.

- A. Suspension
- B. Saturated solution

- C. Hard
- D. Acidulated

14. Which one of the following is NOT used during the physical separation of substances?

- A. Burette
- B. Filter paper
- C. Beaker
- D. Funnel

15. Few drops of tetraoxosulphate (iv) acid are added to during the electrolysis of to increase it's \_\_\_\_\_.

- A. acidity
- B. alkalinity
- C. basicity
- D. conductivity

16. Alum is added to \_\_\_\_\_.

- A. make it taste nice
- B. colour the
- C. destroy bacteria
- D. induce sedimentation

17. The changing of into vapour or gas is called \_\_\_\_\_.

- A. humidity
- B. saturation
- C. condensation
- D. evaporation

18. How many atoms of hydrogen are present in  $3\text{H}_2\text{O}$ ?

- A. 9
- B. 6
- C. 3
- D. 2

19. Pure drinking should be \_\_\_\_\_ and \_\_\_\_\_.

- A. colourless, tasteless
- B. white, clear
- C. clear, tasty
- D. scenting, colourful

20. During electrolysis of using platinum anodes and cathodes \_\_\_\_\_ and \_\_\_\_\_ are produced.

- A. hydrogen, nitrogen
- B. oxygen, chlorine
- C. carbondioxide, sulphur
- D. hydrogen,

21. The addition of permute is a used in removing \_\_\_\_\_ water.

- A. temporary soft
- B. permanent soft
- C. temporary hard
- D. permanent hard

22. A liquid which contains particles which are so small that they do not settle at the bottom but looks cloudy in a beam of light is called a \_\_\_\_\_.

- A. suspension



- B. saturated solution
- C. hard
- D. colloid

23. The process of removing salt from sea is called \_\_\_\_\_.

- A. distillation
- B. fractional distillation
- C. desalination
- D. filtration

24. A solution which will not dissolve any more solid is called \_\_\_\_\_.

- A. a suspension
- B. a saturated solution
- C. a hard
- D. an acidulated

25. \_\_\_\_\_ is used to purify water.

- A. Oxygen
- B. Chlorine
- C. Hydrogen
- D. Zinc

26. The body can die of \_\_\_\_\_ if there is no constant supply of water.

- A. starvation
- B. malnutrition
- C. dehydration
- D. efflorescence

27. The continuous movement of from land, rivers and oceans to the atmosphere and from the atmosphere back to land, rivers and oceans is \_\_\_\_\_.

- A. cycle
- B. river cycle
- C. ocean cycle
- D. cycle

28. The process by which solutions are decomposed into their constituents by means of electricity is called \_\_\_\_\_.

- A. osmosis
- B. electrolysis
- C. peristalsis
- D. metamorphosis

29. Which of the following is an example of condensation in the cycle?

- A. Clouds forming in the atmosphere.
- B. Drops of falling through the air.
- C. Puddles disappearing on a hot day.
- D. Streams flowing into rivers.

30. Substances that do NOT dissolve in to form a true solution but rather look cloudy in a beam of light are called\_\_\_\_\_.

- A. solutions
- B. solvents
- C. suspensions
- D. colloids

31. The decomposition of \_\_\_\_\_ to give hydrogen and oxygen occurs through the process of \_\_\_\_\_.

- A. decantation
- B. filtration
- C. electrolysis
- D. distillation

32. Hard water causes

I Wastage of fuel

II Wastage of soap

III Deposition of dirty scum on fabric

IV Difficulty in dyeing clothing

- A. I and II
- B. I, II and III
- C. II, III and IV
- D. I, II and IV

33. Soap and detergents make it easier to wash clothes because they \_\_\_\_\_.

- A. make it lather
- B. increase its density
- C. increase its specific heat
- D. decrease the surface tension of the

34. Substances which cause hardness of water can be removed by all of these methods EXCEPT \_\_\_\_\_.

- A. adding  $\text{CaCO}_3$
- B. adding  $\text{Na}_2\text{CO}_3$

- C. adding NaOH
- D. adding  $\text{Ca}(\text{OH})_2$

35. Is a universal solvent because it \_\_\_\_\_.

- A. can dissolve substances
- B. can dissolve many substances
- C. does not occur without a solute
- D. is colourless and odourless

36. What percentage of the body is made up of water?

- A. 80 - 90%
- B. 40 - 50%
- C. 60 - 70%
- D. 20 - 30%

37. \_\_\_\_\_ is a common process of purifying water.

- A. Distillation
- B. Diffusion
- C. Condensation
- D. Evaporation

38. Which of these substances can cause temporary hardness of water?

- A. Calcium hydrogen trioxocarbonate (IV)
- B. Calcium tetraoxosulphate (IV)
- C. Calcium trioxocarbonate (IV)
- D. Sodium hydrogen trioxocarbonate (IV)

39. An example of a substance that forms colloidal solution in is \_\_\_\_\_

- A. dye
- B. palm oil
- C. salt
- D. starch

40. Which of the following sources of provides the best drinking water?

- A. Ocean
- B. River
- C. Sea
- D. Spring

41. Hardness of is caused by ions of \_\_\_\_\_.

- A. calcium
- B. ammonium
- C. potassium
- D. sodium

42. When a liquid carries current, the composition changes due to a chemical effect that is referred to as \_\_\_\_\_.

- A. electrolysis
- B. electrodes
- C. anode
- D. cathode

# ANSWERS

**TOPIC: BALANCED ENVIRONMENT**

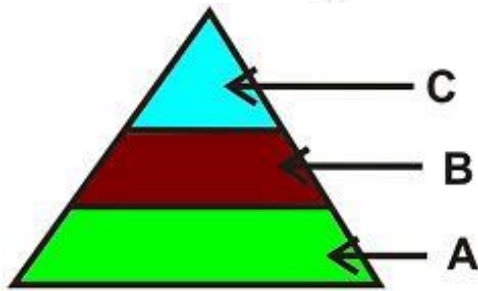
**DIRECTION: Choose the correct answer from the lettered options.**

1. Why is it that fossil shells of animals that once lived in the sea can be found many miles from the coast of the ocean?

- A. Animals moved the fossils when they moved to warmer areas
- B. The sea level lowered from where it was.
- C. Strong winds moved the fossils away from the waste.
- D. The sea animals began living on land.

The correct answer is option [B]

2. The diagram below shows the pyramid of numbers. The part labelled B is referred to as the \_\_\_\_\_.



- A. primary consumers
- B. secondary consumers
- C. producers
- D. tertiary consumers

The correct answer is option [A]

3. Which one of the following options CANNOT be found in a rainforest?

- A. Tall trees
- B. Monkeys
- C. Protozoans
- D. Very tall grasses

The correct answer is option [D]

4. When the stored in a pyramid decreases from the producers to the consumers, it is called \_\_\_\_\_.

- A. pyramid of numbers
- B. pyramid of mass
- C. pyramid
- D. potential of the pyramid

The correct answer is option [C]

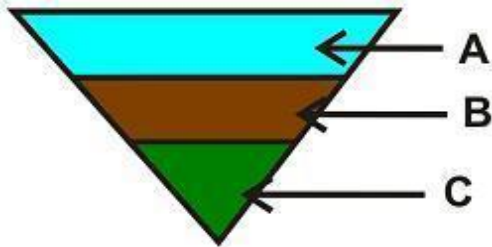
5. Nigeria is divided into two major natural habitats namely \_\_\_\_\_ and \_\_\_\_\_.

- A. tropical Sahara, tropical savanna
- B. tropical rainforest, tropical Sahara
- C. tropical mangrove forest, tropical savanna
- D. tropical rainforest, tropical savanna

The correct answer is option [D]



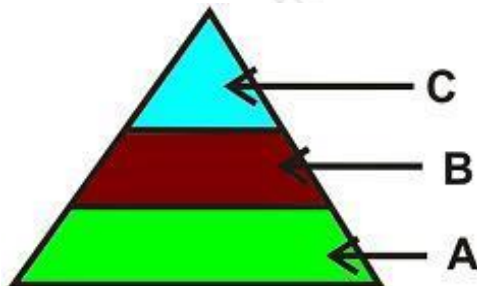
6. The diagram below shows the pyramid of mass. The part labelled C is called \_\_\_\_.



- A. producers
- B. primary consumers
- C. secondary consumers
- D. Tertiary producers

The correct answer is option [A]

7. The diagram below shows the pyramid of numbers. The part labelled A is referred to as the \_\_\_\_.



- A. producers
- B. primary Consumers
- C. secondary Consumers
- D. None of the above

The correct answer is option [A]

8. Which one of the following definitions best describes sustainable development?

- A. The development that destroys the needs of the present generation in order to meet the need of future generation.
- B. The management of the needs of the present generation in order to meet the need of future generation.
- C. The development that takes care of the needs of the present generation without destroying the ability of the future generation to meet their own need.
- D. The management that takes care of the needs of the present generation without destroying the ability of the future generations to meet their own needs.

The correct answer is option [C]

9. A diagram that shows the rate of flow at different types of food level is called \_\_\_\_\_.

- A. diagram
- B. pyramid
- C. food web
- D. food chain

The correct answer is option [B]

10. The Yankari Game Reserve is located in which one of the following states in Nigeria?

- A. Niger State
- B. Cross Rivers State
- C. Bauchi State
- D. Benue State

The correct answer is option [C]

11. \_\_\_\_\_ is the determination of increase in size between producers and consumers.

- A. Pyramid of mass

- B. Pyramid of numbers
- C. pyramid
- D. Pyramid of organisms

The correct answer is option [A]

12. Which one of the following best defines a pyramid of numbers?

- A. The relationship of the numbers of plants and animals in a food chain of a tropical mangrove forest.
- B. The relationship of the number of plants and animals in a food chain of a tropical savanna and a tropical rain forest.
- C. The number of plants and animals in a food chain.
- D. The number of plants and animals in a food chain of a tropical savanna and rainforest.

The correct answer is option [B]

13. Where is the tropical rainforest found in Nigeria?

- A. Southern part of Nigeria
- B. Northern part of Nigeria
- C. Outside Nigeria
- D. Eastern Nigeria

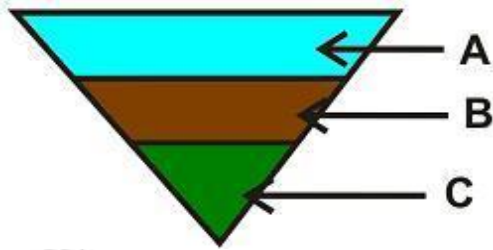
The correct answer is option [A]

14. Which one of the following is the main source of for a community?

- A. Producers
- B. Abiotic substances
- C. Sun
- D. Consumers

The correct answer is option [C]

15. The diagram below shows the pyramid of mass. The part labelled B is referred to as \_\_\_\_\_.



- A. secondary consumers
- B. producers
- C. primary consumers
- D. tertiary consumers

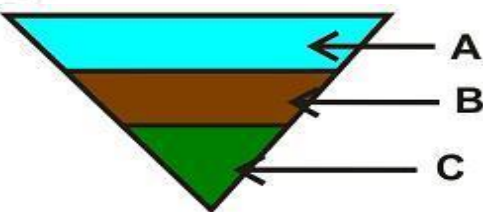
The correct answer is option [C]

16. The top layer of the tropical rainforest is called \_\_\_\_\_.

- A. scavenger
- B. canopy
- C. community
- D. food web

The correct answer is option [B]

17. The diagram below shows the pyramid of mass. The part labelled A is referred to as \_\_\_\_\_.



- A. producers
- B. secondary consumers
- C. primary consumers

D. secondary retailers

The correct answer is option [B]

18. The tropical rainforest is subdivided into \_\_\_\_\_ layers?

A. 3

B. 2

C. 1

D. 4

The correct answer is option [A]. The three layers are:

(1) The top layer.

(2) The layer above the ground.

(3) Organisms that live in the soil (i.e. layer under the ground).

19. In tropical savanna, the main producers are \_\_\_\_\_.

A. trees

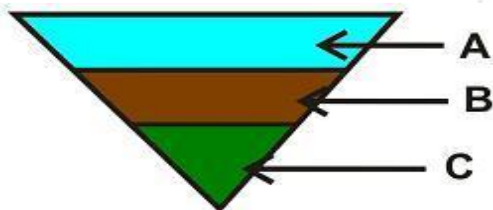
B. grasses

C. monkeys

D. snakes

The correct answer is option [B]

20. The diagram below shows the pyramid of numbers. The part labelled C is referred to as \_\_\_\_\_.



A. tertiary consumers

B. secondary consumers

C. primary consumers

D. producers

The correct answer is option [B]

21. Which of the following activities will cause a reduction in the population of wild life in the country?

A. Game reserves

B. Felling of trees.

C. Forest reserves

D. Keeping of animals.

The correct answer is option [B]

## TOPIC: CIRCULATORY SYSTEM

**DIRECTION: Choose the correct answer from the lettered options.**

1. Which of the following does the right side of the heart pump blood into?

- A. Liver
- B. Lungs
- C. Brain
- D. Kidney

The correct answer is option [B].

2. The blood vessels which take oxygenated blood from the lungs to the heart are the \_\_\_\_\_.

- A. vena cava
- B. renal veins
- C. renal arteries
- D. pulmonary veins

The correct answer is option [D]

3. Blood flows to the heart through the \_\_\_\_\_.

- A. arteries
- B. capillaries
- C. veins
- D. valves

The correct answer is option [C]

4. Which of the following is an organ of the excretory system?

- A. Lungs
- B. Femur

- C. Kidney
- D. Small intestine

The correct answer is option [C]

5. Clotting of blood occurs by the activity of \_\_\_\_\_.

- A. platelets
- B. marrow
- C. spleen
- D. plasma

The correct answer is option [A]

6. The chemical symbols of Gold, Lead and Neon are \_\_\_\_\_, \_\_\_\_\_ and \_\_\_\_\_.

- A. Au, Pb, Ne
- B. G, Ld., N
- C. Au, Ld, Ne
- D. Au, Pb, N

The correct answer is option [A]

7. The blood cell that is meant to protect or defend the blood against disease germs is referred to as \_\_\_\_\_.

- A. white blood cell
- B. red blood cell
- C. platelets
- D. plasma

The correct answer is option [A]

8. The liquid part of the blood is called \_\_\_\_\_.

- A. platelets



- B. red blood cell
- C. hemoglobin
- D. plasma

The correct answer is option [D].

Plasma is the fluid part of the blood which contains the three types of blood cells.

9. In the circulatory system, the main organ that serves as a pump is called \_\_\_\_\_.

- A. liver
- B. bladder
- C. lung
- D. heart

The correct answer is option [D]

10. The organ in that pumps the blood and makes it flow around the body is called \_\_\_\_\_.

- A. veins
- B. artery
- C. heart
- D. lungs

The correct answer is option [C]

11. The removal of undigested solid food materials from our body is called \_\_\_\_\_.

- A. excretion
- B. defecations
- C. respiration
- D. urination

The correct answer is option [B]

12. Which of the following is NOT a defect or disease of the blood?

- A. Anemia
- B. Asthma
- C. Sickle cell disease
- D. Leukamia

The correct answer is option [B]

13. Which one of the following is NOT a composition of blood?

- A. Bile
- B. Plasma
- C. Platelets
- D. Red blood cells

The correct answer is option [A]

14. Which of the following is NOT transported in the body?

- A. Digested food
- B.
- C. Waste materials from the cells
- D. Feces

The correct answer is option [D]

15. What separates the right artery from the right ventricle?

- A. Tissue valve
- B. Bicuspid valve
- C. Tricuspid valve
- D. Pulmonary valve

The correct answer is option [C]

16. Exchange of materials between blood and body cells occurs through the \_\_\_\_\_.

- A. villi
- B. capillaries
- C. lungs
- D. veins

The correct answer is option [B]

17. Which one of the following is a disease associated with the blood?

- A. Leukemia
- B. Tuberculosis
- C. Myopia
- D. Dysentery

The correct answer is option [A]

18. The normal pH of the human blood is \_\_\_\_\_.

- A. 7.4
- B. 4.4
- C. 5.4
- D. 6.4

The correct answer is option [A]

19. The bronchus divides into smaller windpipes called \_\_\_\_\_.

- A. alveoli
- B. larynx
- C. bronchioles
- D. bronchi

The correct answer is option [C]

20. The instrument used in the measurement of heart rate is called \_\_\_\_\_.

- A. heart chart
- B. electrocardiograph
- C. stethoscope
- D. sphygmomanometer

The correct answer is option [B].

21. Blood is made up of solids suspended in a liquid called \_\_\_\_\_.

- A. platelets
- B. marrow
- C. spleen
- D. plasma

The correct answer is option [D]

22. Which one of the following blood cells has the largest percentage proportion in the blood?

- A. White blood cells
- B. Red blood cells
- C. Plasma
- D. Platelets

The correct answer is option [B]

23. Which one of the following is NOT a blood group?

- A. A
- B. AO
- C. O
- D. AB

The correct answer is option [B]

24. Which of these is a compound that combines with in the blood?

- A. Plasma
- B. Carbon dioxide
- C. Hemoglobin
- D. Globin

The correct answer is option [C].

25. The left side of the heart pumps blood into the \_\_\_\_\_.

- A. liver
- B. heart
- C. lungs
- D. body

The correct answer is option [D].

26. What is the name of the liquid which transports materials around the body?

- A. Fluid
- B. Solution
- C. Urine
- D. Blood

The Correct answer is option [D].

27. Which one of the following is a disease associated with the heart?

- A. Tuberculosis
- B. Hypertension
- C. Myopia
- D. Dysentery

The correct answer is option [B]

28. There are \_\_\_\_\_ main parts of the circulatory system.

- A. 5
- B. 4
- C. 3
- D. 2

The correct answer is option [B]

29. The two upper chambers of the heart are called \_\_\_\_\_.

- A. ventricles
- B. auricles
- C. renal arteries
- D. vena cava

The correct answer is option [B]

30. \_\_\_\_\_ is the blood cell that is responsible for blood clotting.

- A. White blood cell
- B. Red blood cell
- C. Auricle
- D. Platelet

The correct answer is option [D]

31. The heart has \_\_\_\_\_ major sections.

- A. 5
- B. 4
- C. 3
- D. 2

The correct answer is option [D]

32. The red blood cell is responsible for the transportation of \_\_\_\_\_ in the body.

- A. carbon (iv) oxide
- B. hemoglobin
- C. oxygen
- D. nitrogen

The correct answer is option [C]

33. Exchange of materials between blood and cells takes place through the \_\_\_\_\_.

- A. capillaries
- B. veins
- C. ventricles
- D. arteries

The correct answer is option [A]

34. Blood platelets are referred to as \_\_\_\_\_.

- A. white blood cells
- B. free nuclei cytoplasm fragments
- C. a kind of red blood cells
- D. plasma

The correct answer is option [A]

35. \_\_\_\_\_ is NOT a disease of the blood.

- A. Anemia
- B. Sickle cell
- C. Short sightedness
- D. Leukemia

The correct answer is option [C]

36. There are \_\_\_\_\_ kinds of blood cells.

- A. 1
- B. 2
- C. 3
- D. 4

The correct answer is option [C]

37. The current in a circuit is measured with \_\_\_\_\_.

- A. a voltmeter
- B. an ammeter
- C. a thermometer
- D. a hygrometer

The correct answer is option [B]

38. Which of the following is NOT a blood vessel?

- A. Heart
- B. Capillaries
- C. Arteries
- D. Veins

The correct answer is option [A]

39. Which of the following is NOT part of the circulatory system?

- A. Heart
- B. Arteries
- C. Capillaries
- D. Auricle

The correct answer is option [D]



40. Blood plasma contains \_\_\_\_\_

- (i) Water
- (ii) Hemoglobin
- (iii) Dissolved minerals
- (iv) Dissolved proteins
- (v) Red cells

- A. i, ii and iii
- B. i, ii and iv
- C. iii, iv and v
- D. i, iii and iv

The correct answer is option [D]

41. The vessel which carries blood from the heart is called \_\_\_\_\_.

- A. artery
- B. vein
- C. capillary
- D. auricle

The correct answer is option [A]

42. Which of the following is NOT a function of blood in the body?

- A. Distribution of food
- B. Removal of feces
- C. Removal of wastes
- D. Circulation of

The correct answer is option [B]

43. The blood vessels which carry blood towards the heart are called \_\_\_\_\_.

- A. arteries
- B. veins
- C. capillaries
- D. ventricles

The correct answer is option [B]

44. + hemoglobin =

- A. oxygenhaemoglobin
- B. oxyhaemoglobin
- C. oxyhaem
- D. ox globin

The correct answer is option [B].

45. Gases are transported in the body by \_\_\_\_\_.

- A. blood
- B. water
- C. urine
- D. air

The correct answer is option [A].

46. Where in the human body is the heart found?

- A. Head
- B. Neck
- C. Chest
- D. Abdomen

The Correct answer is option [C].

47. The act of transferring blood from one person to another is known as\_\_\_\_\_.

- A. blood pumping
- B. blood transfusion
- C. blood transfer
- D. blood clotting

The correct answer is option [B]

48. Doctors take the pulse of their patients to know the \_\_\_\_\_ of the patient.

- A. blood group
- B. genotype
- C. heart rate
- D. physical strength

The correct answer is option (C)

49. The blood vessels that carry blood towards the heart are known as \_\_\_\_\_.

- A. veins
- B. capillaries
- C. auricles
- D. arteries

The correct answer is option [A]

Veins are blood vessels that carry blood towards the heart.

Artries are blood vessels that carry blood away from the heart.

Capillaries are actually a network of very tiny (microscopic) blood vessels that connects the arterioles and venules and enable the exchange of oxygen, etc.

50. The chemical in the blood which carries is known as \_\_\_\_\_.

- A. antigens
- B. hemoglobin

C. plasma

D. antibodies

The correct answer is option [B]

## TOPIC: CONTINUITY OF LIFE

**DIRECTION: Choose the correct answer from the lettered options.**

1. Which one of the following fruits can be dispersed by wind?

- A. Coconut
- B. Tridax
- C. Maize
- D. Mango

The correct answer is option [B]

2. The continuous existence of a specie of animal is maintained by \_\_\_\_\_.

- A. continuity of life
- B. reproduction
- C. death
- D. mating

The correct answer is option [B]

3. Which one of the following is NOT borne by the stem of a plant?

- A. Terminal bud
- B. Auxiliary bud
- C. Leaf
- D. Node

The Correct answer is option [C].

4. The reproductive organ of a plant is called \_\_\_\_\_.

- A. flower
- B. fruit
- C. leaf

D. root

The correct answer is option [A]

5. In flowers the terminal part of a stamen containing the pollen sacs is known as the \_\_\_\_\_.

A. anther

B. style

C. filament

D. pistil

The correct answer is option [A]

6. Which one of the following plants CANNOT be propagated by vegetative propagation?

A. Cassava

B. Potato

C. Sugarcane

D. Mango

The correct answer is option [D]

7. There are \_\_\_\_\_ types of reproduction.

A. 5

B. 4

C. 3

D. 2

The correct answer is option [D]

8. Which of the following structures of a flower forms the seed after fertilization?

A. Filament

- B. Ovary
- C. Ovule
- D. Sepal

The correct answer is option [C]

9. Which one of the following is NOT necessary for the germination of seeds?

- A. Maturation
- B. Suitable temperature
- C. Moisture
- D.

The correct answer is option [A]

10. A baby is protected from infection and disease by ensuring cleanliness

And \_\_\_\_\_.

- A. giving immunization
- B. buying expensive drugs
- C. weaning the baby
- D. drug abuse

The correct answer is option [A]

11. The structure in a flower that forms a seed after fertilization is called the

\_\_\_\_\_.

- A. sepal
- B. style
- C. ovule
- D. filament

The correct answer is option [C]

12. Pollen grains can be transferred to the stigma by \_\_\_\_\_, \_\_\_\_\_ and \_\_\_\_\_.

- A. wind, insects, birds
- B. insects, water, sun
- C. birds, snail, leafs
- D. goat, cow, man

The correct answer is option [A]

13. The collective name of carpels of a flower is \_\_\_\_\_.

- A. calyx
- B. corolla
- C. gynoecium
- D. androecium

The correct answer is option [C]

14. A hole through which escapes from the leaf is known as \_\_\_\_\_.

- A. stomata
- B. chlorophyll
- C. cambium
- D. petiole

The Correct answer is option [A].

15. A creamy structure in a seed that provides food for growing seedlings is called \_\_\_\_\_.

- A. plumule
- B. radicle
- C. cotyledon
- D. fruit

The correct answer is option [C]



16. When tips of plants grow towards the source of light, the growth movement is known as \_\_\_\_\_ movement.

- A. tropic
- B. nastic
- C. tactic
- D. general

The correct answer is option [A]

17. Stamens are collectively called \_\_\_\_\_.

- A. androecium
- B. carpel
- C. gynoecium
- D. pistil

The correct answer is option [A]

18. The fusion of the male and female sex gamete is \_\_\_\_\_.

- A. fertilization
- B. conjugation
- C. mating
- D. pollination

The correct answer is option [A]

19. Which of the following insects helps to pollinate flowers?

- A. Tsetse fly
- B. Butterfly
- C. Housefly
- D. Mosquito

The correct answer is option [B]

20. The transfer of pollen grains from the anther to the stigma is called \_\_\_\_\_.

- A. fertilization
- B. conjugation
- C. mating
- D. pollination

The correct answer is option [D]

## TOPIC: DIGESTIVE SYSTEM

**DIRECTION: Choose the correct answer from the lettered options.**

1. Which of the following is NOT a digestive juice?

- A. Saliva
- B. Gastric juice
- C. Pancreatic juice
- D. Urine

The correct answer is option [D]

2. The conversion of excess protein (amino acids) into urea occurs in the \_\_\_\_\_.

- A. kidney
- B. pancreas
- C. villi
- D. liver

The correct answer is option [A]

3. In the mouth, carbohydrates are broken down by \_\_\_\_\_ enzyme.

- A. lipase
- B. pepsin
- C. ptyalin
- D. rennin

The correct answer is option [C]

4. Which of the following organs in the human body produces bile?

- A. Gall bladder
- B. Pancreas
- C. Spleen

D. Liver

The correct answer is option [D]

5. There are \_\_\_\_\_ digestive juices in the human body.

A. 5

B. 4

C. 3

D. 2

The correct answer is option [B]

6. Which one of the following organs produces bile?

A. Gall bladder

B. Pancreas

C. Spleen

D. Liver

The correct answer is option [D]

7. Food enters the blood stream through special structures called \_\_\_\_\_ in the walls of the intestine.

A. villi

B. duodenum

C. stomach

D. fingers

The correct answer is option [A]

8. Mammals store excess carbohydrates chiefly as \_\_\_\_\_.

A. glucose

B. glycogen

- C. fat
- D. peptones

The correct answer is option [B]

9. Which of the following is NOT secreted during the process of digestion of a balanced diet?

- A. Saliva
- B. Fruit juice
- C. Gastric juice
- D. Pancreatic juice

The correct answer is option [B]

10. The metabolic process that does not require is called \_\_\_\_\_.

- A. deoxymetabolism
- B. catabolism
- C. anaerobic metabolism
- D. aerobic metabolism

The correct answer is option [C]

11. Digestion of food takes place in a long tube in the body called \_\_\_\_\_.

- A. stomach
- B. intestine
- C. alimentary canal
- D. mouth

The correct answer is option [C]

12. What is the process by which food substances are broken down into simpler forms and absorbed by the body?

- A. Respiration
- B. Digestion
- C. Excretion
- D. Reproduction

The Correct answer is option [B].

13. Completely digested food enters the blood stream through special structures called \_\_\_\_\_.

- A. gastric gland
- B. pancreas
- C. villi
- D. gall bladder

The correct answer is option [C]

14. The movement of food along the alimentary canal is commonly described as \_\_\_\_\_.

- A. diffusion
- B. peristalsis
- C. osmosis
- D. digestion

The correct answer is option [B]

15. The process of digestion helps to \_\_\_\_\_.

- A. acidify our food
- B. add to our food
- C. breakdown our food into smaller molecules
- D. make our food taste sweet

The correct answer is option [C]

16. The end product of the digestion of protein is \_\_\_\_\_.

- A. glucose
- B. fatty acids
- C. glycerol
- D. amino acids

The correct answer is option [D]

17. Proteins are broken up into \_\_\_\_\_ acids in the human body.

- A. amino
- B. ethanoic
- C. fatty
- D. formic

The correct answer is option [A]

18. The digestion of cooked starch starts in the part of alimentary canal called the \_\_\_\_\_.

- A. stomach
- B. small intestine
- C. mouth
- D. large intestine

The correct answer is option [C]

19. Which one of the following is NOT an organ in the digestive system?

- A. Oesophagus
- B. Kidney
- C. Stomach

D. Duodenum

The correct answer is option [B]

20. After digestion, lipid (fats) are converted to absorbable end products known as \_\_\_\_\_.

- A. amino acids
- B. fatty acids and glycerol
- C. glycogen
- D. glucose

The correct answer is option [B]

21. Which one of the following is NOT a part of the digestive system?

- A. Gullet
- B. Liver
- C. Mouth
- D. Small intestine

The correct answer is option [B]

22. The finger-like projections found in the intestine provide \_\_\_\_\_.

- A. more for digestion
- B. fluids to ease bowel movement
- C. digestive enzymes for proteins
- D. large surface area for the absorption of food

The correct answer is option [D]

23. Absorption of food takes place in the \_\_\_\_\_.

- A. large intestine
- B. small intestine



- C. stomach
- D. oesophagus

The correct answer is option [B]

24. Excess carbohydrates in animals is stored in the liver as \_\_\_\_\_.

- A. cellulose
- B. fatty acid
- C. glucose
- D. glycogen

The correct answer is option [D]

25. Which one of the following is NOT an organ in the digestive system?

- A. Oesophagus
- B. Kidney
- C. Stomach
- D. Duodenum

The correct answer is option (B)

26. The process of digestion is quickened by chemical substances called \_\_\_\_\_.

- A. acids
- B. alkaline
- C. colloids
- D. enzymes

The correct answer is option [D]

27. The long tube forming the basic parts of the is called the \_\_\_\_\_.

- A. alimentary canal
- B. large intestine

- C. oesophagus
- D. small intestine

The correct answer is option [A]

28. The enzyme ptyalin acts on \_\_\_\_\_.

- A. carbohydrate
- B. fats and oils
- C. mineral
- D. proteins

The correct answer is option [A]

29. Digestive juices are produced in the \_\_\_\_\_.

- A. blood
- B. glands
- C. lumen
- D. muscles

The correct answer is option [B]

30. Which of the following food substances is digested in the stomach?

- A. Proteins
- B. Carbohydrates
- C. Fats and oil
- D. Fats and proteins

The correct answer is option [A]

31. Which of the following takes place in the liver?

- A. Decomposition of fats
- B. Deamination of proteins

- C. Synthesis of proteins
- D. Production of antibodies

The correct answer is option [B]

32. Glycogen is a carbohydrate as \_\_\_\_\_ is a protein.

- A. urea
- B. alanine
- C. triglyceride
- D. maltose

The correct answer is option [B].

33. Where in the human body is the stomach found?

- A. Head
- B. Neck
- C. Chest
- D. Abdomen

The Correct answer is option [D].

34. The various chemical reactions in the body that leads to the release of during work is called \_\_\_\_\_.

- A. metabolism
- B. breakdown
- C. catabolism
- D. anabolism

The correct answer is option [A].

35. The part of the alimentary canal where absorption of takes place is called the \_\_\_\_\_.

- A. stomach
- B. duodenum
- C. small intestine
- D. large intestine

The correct answer is option [D]

36. In which part of the alimentary canal does digestion of proteins start?

- A. Large intestine
- B. Mouth
- C. Stomach
- D. Small intestine

The correct answer is option [C]

37. The end product of digestion of protein is \_\_\_\_\_.

- A. glucose
- B. fatty acids
- C. amino acids
- D. sugar

The correct answer is option [C]

38. Which of the following is NOT an example of the systems in the human body?

- A. Digestion system
- B.
- C.
- D. Nervous system

The correct answer is option [A]

39. The breakdown of glycogen with is known as \_\_\_\_\_.

- A. metabolism
- B. glycogenesis
- C. aerobic glycolysis
- D. dissolution

The correct answer is option [C].

40. The name of the digestive enzyme that causes the coagulation of milk proteins is called \_\_\_\_\_.

- A. ptyalin
- B. rennin
- C. pepsin
- D. amylase

The correct answer is option [B]

41. In man, excess carbohydrates can be stored in the \_\_\_\_\_.

- A. gall bladder
- B. kidney
- C. liver
- D. pancreas

The correct answer is option [C]

**TOPIC: ENERGY**

**DIRECTION: Choose the correct answer from the lettered options.**

1. Calculate the work done by a ball of mass 40kg which falls freely from a height of 0.8m above the ground ( $g = 10\text{m/s}^2$ ).

- A. 0.31
- B. 0.32
- C. 0.33
- D. 0.34

The correct answer is option [B].

Mass = 40g

= 0.04kg

work = force x distance

(force = mass x acceleration)

work = mass x acceleration x distance

$w = 0.04 \times 10 \times 0.8$

= 0.32J

2. Pressure may be defined as \_\_\_\_\_.

- A. height multiplied by density
- B. normal force per unit area
- C. pounds per square inch
- D. grams per square centimeter

The correct answer is option [B].

3. Which of these is NOT fuel for cooking?

- A. Electricity
- B. Methane

- C. Wood
- D. Carbon (iv) oxide

The correct answer is option [D]

4. Which one of these is NOT a source of energy?

- A. Stone
- B. Petrol
- C. Wood
- D. Sun

The correct answer is option [A]

5. What type of does an orange fruit have while hanging on the tree?

- A. Kinetic
- B. Light
- C. Mechanical
- D. Potential

The correct answer is option (D)

6. An object which does NOT allow light to pass through it is referred to as \_\_\_\_\_ object.

- A. glass
- B. translucent
- C. opaque
- D. transparent

The Correct answer is option [C].

7. Which of the following statements is NOT true about the image in a plane mirror?

- A. The image is same size as the object.

- B. The image is laterally inverted.
- C. The image is virtual.
- D. The image is magnified.

The correct answer is option [D].

8. Determine the potential of a body of mass 5kg thrown up to a height of 7m assuming the acceleration due to gravity of the body is 10m/s square.

- A. 150J
- B. 250J
- C. 350J
- D. 450J

The correct answer is option [C]

$$PE = mgh$$

$$5 \times 10 \times 7$$

$$= 350J$$

9. The line where the incident ray and the reflected ray touch the mirror is called \_\_\_\_\_ line.

- A. refracted
- B. normal
- C. pin hole
- D. mirror

The correct answer is option [B]

10. A collection of light travelling in the same direction is called \_\_\_\_\_.

- A. ray of light
- B. beam of light
- C. line of light



D. group of light

The correct answer is option [B]

11. White light can be separated into a number of different colours by the use of a \_\_\_\_\_.

- A. convex lens
- B. concave lens
- C. glass prism
- D. convex mirror

The correct answer is option [C]

12. Both kinetic and potential are forms of \_\_\_\_\_ energy.

- A. electrical
- B. chemical
- C. mechanical
- D. hydro

The correct answer is option [C]

13. \_\_\_\_\_ is the primary source of available on the earth.

- A. Food
- B. Sun
- C. Atomic reactors
- D. Wind

The correct answer is option [B]

14. Change in direction of light as it passes from one medium to another is referred to as \_\_\_\_\_.

- A. diffraction

- B. refraction
- C. reflection
- D. interference

The correct answer is option [B].

15. The film of a pin whole camera functions as the \_\_\_\_\_ of the eye.

- A. iris
- B. lens
- C. pupil
- D. retina

The correct answer is option (D)

16. Which one of these is NOT a form of energy?

- A. Chemical
- B. Electrical
- C. Heat
- D. Fire

The correct answer is option [D]

17. When light is dispersed by a triangle prism, a \_\_\_\_\_ is formed.

- A. spectrum
- B. mirage
- C. echo
- D. image

The correct answer is option [A].

18. The separation of white light into a band of colours as it passes through a triangular glass prism is called \_\_\_\_\_.

- A. dispersion
- B. spectrum
- C. reflection
- D. refraction

The correct answer is option [B]

19. Which of the following is NOT a form of energy?

- A. Hydro
- B. Power
- C. Potential
- D. Kinetic

The correct answer is option [B]

20. Which one of the following is NOT a property of light?

- A. It can be reflected.
- B. It does not pass through a plane glass.
- C. It helps the eye to see objects.
- D. It is made up of many colours.

The correct answer is option [B]

21. Which one of the following is a translucent object?

- A. Asbestos
- B. Duster
- C. Oily paper
- D. Plane glass

The correct answer is option [C]

22. The straight line along which light travels is called a \_\_\_\_\_.

- A. ray of light
- B. ray of sun
- C. ray of
- D. ray of sunlight

The correct answer is option [A]

23. \_\_\_\_\_ is the ability or capacity of an individual to perform work.

- A. Work
- B. Force
- C. Energy
- D. Power

The correct answer is option [C].

24. The path and direction taken by light is known as \_\_\_\_\_.

- A. ray of light
- B. slit of light
- C. line of light
- D. star of light

The correct answer is option [A]

25. The measuring unit of is \_\_\_\_\_.

- A. newton
- B. kilogram
- C. centimeters
- D. joules

The correct answer is option [D].

26. A reflection in a mirror is called \_\_\_\_\_.

- A. darkness
- B. an image
- C. a shadow
- D. a colour

The Correct answer is option [B].

27. The terminals of a dry cell are \_\_\_\_\_ and \_\_\_\_\_.

- A. negative, neutral
- B. positive, neutral
- C. positive, negative
- D. neutral, normal

The correct answer is option [C]

28. What travels through space is called \_\_\_\_\_ energy.

- A. heat
- B. radiant
- C. atomic
- D. sun

The correct answer is option [A]

29. Which one of the following is NOT a natural source of energy?

- A. Battery
- B. Coal
- C. Food
- D. Sun

The correct answer is option [A]

30. Which of the following is NOT a secondary source of energy?

- A. Food
- B. Sun
- C. Atomic reactors
- D. Wind

The correct answer is option [B]

31. The colour of an opaque object seen is the colour of light that is \_\_\_\_\_.

- A. absorbed
- B. refracted
- C. reflected
- D. transmitted

The correct answer is option [C].

32. The image of an object formed in a pin-hole camera is usually \_\_\_\_\_.

- A. upright
- B. inverted
- C. refracted
- D. a real image

The correct answer is option [B]

33. At work is also called \_\_\_\_\_ energy.

- A. electrical
- B. mechanical
- C. potential
- D. kinetic

The correct answer is option [D].

34. What happens when a ray of light hits the surface of a rectangular glass block?

- A. It becomes perpendicular to the glass block.
- B. It is reflected.
- C. It is refracted.
- D. It is deflected.

The correct answer is option [C]

## TOPIC: ENERGY AND MATERIALS FOR COMMUNITIES

**DIRECTION: Choose the correct answer from the lettered options.**

1. Plants get their supply of through the leaves by the process of \_\_\_\_\_.

- A. absorption
- B. diffusion
- C. transpiration
- D. photosynthesis

The correct answer is option [C]

2. The in food is known as \_\_\_\_\_ energy.

- A. mechanical
- B. kinetic
- C. potential
- D. chemical

The correct answer is option [D]

3. The following are basic materials that plant uses to make food EXCEPT \_\_\_\_\_.

- A. calcium
- B. water
- C. carbon dioxide
- D. nitrogen

The correct answer is option [A]

4. Why does an environment need a decomposer?

- A. For transfer of from one organism to another.
- B. For absorption of from the sun.
- C. To clean-up the environment and put nutrients back into the soil.



D. To prevent one animal from eating up another.

The correct answer is option [C]

Decomposers are organism's chiefly fungi and bacteria, which decompose dead organic matter, absorbing some of the products, but also releasing simple substances which can be used by other organisms.

5. When a house plant is wilting, what vital resource is it most likely lacking?

A. Plant food

B.

C. Sunlight

D. Air

The correct answer is option [B]

6. Different organisms living together in the same make up the \_\_\_\_\_.

A. biosphere

B. community

C. ecosystem

D. niche

The correct answer is option [B]

7. Food chains are composed of \_\_\_\_\_, \_\_\_\_\_ and \_\_\_\_\_.

A. producers, consumers, decomposers

B. consumers, sellers, resellers.

C. decomposers, manufacturers, retailers

D. consuming, selling, buying

The correct answer is option [A]

8. In a food chain, which of the following is the producer?

- A. Animal
- B. Plant
- C. Man
- D. Microorganism

The correct answer is option [B]

9. A community can be defined as \_\_\_\_\_.

- A. a place where any group of plants and animals live together
- B. a place where only plants live together
- C. a village where only humans exist
- D. a free space where no living thing grow

The correct answer is option [A]

10. A set of food chains is called \_\_\_\_\_.

- A. food chains
- B. food web
- C. food pyramid
- D. biomes

The correct answer is option [B]

## TOPIC: EXCRETORY SYSTEM

**DIRECTION: Choose the correct answer from the lettered options.**

1. The materials that humans excrete are referred to as \_\_\_\_\_ and \_\_\_\_\_.

- A. solids, gases
- B. solids, liquors
- C. gases, liquids
- D. solid, waters

The correct answer is option [C]

2. Excreted materials are of \_\_\_\_\_ kinds.

- A. 5
- B. 4
- C. 3
- D. 2

The correct answer is option [D]

3. Since some of the organs of the urinary system are also used in reproduction, the system is called \_\_\_\_\_.

- A. circulatory system
- B. Excretory system
- C. urogenital system
- D. respiratory system

The correct answer is option [C]

4. Sweat is an excretory product given out from the body through the \_\_\_\_\_.

- A. bladder
- B. kidney

- C. mouth
- D. skin

The correct answer is option [D]

5. Which of the following is an excretory organ?

- A. Lung
- B. Heart
- C. Duodenum
- D. Rectum

The correct answer is option [A]

6. The main organ of the body responsible for regulating the amount of in the body is the \_\_\_\_\_.

- A. heart
- B. small intestine
- C. kidney
- D. large intestine

The correct answer is option [C]

7. Which one of the following is NOT an excretory organ?

- A. Skin.
- B. Heart
- C. Stomata
- D. Kidney

The correct answer is option [B]

8. The organ responsible for the removal of urine from the blood stream is the \_\_\_\_\_.

- A. lung
- B. liver
- C. kidney
- D. skin

The correct answer is option [C]

9. Which one of the following is NOT a waste product?

- A. Carbon (iv) oxide
- B. Sweat
- C. Urine
- D. Protein

The correct answer is option [D]

10. Which of the following is a reason why a man can die after a couple of days if he does not pass out urine and feces?

- A. The pain would be more than he can bear.
- B. His urinary bladder would be inefficient.
- C. The waste products would be broken down into smaller bits.
- D. The waste products become toxic to the body.

The correct answer is option [D]

11. The gaseous waste in excretion is \_\_\_\_\_.

- A. carbon monoxide
- B. carbon dioxide
- C. carbon
- D. hydrogen

The correct answer is option [B]

12. Which one of the following structures is NOT a human excretory organ?

- A. Eye
- B. Kidney
- C. Liver
- D. Lung

The correct answer is option [A]

13. The body gets rid of it does NOT want through \_\_\_\_\_, \_\_\_\_\_ and \_\_\_\_\_.

- A. boxing, wrestling, running
- B. jumping, running, eating
- C. sweating, urinating, breathing
- D. swimming, drinking, eating

The correct answer is option [C]

14. Which one of the following is the waste product that goes out of the lungs?

- A. Sweat
- B. Carbon (iv) oxide
- C. Salt
- D. Urine

The correct answer is option [B]

15. The function of the bladder in the human body is to \_\_\_\_\_.

- A. produce enzymes
- B. produce urine
- C. remove excess salt
- D. store urine

The correct answer is option [D]

16. Which of the following is NOT an excretory product?

- A. Oxygen
- B. Carbondioxide
- C. Sweat
- D. Urine

The correct answer is option [A]

17. The process of excretion means \_\_\_\_\_ .

- A. getting rid of waste materials from our body
- B. removing excess mucus through our nose
- C. removing faeces through the anus
- D. spitting out saliva from our mouth

The correct answer is option [A]

18. The major organs of excretion in man are \_\_\_\_\_, \_\_\_\_\_ and \_\_\_\_\_.

- A. heart, kidney, skins
- B. anus, skin, spleen
- C. skin, lungs, kidneys
- D. lungs, nose, skin
- E. A and B are correct.

The correct answer is option [C]

19. The long tube that goes from the kidney to the bladder is known as the \_\_\_\_\_.

- A. uterus
- B. urethra
- C. ureter
- D. nephron

The correct answer is option [C]

20. Which one of the following best describes excretion?

- A. The removal of metabolic waste products from the body.
- B. The removal of undigested food.
- C. The removal of only.
- D. The removal of faeces.

The correct answer is option [A]

21. The kidney is an organ found in the \_\_\_\_\_ system of the body.

- A. circulatory
- B. digestive
- C. excretory
- D. nervous
- E. respiratory

The correct answer is option [C]

22. A major function of the human skin is \_\_\_\_\_.

- A. diminution of proteins
- B. elimination of vitamin D
- C. production of glycogen
- D. regulation of body temperature

The correct answer is option [D]

23. Which one of these is NOT a product of excretion?

- A. Carbon (iv) oxide
- B. Enzyme
- C. Salt
- D. Urea

The correct answer is option [B]



24. What is the effect of sweat evaporation on the skin on a sunny day?

- A. Heating
- B. Cooling
- C. Drying
- D. Expansion

The correct answer is option [B]

## TOPIC: GARDENING AND POULTRY KEEPING

**DIRECTION: Choose the correct answer from the lettered options.**

1. The process by which plants loose to their surroundings is known as \_\_\_\_\_.

- A. respiration
- B. transpiration
- C. evaporation
- D. dehydration

The Correct answer is option [B].

2. The replanting of seedlings further apart from each other so as to give them more room for growth to mature plants is known as \_\_\_\_\_.

- A. transpiration
- B. transplanting
- C. cross planting
- D. electro planting

The correct answer is option [B]

3. The movement of plants from nursery to the field is known as \_\_\_\_\_.

- A. transpiration
- B. transplanting
- C. thinning
- D. harvesting

The correct answer is option [B]

4. An inorganic matter that is added to the soil to enrich it is known as \_\_\_\_\_.

- A. fertilizer
- B. compost

- C. manure
- D. animal dropping

The Correct answer is option [A].

5. Which of the following is NOT a basic component of the soil?

- A. Minerals
- B. Water
- C. Fertilizer
- D. Organic matter

The correct answer is option [C]

6. The loose part of the earth that supports plant life is called \_\_\_\_\_.

- A. humus
- B. sand
- C. soil
- D. silt

The correct answer is option [C]

7. The practice of growing and caring for plants which are NOT used for food is known as \_\_\_\_\_.

- A. pasteurization
- B. bush cultivation
- C. wild life farming
- D. forestry

The Correct answer is option [D].

8. An organic matter that is added to the soil to enrich it is known as \_\_\_\_\_.

- A. fertilizer

- B. compost
- C. manure
- D. animal dropping

The Correct answer is option [C].

9. Which of the following is NOT a way of caring for growing plants?

- A. Harvesting
- B. Maturing
- C. Mulching
- D. Pruning

The correct answer is option [A]

10. Which one of the following types of soil is ideal for gardening?

- A. Loamy
- B. Sandy
- C. Clayey
- D. Silty

The Correct answer is option [A].

11. The keeping of chickens for use and profit is called \_\_\_\_\_.

- A. poultry farming
- B. harvesting
- C. farming
- D. weeding

The correct answer is option [A]

12. Livestock farming is a process by which a farmer rears \_\_\_\_\_ for food and sale.

- A. animals

- B. birds
- C. insects
- D. snakes

The correct answer is option [A]

## TOPIC: HABITAT

**DIRECTION: Choose the correct answer from the lettered options.**

1. In an aquatic habitat, the biotic factors are \_\_\_\_\_.

- A. dissolved gases
- B. dissolved salts
- C. plants and animals
- D. amount of

The correct answer is option [C]

2. What use is the gills to the fish?

- A. For digestion
- B. For tasting salt in the water.
- C. For hearing
- D. For taking from water.

The correct answer is option [D]

3. The frog is likely to be found in \_\_\_\_\_ habitat.

- A. an arboreal
- B. an aquatic
- C. a fresh
- D. a salt

The correct answer is option [A]

4. The place where plants and animals live is called \_\_\_\_\_.

- A. fresh
- B. niche
- C. soil

D. habitat

The correct answer is option [D]

5. Animals that live in and on land are called \_\_\_\_\_.

- A. aves
- B. amphibians
- C. mammals
- D. Pisces

The correct answer is option [B]

6. Which of the following best explains the adaptation of living things to their environment?

- A. Some animals have structures that help them live successfully in their habitats, while others do not.
- B. Some plants have structures that help them live successfully in their habitats, while others do not.
- C. Plants and animals have structures that help them live successfully in their habitats.
- D. Most big animals have structures that help them live successfully in their habitats.

The correct answer is option [C]

7. Which one of the following is NOT an abiotic factor?

- A. Competition
- B. Salinity
- C. Humidity
- D. Temperature

The correct answer is option [A]

8. Which of these is NOT an aquatic environment?

- A. River
- B. Sea
- C. Lakes
- D. Savannah

The correct answer is option [D]

9. What is the function of plant adaptations such as stinging hairs, thorns, and briars?

- A. Reproduction
- B. Phosynthesis
- C. Protection
- D. Disease prevention

The correct answer is option [C]

10. Movements in fish is mainly performed by the use of \_\_\_\_\_.

- A. gills
- B. scales
- C. head
- D. fins

The correct answer is option [D]

11. Which of the following paths shows how humans can get from the sun?

- A. Sun - cow - human
- B. Sun - cow - grass - human
- C. Sun - grass - cow - human
- D. Sun - grass - sheep - cow - human
- E. Sun - sheep - grass - cow - human

The correct answer is option [C]



12. Which of the following is NOT a fresh habitat?

- A. Pond
- B. River
- C. Sea
- D. Lake

The correct answer is option [C]

13. There are \_\_\_\_\_ main kinds of habitats.

- A. 5
- B. 4
- C. 3
- D. 2

The correct answer is option [D]

14. In aquatic animals the special organs that are developed for absorbing are the \_\_\_\_\_.

- A. lungs
- B. air bladder
- C. gills
- D. spiracles

The correct answer is option [C]

15. What makes up a population?

- A. People
- B. Animals
- C. Plants and animals
- D. Various organisms in an environment

The correct answer is option [D]

16. The natural dwelling place of an organism is called its \_\_\_\_\_.

- A. population
- B. biome
- C. habitat
- D. ecosystem

The correct answer is option [C]

17. Which of the following characteristics will enable one to identify a sea mammal among other fishes?

- A. Possession of the three body region.
- B. Absence of air.
- C. Absence of tail.
- D. Possession of two types of limbs.

The correct answer is option [A]

18. The way in which the bodies of plants and animals are structured such that they can survive in their is referred to as \_\_\_\_\_.

- A. adaptation
- B. irritability
- C. excretion
- D. growth

The correct answer is option [A]

19. What are some of the non-living things in an ecosystem?

- A. Plants and animals.
- B. Sun, soil, water, rocks and air.
- C. Sun, plants, and animals.
- D. Plants, animals, soil and water.

The correct answer is option [B]

20. Aquatic organisms are groups of plants and animals that live \_\_\_\_\_.

- A. both in and on land
- B. in
- C. on a piece of deserted land
- D. on land

The correct answer is option [B]

21. A group of organisms of the same kind living in a given place is called \_\_\_\_\_.

- A. population
- B. habitat
- C. density
- D. community

The correct answer is option [A]

A population is simply a group of organisms of the same kind living in a defined place or region.

A is the kind of place where plants or animals live, being either aquatic, terrestrial, etc.

## TOPIC: HYDROGEN

**DIRECTION:** Choose the correct answer from the lettered options.

1. When hydrogen is chemically combined with the product is \_\_\_\_\_.

- A. carbohydrate
- B. hydrocarbons
- C. hydrogen
- D. hydro chemical acid

The correct answer is option [C]

2. \_\_\_\_\_ does not occur freely in air but in a combined state.

- A. Oxygen
- B. Carbon
- C. Sulphur
- D. Hydrogen

The correct answer is option [D]

3. Which of the following gases is necessary in the preparation of margarine?

- A. Argon
- B. Chlorine
- C. Hydrogen
- D. Nitrogen

The correct answer is option [C]

4. Which of the following is a gaseous substance that acts as a strong reducing agent?

- A. Oxygen
- B. Carbondioxide

- C. Hydrogen
- D. Carbon monoxide

The correct answer is option [C]

5. Removing from an oxide is called \_\_\_\_\_.

- A. reduction
- B. oxidation
- C. substitution
- D. replacement

The correct answer is option [A]

6. Which of the following is NOT a property of hydrogen?

- A. It allows things to burn in it.
- B. It burns with a pale blue flame.
- C. It is insoluble in water.
- D. It is a light gas.

The correct answer is option [A]

7. The gas used in filling weather ballon is called \_\_\_\_\_.

- A.
- B. helium
- C. hydrogen
- D. nitrogen

The correct answer is option [B]

8. Margarine is manufactured in an industry by a process known as \_\_\_\_\_.

- A. oxidation
- B. hydrogenation

- C. dehydrogenation
- D. saponification

The correct answer is option [B]

9. Hydrogen is regarded as \_\_\_\_\_ agent.

- A. an oxidizing
- B. a reducing
- C. a stimulating
- D. a catalyzing

The correct answer is option [B]

10. Which of the following is the best gas for filling balloons?

- A. Carbon (iv) oxide
- B. Hydrogen
- C. Nitrogen
- D. Steam

The correct answer is option [B]

11. Which of the following methods is used in the laboratory preparation of hydrogen?

- A. Dilute calcium metal in water.
- B. Dilute tetraoxosulphate (vi) acid and magnesium.
- C. Dilute magnesium in water.
- D. Mix and zinc.

The correct answer is option [B]

## TOPIC: OXYGEN

**DIRECTION:** Choose the correct answer from the lettered options.

1. The percentage composition of gas in the air is about \_\_\_\_\_.

- A. 10%
- B. 21%
- C. 30%
- D. 60%

The correct answer is option [B]

2. What percentage of is contained in the air?

- A. 31
- B. 21
- C. 8
- D. 15

The correct answer is option [B]

3. \_\_\_\_\_ most readily enhances combustion.

- A. Hydrogen
- B. Chlorine
- C. Oxygen
- D.

The correct answer is option [C]

4. \_\_\_\_\_ relights a glowing splint.

- A. Carbon
- B. Hydrogen
- C. Sulphur

D. Oxygen

The correct answer is option [D]

5. Manganese (iv) oxide in the production of is used as \_\_\_\_\_.

- A. a catalyst
- B. a reducing agent
- C. an oxidizing agent
- D. an antioxidant

The correct answer is option [A]

6. The part of air which does NOT support combustion or burning is called \_\_\_\_\_.

- A. Oxygen
- B. nitrogen
- C. carbon dioxide
- D. rare gases

The correct answer is option [B]

7. In the laboratory preparation of oxygen, manganese (iv) oxide behaves as a \_\_\_\_\_.

- A. catalyst
- B. reducer
- C. promoter
- D. dehydrator

The correct answer is option [A]

8. \_\_\_\_\_ keeps us breathing and alive.

- A. Nitrogen
- B. Hydrogen
- C. Carbon dioxide



D. Oxygen

The correct answer is option [D]

9. Which of the following individuals will require extra to survive?

- A. Divers in deep sea.
- B. Drivers on the road.
- C. Doctors in hospitals.
- D. Travellers by plane.

The correct answer is option [A]

10. The addition of two metals or substance is called \_\_\_\_\_.

- A. reduction
- B. addition
- C. substitution
- D. oxidation

The correct answer is option [D]

11. Any substance which speeds up a chemical reaction without undergoing any chemical change is called a \_\_\_\_\_.

- A. activator
- B. charger
- C. catalyst
- D. inducer

The correct answer is option [C]

12. \_\_\_\_\_ gas will be produced in the laboratory using potassium trioxochlorate(vi).

- A. Hydrogen
- B. Noble gas

C. Oxygen

D. Neon

The correct answer is option [C]

13. Which of the following explains why high mountain climbers usually carry extra oxygen?

A. is required for respiration.

B. More people live on mountain tops.

C. There is less in the atmosphere the higher you rise.

D. They are astronauts requiring more oxygen.

The correct answer is option [C]

## TOPIC: PHYSICAL GROWTH AND DEVELOPMENT

**DIRECTION:** Choose the correct answer from the lettered options.

1. The chemicals in food substances which are essential for growth are called \_\_\_\_\_.

- A. enzymes
- B. fertilizers
- C. foodstuffs
- D. nutrients

The correct answer is option (D)

2. Iodine is used for testing \_\_\_\_\_.

- A. lactose
- B. maltose
- C. starch
- D. sucrose

The correct answer is option [C]

3. Protein deficiency causes a disease known as \_\_\_\_\_.

- A. beri-beri
- B. scurvy
- C. kwashiorkor
- D. pellagra

The correct answer is option [C]

4. The chemical used to test simple sugars is called \_\_\_\_\_.

- A. million's reagent
- B. iodine

- C. osmic acid
- D. benedict's solution

The correct answer is option [D]

Benedict's reagent is used as a test for the presence of reducing sugars. This includes all monosaccharaides and the disaccharides, lactose and maltose.

5. Which of the following food nutrients helps the body to form new cells and tissues?

- A. Fats and oil
- B. Proteins
- C. Vitamins
- D. Minerals

The correct answer is option [B]

6. Human beings require vitamins in their diet because vitamins \_\_\_\_\_.

- A. influence many important chemical processes in the body
- B. contain carbohydrate and fats
- C. stimulate the alimentary carnal
- D. prevent kwashiorkor

The correct answer is option [A]

7. Which of the following factors does NOT affect growth and development?

- A. Food
- B. Glands
- C. Disease
- D. Thinking

The correct answer is option [D]

8. The name of the gland that produces the growth stimulating hormone is called \_\_\_\_\_ gland.

- A. adrenalin
- B. pituitary
- C. thyroid
- D. gastric

The correct answer is option [B]

9. Night blindness is caused by lack of \_\_\_\_\_.

- A. vitamin A
- B. vitamin B
- C. vitamin C
- D. vitamin D

The correct answer is option [A]

10. The gland that produces the growth - stimulating hormone that determines how tall an individual can be is known as the \_\_\_\_\_.

- A. thyroid gland
- B. pituitary gland
- C. adrenal gland
- D. goiter gland

The correct answer is option [B]

11. Which one of the following can transmit the height of parents to their children?

- A. Cells
- B. Enzymes
- C. Genes
- D. Hemoglobin

The correct answer is option [C]

12. Which one of the following food substances is needed for body building?

- A. Proteins
- B. Fats
- C. Carbohydrates
- D. Vitamins

The correct answer is option [A].

13. Which of the following is NOT a factor that affects growth?

- A. Exercise
- B.
- C. Gland
- D. Heredity

The correct answer is option [B]

14. Which one of the following best defines growth?

- A. An increase in size.
- B. A decrease in size.
- C. An increase in height.
- D. An increase in weight.

The correct answer is option [A]

15. Lack of vitamin D causes \_\_\_\_\_.

- A. rickets
- B. beri-beri
- C. goiter
- D. scurvy

The correct answer is option [A]

16. The two periods of rapid growth in the process of growth and development in man are \_\_\_\_\_ and \_\_\_\_\_.

- A. from birth to 2 years, 9 years to 16 years
- B. from birth to 1 1/2 years, 7 year to 14 years
- C. from birth to 4 years, 11 years to 20 years
- D. from birth to 3 1/2 years, 10 years to 18 years

The correct answer is option [A]

17. Living things grow in order to increase in \_\_\_\_\_ and weight.

- A. length
- B. width
- C. size
- D. volume

The correct answer is option [C]

## TOPIC: PURE AND IMPURE SUBSTANCES

**DIRECTION:** Choose the correct answer from the lettered options.

1. Petroleum components can be gotten through \_\_\_\_\_.

- A. fractional distillation
- B. chromatography
- C. filtration
- D. lubrication

The correct answer is option [A]

2. The process of separating petrol from crude oil is known as \_\_\_\_\_.

- A. fractional distillation
- B. sublimation
- C. destructive distillation
- D. filtration
- E. decantation

The correct answer is option [A]

3. Petroleum is a mixture of \_\_\_\_\_.

- A. gases
- B. solids
- C. liquids
- D. hydrocarbons

The correct answer is option [D]

4. Which of the following is NOT an extract of petroleum?

- A. Kerosene
- B. Palm oil



- C. Bitumen
- D. Lubricating oil

The correct answer is option [B]

5. Another word for combustion is \_\_\_\_\_.

- A. flaming
- B. burning
- C. smoking
- D. roasting

The correct answer is option [B]

6. Which of the following is an example of a chemical change?

- A. A piece of rough wood that has been smoothened.
- B. A piece of wood that has been painted.
- C. A sheet of paper torn in half.
- D. A piece of old metal that has rusted.

The correct answer is option [D]

7. If you have a mixture of iron fillings and humus soil, how best can this mixture be separated?

- A. By the use of a magnet.
- B. By hand
- C. By the use of a filter paper.
- D. By the use of a wire screen sieve.

The correct answer is option [A]

8. A method of separating liquids which depends on the different speed with which they move through a porous material like filter paper is called \_\_\_\_\_.

- A. filtration
- B. distillation
- C. chromatography
- D. suspension

The correct answer is option [C]

9. What method would you use to separate mixture of Ammonium Chloride and Sodium Chloride?

- A. Chromatography
- B. Decantation
- C. Filtration
- D. Sublimation

The correct answer is option [D]

10. The separation of liquids with different boiling points is called \_\_\_\_\_.

- A. filtration
- B. fractional distillation
- C. chromatography
- D. suspension

The correct answer is option [B]

11. \_\_\_\_\_ is the conversion of liquid into vapor and the condensation of the vapor back into a liquid.

- A. Filtration
- B. Distillation
- C. Decantation
- D. Suspension

The correct answer is option [B]

12. A mixture of potassium trioxochlorate (v) and sodium chloride can be separated by \_\_\_\_\_.

- A. distillation
- B. crystallization
- C. recrystallization
- D. filtration

The correct answer is option [B].

13. Iodine can be separated from iodine-sodium chloride mixture by \_\_\_\_\_.

- A. chromatography
- B. sublimation
- C. filtration
- D. sieving

The correct answer is option [B].

14. Separation of a mixture of kerosene and sand can be easily carried out by using the difference in their \_\_\_\_\_.

- A. physical state
- B. solubility
- C. size
- D. melting point

The correct answer is option [A].

15. Diesel is obtained from crude oil by\_\_\_\_\_.

- A. chromatography
- B. condensation
- C. evaporation
- D. fractional distillation

The correct answer is option (D)

16. \_\_\_\_\_ is a substance which CANNOT be split into other simpler units.

- A. An atom
- B. A compound
- C. An element
- D. A mixture

The correct answer is option [C]

An atom is the smallest particle of an element.

A compound is a substance containing 2 or more elements chemically combined together.

## TOPIC: RESPIRATORY SYSTEM

**DIRECTION:** Choose the correct answer from the lettered options.

1. Which of the following is the appropriate sequence for inspiration?

- a. Diaphragm contracts and flattens out.
- b. Air from outside rushes in through the nose.
- c. Rib muscles will contract and ribs raised.
- d. The volume of chest is increased and air pressure in lung is lowered.

A. 1-->2-->3-->4

B. 1-->4-->2-->3

C. 1-->3-->4-->2

D. 1-->4-->3-->2

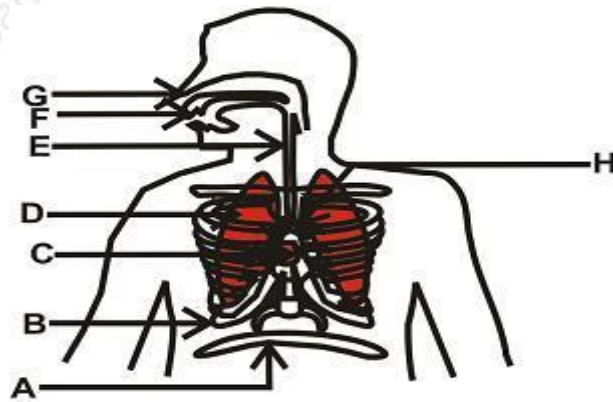
The correct answer is option [C]

2. Which of the following is the name of the windpipe that enters the lungs?

- A. Oesophagus
- B. Larynx
- C. Pharynx
- D. Trachea

The correct answer is option [D].

3. From the diagram shown, the part labelled B is called the \_\_\_\_\_.



- A. rib
- B. heart
- C. lungs
- D. bronchus

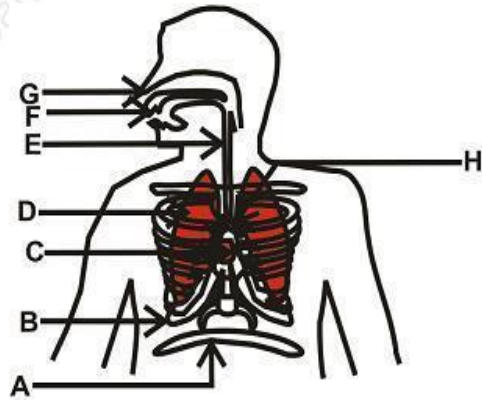
The correct answer is option [A]

4. Inhaling particles of pollen grains from flowers causes sneezing and headaches which lead to \_\_\_\_\_.

- A. asthma
- B. colds
- C. catarrh
- D. hay fever

The correct answer is option [D].

5. From the diagram shown, the part labelled D is called the \_\_\_\_.



- A. windpipe
- B. heart
- C. lungs
- D. bronchus

The correct answer is option [C]

6. Which one of the following options is the percentage composition of gas in exhaled air?

- A. 4.38%
- B. 16.02%
- C. 79.00%
- D. 0.60%

The correct answer is option [B].

**Solution:**

The table below gives the percentages of gases inhaled and exhaled.

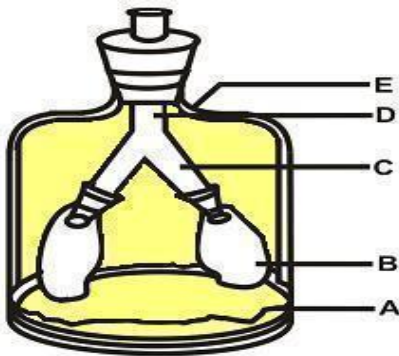
GAS	INHALED AIR	EXHALED AIR
NITROGEN	79.00%	79.00%
OXYGEN	20.96%	16.02%
CARBON DIOXIDE	0.04%	4.38%
WATER VAPOUR	TRACE	0.60%

7. Which of the following paths does inhaled air pass through?

- A. Nose-->trachea-->bronchi-->bronchioles-->lungs
- B. Nose-->bronchi-->trachea-->lungs
- C. Nose-->bronchi-->lungs
- D. Trachea-->nose-->bronchi-->lungs

The correct answer is option [A]

8. From the diagram shown, the part labelled B is called the \_\_\_\_\_.



- A. lung
- B. bronchus
- C. diaphragm
- D. trachea

The correct answer is option [A].

9. Which of the following is NOT an attribute of both plants and animals?

- A. Photosynthesis
- B. Respiration
- C. Excretion
- D. Feeding

The correct answer is option [A]



10. Which one of the following is a respiratory organ?

- A. Tongue
- B. Eye
- C. Nose
- D. Lungs

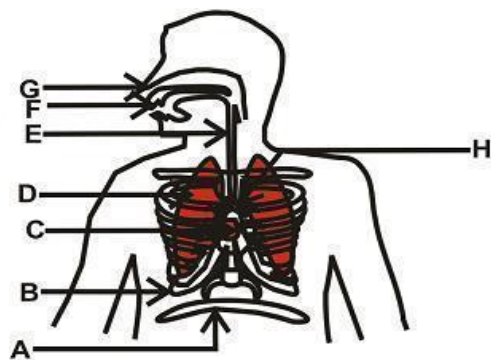
The Correct answer is option [D].

11. Which one of these disease is associated with the respiratory system?

- A. Asthma
- B. Anemia
- C. Malaria
- D. Diarrhoea

The correct answer is option (A)

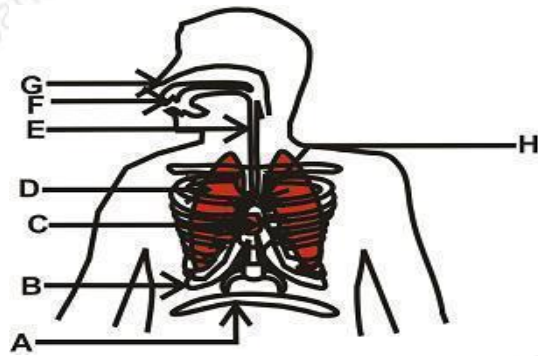
12. From the diagram shown, the part labelled G is called the \_\_\_\_\_.



- A. nose
- B. windpipe
- C. rib
- D. diaphragm

The correct answer is option [A]

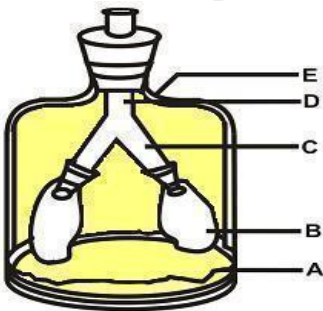
13. From the diagram shown, the part labelled F is called the \_\_\_\_\_.



- A. nose
- B. windpipe
- C. mouth
- D. bronchus

The correct answer is option [C]

14. From the diagram shown, the part labelled E is called the \_\_\_\_\_.



- A. bronchus
- B. lung
- C. diaphragm
- D. bell jar

The correct answer is option [D].

15. Which of the following is NOT true of respiration?

- A. It is also known as tissue respiration.

- B. It always takes place in the absence of oxygen.
- C. It takes place in all living cells.
- D. It is also called internal respiration.

The correct answer is option [B].

16. The process of taking in air is known as \_\_\_\_\_.

- A. inspiration
- B. expiration
- C. respiration
- D. inhalation

The correct answer is option [A].

Inspiration is the process of taking air into the lungs (inhalation).

17. The center which controls respiratory activities in the mammalian brain is the \_\_\_\_\_.

- A. cerebrum
- B. medulla
- C. olfactory
- D. pituitary organ

The correct answer is option [B]

18. Metabolism that uses is called \_\_\_\_\_.

- A. ox metabolic
- B. aerobic metabolism
- C. anaerobic metabolism
- D. metabolic oxygenation

The correct answer is option [B].

19. Which one of the following is given off as a by-product during respiration?

- A. Oxygen
- B. Carbon dioxide
- C. Glucose
- D. Protein

The Correct answer is option [B].

20. The air we breathe out is referred to as \_\_\_\_\_.

- A. inhaled air
- B. inspiration
- C. exhaled air
- D. inspired air

The correct answer is option [C].

21. Which one of the following are respiratory organs in man?

- i Nose
- ii Trachea
- iii Lungs
- iv Mouth

- A. i, ii, iii and iv
- B. ii and iii
- C. i, ii and iii
- D. i, ii and iv

The correct answer is option [C].

22. The air we breathe in is referred to as \_\_\_\_\_.

- A. exhaled air

- B. expiration
- C. inhaled air
- D. expired air

The correct answer is option [C].

23. \_\_\_\_\_ is when the body is sensitive to certain substances.

- A. Antibody
- B. Alergy
- C. Allergy
- D. Antigens

The correct answer is option [C].

An allergy is a reaction of your immune system to something that does not bother most other people.

24. The diagram shown is an illustration of the human \_\_\_\_\_ system.

- A. skeletal
- B. circulatory
- C. respiratory
- D. digestive

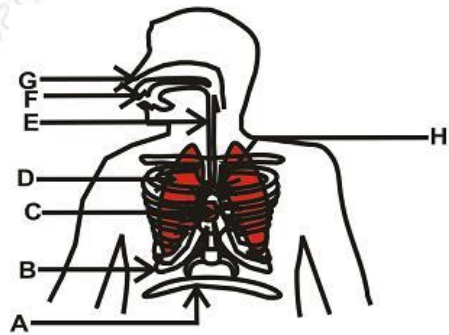
The correct answer is option [C]

25. Which of the following is a content of the air we breathe out?

- A. Carbon (iv) oxide
- B. Hydrogen peroxide
- C. Oxygen
- D. Nitrogen

The correct answer is option [A]

26. From the diagram shown, the part labelled A is called the \_\_\_\_\_.



- A. rib
- B. diaphragm
- C. heart
- D. lungs

The correct answer is option [B].

27. The process of taking in air is known as \_\_\_\_\_.

- A. inspiration
- B. expiration
- C. exhalation
- D. suffocation

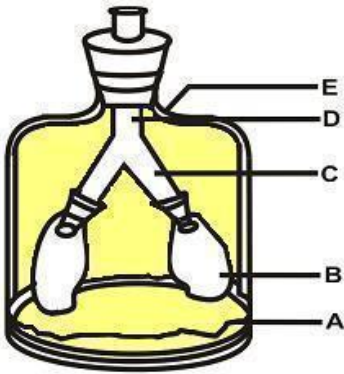
The correct answer is option [A]

28. What happens when carbondioxide is put into a solution of lime water?

- A. It turns red.
- B. It turns milky.
- C. It turns blue.
- D. There is no change.

The correct answer is option [B]

29. From the diagram shown, the part labelled C is called the \_\_\_\_\_.



A. diaphragm

B. trachea

C. bronchus

D. lung

The correct answer is option [C].

30. Complete the equation given:

carbohydrate + =

A. + carbohydrate + glucose

B. + carbondioxide +

C. carbondioxide + glucose +

D. + glucose +

The correct answer is option [B].

31. Which one of the following is the reason why breathing through the mouth is not good for health?

A. Because the mouth is not a passage way for air and contains the organs for breathing.

B. Because the mouth is a passage way for air and contains the organs for breathing.

C. Because the mouth is not a passage way for air and does not contain the organs for breathing.

D. Because the mouth is a passage way for air and does not contain the organs for breathing.

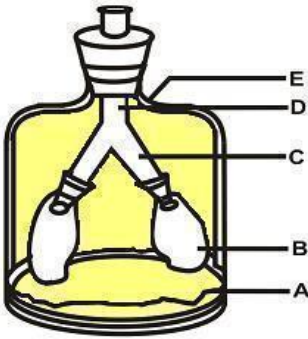
The correct answer is option [C]

32. Which of the following is NOT an organ of the respiratory system?

- A. Stomach
- B. Nose
- C. Trachea
- D. Lungs

The correct answer is option [A]

33. The diagram shown, illustrates \_\_\_\_\_ - \_\_\_\_.



- A. a model of the circulatory system
- B. a model of the
- C. a model of the
- D. a model of the

The correct answer is option [C].

34. Which one of the following options is correct and better for health?

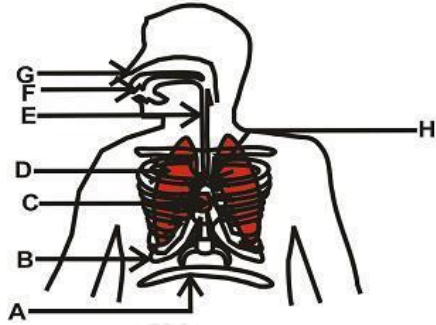
- A. Breathing through the nose and mouth.
- B. Breathing through the nose.
- C. Breathing through the mouth.



D. Breathing through one part of the nose.

The correct answer is option [B]

35. From the diagram shown, the part labelled C is called the \_\_\_\_\_.



A. windpipe

B. mouth

C. bronchus

D. heart

The correct answer is option [D]

36. The passing out of used air from the body is called \_\_\_\_\_.

A. respiration

B. breathing

C. expiration

D. inspiration

The correct answer is option [C].

37. Which one of the following is a way to get enough when you are in a building?

A. There should be cross ventilation.

B. The building should be without windows.

C. All the air in the building should be removed.

D. There should be no ventilation at all.

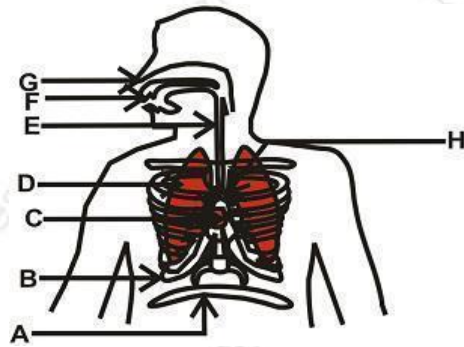
The correct answer is option [A].

38. Which of the following is responsible for the process of inspiration and expiration?

- A. Heart
- B. Liver
- C. Brain
- D. Lungs

The correct answer is option [D]

39. From the diagram shown, the part labelled H is called the \_\_\_\_\_.



- A. nose
- B. bronchus
- C. windpipe
- D. diaphragm

The correct answer is option [B]

40. Which one of the following is a breathing problem that occurs when particles in the air causes difficulty in breathing?

- A. Hay Fever
- B. Catarrh
- C. Asthma
- D. Cold

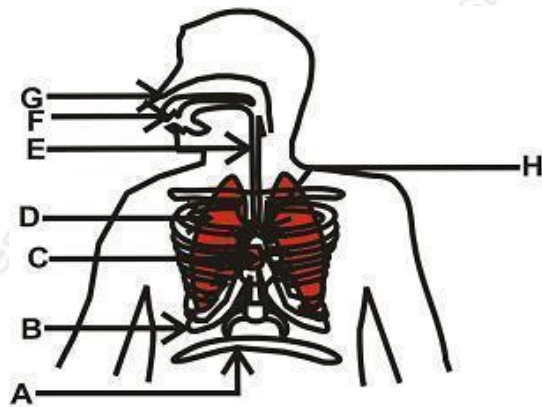
The correct answer is option [C].

41. Inspiration can also be referred to as \_\_\_\_\_.

- A. breathing
- B. expiration
- C. perspiration
- D. aspiration

The correct answer is option [A].

42. From the diagram shown, the part labelled E is called tthe \_\_\_\_\_.



- A. diaphragm
- B. windpipe
- C. heart
- D. mouth

The correct answer is option [B]

43. What is the composition of vapour in inhaled air?

- A. 0.60%
- B. 16.02%
- C. Trace amount
- D. 95.00%

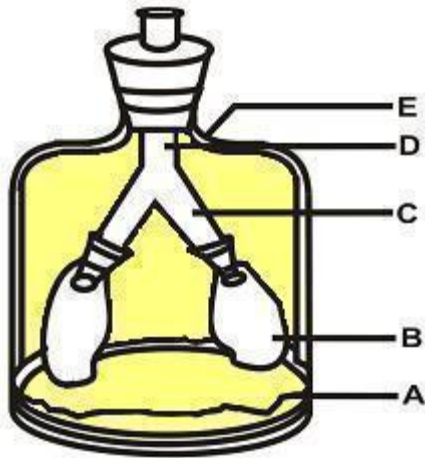
The correct answer is option [C].

Solution:

The table below gives the percentages of gases inhaled and exhaled.

GAS	INHALED AIR	EXHALED AIR
NITROGEN	79.00%	79.00%
OXYGEN	20.96%	16.02%
CARBON DIOXIDE	0.04%	4.38%
WATER VAPOUR	TRACE	0.60%

44. From the diagram shown, the part labelled D is called the \_\_\_\_\_.



- A. bronchus
- B. trachea
- C. bell jar
- D. diaphragm

The correct answer is option [B].

45. Which one of the following is the reason why is important to living things?

- A. It helps in the release of from digested food.
- B. It aids the release of nutrients from digested food.
- C. It regulates the production of enzymes in the digestive system.

D. It reduces the production of bile in the body.

The correct answer is option [A].

46. When dust particles affect our lungs and cause problems in breathing, the condition is called \_\_\_\_\_.

- A. asthma
- B. tuberculosis
- C. catarrh
- D. silicosis

The correct answer is option [D].

47. The trachea divides into the \_\_\_\_\_.

- A. lungs
- B. alveoli
- C. bronchi
- D. larynx

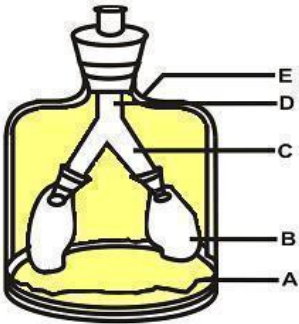
The correct answer is option [C].

48. \_\_\_\_\_ in inhaled air helps to burn the food we eat to integrate in our body.

- A. vapour
- B. Oxygen
- C. carbondioxide
- D. nitrogen

The correct answer is option [B]

49. From the diagram shown, the part labelled A is called the \_\_\_\_\_.



- A. diaphragm
- B. lung
- C. trachea
- D. bronchus

The correct answer is option [A].

50. Breathing in of air into the body is called \_\_\_\_\_.

- A. inspiration
- B. exhalation
- C. respiration
- D. expiration

The correct answer is option [A].

51. Respiration is best defined as the process by which \_\_\_\_\_.

- A. animal cells take in
- B. cells and tissues of the body produce
- C. plant cells take in carbon dioxide
- D. animal cells breakdown carbondioxides

The correct answer is option [B].

52. The center which controls respiratory activities in the mammalian brain is the\_\_\_\_\_.

- A. cerebrum
- B. medulla
- C. olfactory
- D. pituitary organ

The correct answer is option [B]

The Medulla Oblongata controls many involuntary movements of the body especially those concerned with respiration, heartbeat and digestion.

## TOPIC: RUSTING

**DIRECTION: Choose the correct answer from the lettered options.**

1. Which one of the following treatments CANNOT be used to prevent rusting?

- A. Coating with oil
- B. Galvanizing
- C. Cleaning
- D. Greasing

The correct answer is option [C].

2. Which of the following conditions is necessary for to take place?

- (i) Iron
- (ii) Water
- (iii) Oxygen

- A. I only
- B. I and ii only
- C. I, ii and iii
- D. I and iii only

The correct answer is option [C]

3. There is a steel plant in \_\_\_\_\_, Kogi State.

- A. Ajaokuta
- B. Oyo
- C. Rivers State
- D. Warri

The correct answer is option [A]



4. Rusting Is an example of \_\_\_\_\_?

- A. reduction
- B. neutralization
- C. substitution
- D. oxidation

The correct answer is option [D]

5. Metallic iron is coated with zinc in order to \_\_\_\_\_.

- A. give it a shiny appearance
- B. prevent it from
- C. make it strong
- D. make it denser

The correct answer is option [B]

6. When an iron rusts, the kind of change that takes place during the is referred to as a \_\_\_\_\_ change.

- A. mechanical
- B. physical
- C. chemical
- D. normal

The correct answer is option [C]

7. The formation of iron (III) oxide is called \_\_\_\_\_.

- A. electroplating
- B. greasing
- C. painting
- D. rusting

The correct answer is option [D]

8. In addition to water, \_\_\_\_\_ is essential for an iron to rust.

- A. air
- B. germs
- C. heat
- D. light

The correct answer is option [A]

9. Which one of the following measures CANNOT prevent iron from rusting?

- A. Galvanizing
- B. Electroplating
- C. Heating
- D. Painting

The correct answer is option [C]

10. Which of the following is NOT true about iron?

- A. Iron (ii) oxide is formed during rusting.
- B. It can be prevented by painting only.
- C. For to take place, there must be and moisture.
- D. It can be prevented by stopping air and from getting to the iron.

The correct answer is option [B].

## TOPIC: SIMPLE MACHINES

**DIRECTION:** Choose the correct answer from the lettered options.

1. Which one of the following is NOT an example of a simple machine?

- A. Bicycle
- B. Hoes
- C. Knives
- D. Axes

The correct answer is option [A]

2. The application of a force is referred to as \_\_\_\_\_.

- A. load
- B. fulcrum
- C. weight
- D. effort

The correct answer is option [D]

3. Which of the following is NOT a first class lever?

- A. Pliers
- B. Scissors
- C. Bottle opener
- D. Shears

The correct answer is option [C]

4. Which one of the following is applied to reduce the friction between machines?

- A. Petrol
- B. Gas
- C. Grease

D. Kerosene

The correct answer is option [C]

5. In comparing the body with machines, what serves as the load in the forearm?

- A. Palm
- B. Triceps muscles
- C. Bicep muscles
- D. Elbow

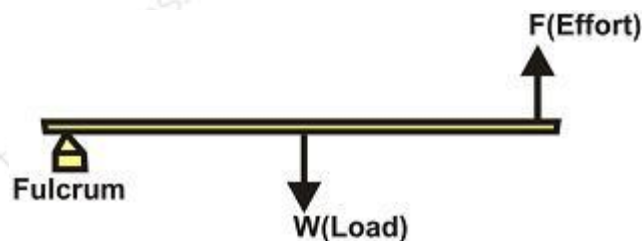
The correct answer is option [A]

6. The force which opposes motion when two surfaces are in contact is called \_\_\_\_\_.

- A. friction
- B. contact force
- C. field force
- D. repelling force

The correct answer is option [A]

7. The diagram shown is an illustration of a \_\_\_\_\_.



- A. First order lever
- B. Third order lever
- C. Second order lever
- D. last order lever

The correct answer is option [C]

8. A \_\_\_\_\_ is any instrument that enables us to do work easily.

- A. lever
- B. pulley
- C. machine
- D. plunched plane

The correct answer is option [C]

9. If the body is compared with machines, what serves as the fulcrum in the forearm?

- A. Triceps muscles
- B. Elbow
- C. Palm
- D. Fingers

The correct answer is option [B]

10. Which one of the following is the point of pivoting?

- A. Weight
- B. Effort
- C. Fulcrum
- D. Load

The correct answer is option [C]

11. A force applied in a machine is called \_\_\_\_\_.

- A. force
- B. effort
- C. mechanical advantage
- D. load

The correct answer is option [B]

12. Which one of the following are the two basic machines from which all others are made?

- A. Lever and jack
- B. Lever and inclined plane
- C. Pulley and jack
- D. Jack and inclined plane

The correct answer is option [B]

13. Which one of the following is NOT an example of a complex machine?

- A. Sewing machine
- B. Pump
- C. Car break
- D. Axes

The correct answer is option [D]

14. A device for transferring from one place to another is called a \_\_\_\_\_.

- A. tool
- B. lever
- C. machine
- D. motor

The correct answer is option [C]

15. Which one of the following is best for maintaining machines?

- A. Servicing with groundnut oil
- B. Cleaning with
- C. Cleaning and servicing
- D. Dusting

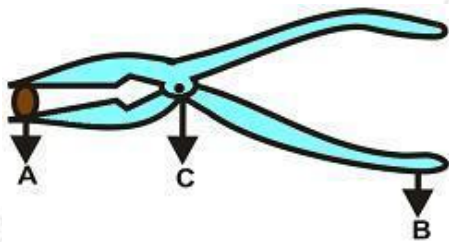
The correct answer is option [C]

16. \_\_\_\_\_ is a type of incline plane.

- A. Axe
- B. Hammer
- C. Screw
- D. Pulley

The correct answer is option [C]

17. The diagram below shows a plier. The part labelled A is the \_\_\_\_\_.



- A. effort
- B. fulcrum
- C. load
- D. style

The correct answer is option [C]

18. Which one of the following is a name given to an object that is being lifted?

- A. Load
- B. Weight
- C. Effort
- D. Fulcrum

The correct answer is option [A]

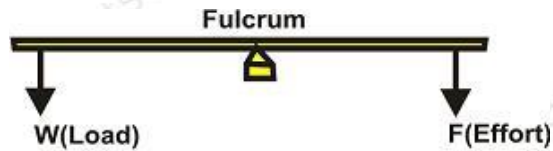
19. \_\_\_\_\_ are force multipliers.

- A. Levering
- B. Machines

- C. Wheel and axle
- D. Inclined planes

The correct answer is option [B]

20. The diagram shown is an illustration of a \_\_\_\_\_.



- A. First order lever
- B. Second order lever
- C. Third order lever
- D. closed order lever

The correct answer is option [A]

21. When the force ratio is less than 1 it is known as \_\_\_\_\_.

- A. efficiency
- B. mechanical disadvantage
- C. velocity ratio
- D. mechanical advantage

The correct answer is option [B]

22. Which of these can lift a heavy load to the roof of a building?

- A. Hammer
- B. Jack
- C. Pulley
- D. Screw

The correct answer is option [C]



23. The force ratio of a machine is \_\_\_\_\_.

- A. the product of the load to effort
- B. the sum of the load to effort
- C. the ratio of the load to effort
- D. the ratio of the effort to the load

The correct answer is option [C]

24. The diagram shown is an illustration of a \_\_\_\_\_.

- A. Second order lever
- B. Third order lever
- C. First order lever
- D. open order lever

The correct answer is option [B]

25. A pulley is also a type of \_\_\_\_\_.

- A. load
- B. effort
- C. weight
- D. lever

The correct answer is option [D]

26. In comparing the body with machines, what provides the effort in the forearm?

- A. Bicep muscles
- B. Palm
- C. Elbow
- D. Triceps muscles

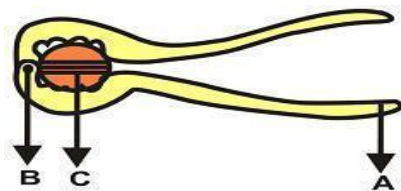
The correct answer is option [A]

27. Which one of the following is the correct machine used to split wood?

- A. Axe
- B. Wedge
- C. Wheel and axle
- D. Incline plane

The correct answer is option [A]

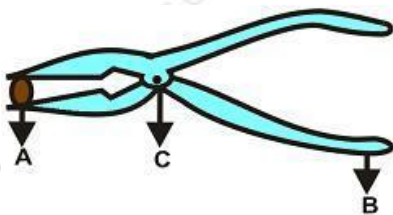
28. The diagram below shows a nut cracker. The part labelled B is the \_\_\_\_\_.



- A. load
- B. fulcrum
- C. effort
- D. force

The correct answer is option [B]

29. The diagram below shows a plier. The part labelled B is the \_\_\_\_\_.



- A. effort
- B. fulcrum
- C. load
- D. joints

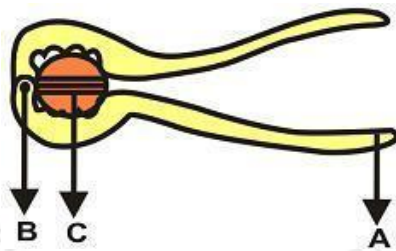
The correct answer is option [A]

30. Which one of the following is the correct machine used to chop wood?

- A. Wedge
- B. Car jack
- C. Axe
- D. Pulley

The correct answer is option [C]

31. What kind of lever is represented by the diagram below?



- A. First order lever
- B. Second order lever
- C. Third order lever
- D. Closed order lever

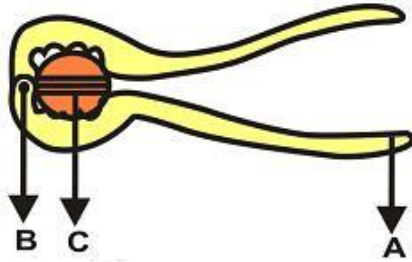
The correct answer is option [B]

32. Which of the following is the correct machine used to raise a load from the ground into a lorry?

- A. Car jack
- B. Axe
- C. Wedge
- D. Inclined plane

The correct answer is option [C]

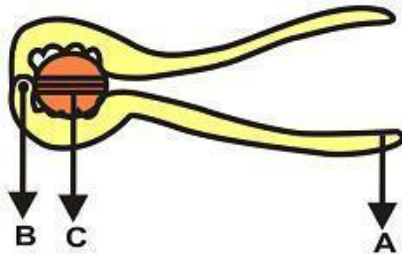
33. The diagram below shows a nut cracker. The part labelled A is the \_\_\_\_\_.



- A. load
- B. effort
- C. fulcrum
- D. weight

The correct answer is option [B]

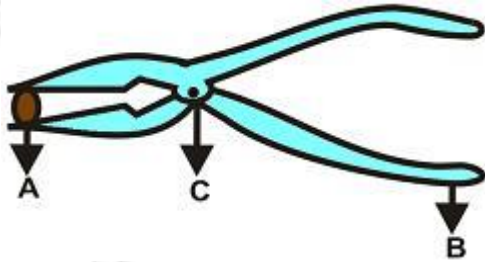
34. The diagram below shows a nut cracker. The part labelled C is the \_\_\_\_\_.



- A. fulcrum
- B. effort
- C. load
- D. circle

The correct answer is option [C]

35. The diagram below shows a plier. The part labelled C is the \_\_\_\_\_.



- A. load
- B. fulcrum
- C. effort
- D. joining

The correct answer is option [B]

36. When a force ratio is greater than 1 it is known as a \_\_\_\_\_.

- A. mechanical disadvantage
- B. velocity ratio
- C. mechanical advantage
- D. efficiency

The correct answer is option [C]

37. Friction between two surfaces can be reduced with the use of \_\_\_\_\_.

- A. grease
- B. oil
- C. ball bearing
- D. all of the above

The correct answer is option [D].

## TOPIC: SKELETAL AND MUSCULAR SYSTEM

**DIRECTION:** Choose the correct answer from the lettered options.

1. A flexible connective tissue present between one vertebra and another is called \_\_\_\_\_.

- A. cartilage
- B. hip
- C. knee cap
- D. spine

The correct answer is option [A]

2. \_\_\_\_\_ is a disease condition in which the thinning of muscle tissues causes the death of the muscle.

- A. Cramp
- B. Osteomalacia
- C. Dystrophy
- D. Dislocation

The correct answer is option [C]

3. In the human body, involuntary muscles can be found in the \_\_\_\_\_.

- A. arm
- B. foot
- C. head
- D. heart

The correct answer is option [D]

4. The bony structure which gives animals rigidity and support is called the \_\_\_\_\_.

- A. ligaments
- B. skeleton
- C. cartilage
- D. joint

The correct answer is option [B]

5. There are \_\_\_\_\_ kinds of muscles.

- A. 3
- B. 2
- C. 1
- D. 4

The correct answer is option [B]

6. What is the name of the bony structure which contains the brain of animals?

- A. Sphere
- B. Skull
- C. Head
- D. Neck

The Correct answer is option [B].

7. There are over \_\_\_\_\_ bones and more than \_\_\_\_\_ joints in the human skeleton.

- A. 100,150
- B. 150, 200
- C. 200,150
- D. 200,100

The correct answer is option [C]

8. The structures which give strength and rigidity to animals are called \_\_\_\_\_.

- A. cartilages
- B. muscles
- C. skeleton
- D. tendons

The correct answer is option (C)

9. Which one of these is a chemical substance that helps to build the bones?

- A. Potassium
- B. Calcium
- C. Iron
- D. Silver

The correct answer is option [B]

10. Which of the following is NOT a component of a joint?

- A. Diaphragm
- B. Synovial fluid
- C. Cartilage
- D. Synovial membrane

The correct answer is option [A]

11. A major function of the skeletal system in the body is \_\_\_\_\_.

- A. digestion
- B. shape
- C. support
- D. excretion

The correct answer is option [C]



12. The muscles of internal organs are called \_\_\_\_\_ muscles.

- A. cardiac
- B. triceps
- C. smooth
- D. skeletal

The correct answer is option [C]

13. The curved spine of the skeleton is important because \_\_\_\_\_.

- A. it enables man to stand erect
- B. it makes man to grow old
- C. it enables man to bend
- D. it protects the lungs

The correct answer is option [A]

14. The appendages consist of all the following EXCEPT\_\_\_\_\_.

- A. shoulders
- B. ribs
- C. pelvis
- D. spine

The correct answer is option [D]

15. What makes a man stand upright when moving about?

- A. His developed brain
- B. His large skull
- C. His skeletal frame
- D. The muscle cover of the skeleton

The correct answer is option [C]

16. The human skeleton is made up of \_\_\_\_\_ main parts.

- A. 1
- B. 2
- C. 3
- D. 4

The correct answer is option [B]

17. What are the names of the bones that make up the back bone of an animal?

- A. Spinal cord
- B. Vertebra
- C. Cartilage
- D. Calcium

The Correct answer is option [B].

18. Which one of the following is NOT an example of exoskeleton?

- A. Hair
- B. Hoof
- C. Skull
- D. Shell

The correct answer is option [C]

19. The place where bones meet and are connected in such a way as to form a hinge is called \_\_\_\_\_.

- A. ligament
- B. tendon
- C. joint
- D. cartilage

The correct answer is option [C]

20. Which one of the following is NOT a joint?

- A. Condylloid
- B. Saddle
- C. Gliding
- D. Hoof

The correct answer is option [D].

21. The hinge joint is found in the following EXCEPT the \_\_\_\_\_.

- A. knees
- B. fingers
- C. shoulders
- D. toes

The correct answer is option [C]

22. The two main parts of the human skeletal system are the \_\_\_\_\_ and \_\_\_\_\_.

- A. central column of bones, appendages
- B. spine, muscles
- C. vertebral column, ribs
- D. vertebral column, girdles

The correct answer is option [A]

23 Which of the following is NOT a function of the human skeletal system?

- A. Attachment
- B. Movement
- C. Support
- D. Storage

The correct answer is option [D]

24. In order to produce movement, the bones and the muscles form a \_\_\_\_\_ system in the body.

- A. lever
- B. chord
- C. pulley
- D. force

The correct answer is option [A]

25. An upset in the skeletal system in which the bones lose their position at the joints is referred to as\_\_\_\_\_.

- A. porosis
- B. osteomalacia
- C. fracture
- D. dislocation

The correct answer is option [D]

26. The functions of the skull and ribs includes \_\_\_\_\_.

- A. protection of the delicate organs of the body
- B. giving normal shape to the body
- C. helping in the growth of the body
- D. lubricating the body

The correct answer is option [A]

27. Joints are held together by brands and sheets of very tough connective tissues known as \_\_\_\_\_.

- A. ligaments
- B. muscles
- C. cartilage
- D. tendons

The correct answer is option [A]

28. \_\_\_\_\_ is a strong whitish cord which attaches muscles to bones.

- A. Aorta
- B. Bladder
- C. Tendon
- D. Cord

The correct answer is option [C]

29. A problem of the muscular system in which the muscles contract without relaxing is known as \_\_\_\_\_.

- A. osteoporosis
- B. fracture
- C. muscular dystrophy
- D. muscular cramp

The correct answer is option [D]

30. There are more than \_\_\_\_\_ joints in the human skeleton.

- A. 150
- B. 170
- C. 200
- D. 250

The correct answer is option [A]

31. The skeletal and muscular systems work together to enable body \_\_\_\_\_.

- A. enlargement
- B. growth
- C. muscles
- D. movement

The correct answer is option [D]

32. \_\_\_\_\_ is another name for pelvic girdle.

- A. Cartilage
- B. Hip
- C. Knee cap
- D. Spine

The correct answer is option [B]

33. Which one of the following is NOT an organ of locomotion?

- A. Cilia
- B. Fins
- C. Gills
- D. Legs

The correct answer is option [C]

34. Which one of the following is part of the axial skeleton?

- A. Skull
- B. Pectoral
- C. Pelvic girdle
- D. Arms

The correct answer is option [A].

35. \_\_\_\_\_ is the oily liquid that lubricates all the joints in the body to reduce friction.

- A. Marrow
- B. Blood
- C. Synovial fluid
- D. Cartilage

The correct answer is option [C]

36. The skeleton is made up of over \_\_\_\_\_ bones.

- A. 150
- B. 200
- C. 250
- D. 300

The correct answer is option [B]

37. Muscles are attached to bones by means of \_\_\_\_\_.

- A. triceps
- B. biceps
- C. tendons
- D. cartilage

The correct answer is option [C]

38. What is the name of the bony framework in the human body?

- A. Frame
- B. Spirit
- C. Skeleton
- D. Soul

The Correct answer is option [C].

39. Bones are made mainly of \_\_\_\_\_.

- A. sodium compounds
- B. calcium compounds
- C. copper compounds
- D. iodine

The correct answer is option [B]

40. The two kinds of muscles in our body are \_\_\_\_\_ and \_\_\_\_\_.

- A. voluntary, involuntary
- B. rough, smooth
- C. ventricle, auricle
- D. straight, crooked

The correct answer is option [A]

41. Which one of the following is NOT a function of the mammalian skeleton?

- A. Protection
- B. Movement
- C. Excretion
- D. Support

The correct answer is option [C]

42. The muscles of the heart are also known as \_\_\_\_\_ muscles.

- A. cardiac
- B. smooth
- C. biceps
- D. voluntary

The correct answer is option [A]

43. Another name for patella is \_\_\_\_\_.

- A. cartilage
- B. hip
- C. knee cap
- D. spine

The correct answer is option [C]



44. A joint which allows movement in all directions is called a \_\_\_\_ joint.

- A. hinge
- B. ball and socket
- C. compound
- D. slightly movable

The correct answer is option [B]

45. The individual bones of the spine are called \_\_\_\_\_.

- A. skull
- B. pelvis
- C. ribs
- D. vertebrae

The correct answer is option [D]

46. Which one of the following joints is formed by the articulation of the tibia, the malleolus of the fibula, and the convex surface of the talus?

- A. Ankle
- B. Knee
- C. Elbow
- D. Wrist

The correct answer is option [A]

47. The knee is an example of a \_\_\_\_\_ joint.

- A. ball and hinge
- B. fixed
- C. hinge
- D. ball and socket

The correct answer is option [C]

48. The ball and socket joint can be found between the \_\_\_\_\_ and \_\_\_\_\_.

- A. capsule, cartilage
- B. femur, tibia
- C. muscle, tendon
- D. pelvis, femur

The correct answer is option [D]

49. A condition in which a bone is broken is known as \_\_\_\_\_.

- A. dystrophy
- B. cramp
- C. fracture
- D. osteoporosis

The correct answer is option [C]

## TOPIC: WATER

**DIRECTION: Choose the correct answer from the lettered options.**

1. Which of the following best defines a solution?

- A. A heterogeneous mixture of a solute and a solvent.
- B. A non-uniform mixture of a solute and a solvent.
- C. A homogenous mixture of a solute and a solvent.
- D. A residue obtained during filtration.

The correct answer is option [C]

2. Cycle is defined as \_\_\_\_\_.

- A. the circulation of in the body
- B. the maintenance of body with
- C. the circulation of between the land, bodies and the atmosphere
- D. the uses of by the primary producers

The correct answer is option (C)

3. Without a constant supply of water, the body can die of \_\_\_\_\_.

- A. starvation
- B. malnutrition
- C. dehydration
- D. efflorescence

The correct answer is option [C]

4. The process involved for a wet cloth hung under the sun to get dry is called \_\_\_\_\_.

- A. percolation
- B. precipitation

- C. evaporation
- D. transpiration

The correct answer is option [C]

5. Why is chlorinated?

- A. To remove dissolved particles.
- B. To destroy disease causing bacteria.
- C. To remove hardness.
- D. To make the taste nice.

The correct answer is option [B]

6. If potassium tetraoxosulphate (vii) is dissolved in and there is a gradual change in the colour of water, what is the most satisfactory conclusion that you can draw from the experiment?

- A. is a universal solvent.
- B. Matter is made up of particles.
- C. Potassium tetraoxomanganate (vii) is a matter.
- D. is a matter.

The correct answer is option [A]

7. Two thirds ( $\frac{2}{3}$ ) of the body consists of \_\_\_\_\_.

- A. Water
- B. vitamins
- C. carbohydrates
- D. mineral salts

The correct answer is option [A]

8. When sugar is dissolved in water, a \_\_\_\_\_ is formed.

- A. solute
- B. solvent
- C. solution
- D. colloid

The correct answer is option [C]

9. The removal of salt from is known as \_\_\_\_\_.

- A. desolation
- B. salting
- C. salivating
- D. desalination

The correct answer is option [D]

10. Which one of the statements given below does NOT apply to a solution?

- A. The particles in a solution can pass through a fine filter paper.
- B. The particles are evenly distributed through the solvent.
- C. The solution is clear and transparent.
- D. It is a homogenous mixture of the solute and the solvent.

The correct answer is option [A]

11. Contaminated is boiled before drinking to get rid of \_\_\_\_\_.

- A. clay suspension
- B. dissolved gases
- C. dust particles
- D. harmful microbes

The correct answer is option [D]

12. When tiny particles of a solid are distributed in a liquid but NOT dissolved in it, the mixture is a \_\_\_\_\_.

- A. colloid
- B. suspension
- C. solution
- D. solvent

The correct answer is option [A]

13. \_\_\_\_\_ does NOT easily lather with soap.

- A. Suspension
- B. Saturated solution
- C. Hard
- D. Acidulated

The correct answer is option [C]

14. Which one of the following is NOT used during the physical separation of substances?

- A. Burette
- B. Filter paper
- C. Beaker
- D. Funnel

The correct answer is option [A]

15. Few drops of tetraoxosulphate (iv) acid are added to during the electrolysis of to increase it's \_\_\_\_\_.

- A. acidity
- B. alkalinity
- C. basicity
- D. conductivity

The correct answer is option [D]

16. Alum is added to \_\_\_\_\_.

- A. make it taste nice
- B. colour the
- C. destroy bacteria
- D. induce sedimentation

The correct answer is option [D]

17. The changing of into vapour or gas is called \_\_\_\_\_.

- A. humidity
- B. saturation
- C. condensation
- D. evaporation

The correct answer is option [D]

18. How many atoms of hydrogen are present in  $3\text{H}_2\text{O}$ ?

- A. 9
- B. 6
- C. 3
- D. 2

The correct answer is option [B]

19. Pure drinking should be \_\_\_\_\_ and \_\_\_\_\_.

- A. colourless, tasteless
- B. white, clear
- C. clear, tasty
- D. scenting, colourful

The correct answer is option [A]

20. During electrolysis of using platinum anodes and cathodes \_\_\_\_\_ and \_\_\_\_\_ are produced.

- A. hydrogen, nitrogen
- B. oxygen, chlorine
- C. carbondioxide, sulphur
- D. hydrogen,

The correct answer is option [D]

21. The addition of permute is a used in removing \_\_\_\_\_ water.

- A. temporary soft
- B. permanent soft
- C. temporary hard
- D. permanent hard

The correct answer is option [D]

22. A liquid which contains particles which are so small that they do not settle at the bottom but looks cloudy in a beam of light is called a \_\_\_\_\_.

- A. suspension
- B. saturated solution
- C. hard
- D. colloid

The correct answer is option [D]

23. The process of removing salt from sea is called \_\_\_\_\_.

- A. distillation
- B. fractional distillation
- C. desalination
- D. filtration

The correct answer is option [C]



24. A solution which will not dissolve any more solid is called \_\_\_\_\_.

- A. a suspension
- B. a saturated solution
- C. a hard
- D. an acidulated

The correct answer is option [B]

A solid is said to be in suspension in a liquid when small particles of it are distributed in it but not dissolved in it.

A colloid is a liquid which contains particles which are so small that they do not settle at the bottom

25. \_\_\_\_\_ is used to purify water.

- A. Oxygen
- B. Chlorine
- C. Hydrogen
- D. Zinc

The correct answer is option [B]

26. The body can die of \_\_\_\_\_ if there is no constant supply of water.

- A. starvation
- B. malnutrition
- C. dehydration
- D. efflorescence

The correct answer is option [C]

27. The continuous movement of from land, rivers and oceans to the atmosphere and from the atmosphere back to land, rivers and oceans is \_\_\_\_\_.

- A. cycle
- B. river cycle

C. ocean cycle

D. cycle

The correct answer is option [D]

28. The process by which solutions are decomposed into their constituents by means of electricity is called \_\_\_\_\_.

A. osmosis

B. electrolysis

C. peristalsis

D. metamorphosis

The correct answer is option [B]

29. Which of the following is an example of condensation in the cycle?

A. Clouds forming in the atmosphere.

B. Drops of falling through the air.

C. Puddles disappearing on a hot day.

D. Streams flowing into rivers.

The correct answer is option [A]

30. Substances that do NOT dissolve in to form a true solution but rather look cloudy in a beam of light are called\_\_\_\_\_.

A. solutions

B. solvents

C. suspensions

D. colloids

The correct answer is option [D]

Solvent is the liquid which dissolves the solid.

Solute is the solid that dissolves.

Solution is the mixture of solvent and solute.

When solute is dispersed in solvent, it is said to be in suspension.

31. The decomposition of to give hydrogen and occurs through the process of \_\_\_\_\_.

- A. decantation
- B. filtration
- C. electrolysis
- D. distillation

The correct answer is option [C]

32. Hard causes

I Wastage of fuel

II Wastage of soap

III Deposition of dirty scum on fabric

IV Difficulty in dyeing clothing

- A. I and II
- B. I, II and III
- C. II, III and IV
- D. I, II and IV

The correct answer is option [C]

33. Soap and detergents in makes it easier to wash clothes because they \_\_\_\_\_.

- A. make it lather
- B. increase its density
- C. increase its specific heat
- D. decrease the surface tension of the

The correct answer is option [D]

34. Substances which cause hardness of can be removed by all of these methods EXCEPT \_\_\_\_\_.

- A. adding  $\text{CaCO}_3$
- B. adding  $\text{Na}_2\text{CO}_3$
- C. adding  $\text{NaOH}$
- D. adding  $\text{Ca}(\text{OH})_2$

The correct answer is option [D]

35. Is a universal solvent because it \_\_\_\_\_.

- A. can dissolve substances
- B. can dissolve many substances
- C. does not occur without a solute
- D. is colourless and odourless

The correct answer is option [B]

36. What percentage of the body is made up of water?

- A. 80 - 90%
- B. 40 - 50%
- C. 60 - 70%
- D. 20 - 30%

The correct answer is option [A].

37. \_\_\_\_\_ is a common process of purifying water.

- A. Distillation
- B. Diffusion
- C. Condensation
- D. Evaporation

The correct answer is option [A]

38. Which of these substances can cause temporary hardness of water?

- A. Calcium hydrogen trioxocarbonate (IV)
- B. Calcium tetraoxosulphate (IV)
- C. Calcium trioxocarbonate (IV)
- D. Sodium hydrogen trioxocarbonate (IV)

The correct answer is option [A]

39. An example of a substance that forms colloidal solution in is \_\_\_\_\_

- A. dye
- B. palm oil
- C. salt
- D. starch

The correct answer is option [B]

40. Which of the following sources of provides the best drinking water?

- A. Ocean
- B. River
- C. Sea
- D. Spring

The correct answer is option [D]

41. Hardness of is caused by ions of \_\_\_\_\_.

- A. calcium
- B. ammonium
- C. potassium
- D. sodium

The correct answer is option [A]

42. When a liquid carries current, the composition changes due to a chemical effect that is referred to as \_\_\_\_\_.

- A. electrolysis
- B. electrodes
- C. anode
- D. cathode

The correct answer is option [A]