

Science Biology

1) Which of the following microbes are spread through vectors?

- a) Entamoeba
- b) Coryne bacteria
- c) Plasmodium
- d) Meningococcus
- e) Viruses of chicken pox and measles
- f) Vibrio cholera
- g) Viruses
- h) Bacteria of plague

- a) A, C, E, H
- b) C, D, H
- c) B, E, F, H
- d) B, H

2) Honey bees collect _____ from the flower.

- a) Nectar and honey
- b) Pollen grains and nectar
- c) Honey and scent
- d) Pollen grains and honey

3) Fertilizer is defined as _____.

- a) The product of earthworm activity
- b) Animal excretions added into the soil
- c) Addition in soil to increase the fertility of soil
- d) All of the above

4) Vultures are on decline because of

- a) Use of DDT
- b) No food
- c) Use of Diclofenac Sodium in animals by VET
- d) all of these

5) Tendril is used to _____.

- a) Hold the stem in erect position
- b) Support the plant
- c) Expose the leaves properly
- d) Raise the fruits above the ground

- 6) Food preservative is used _____.
- a) For making the food thicker and palatable
 - b) To bring about the growth of microbes and to make it palatable
 - c) To make the product juicy and to kill the pathogens
 - d) For none of the above
- 7) This pesticide is banned in agriculture since 1984.
- a) Di-ethene
 - b) DDT
 - c) Endrine
 - d) Copper Oxychloride
- 8) To prevent plant from diseases _____ is the best method.
- a) Ploughing
 - b) Vaccination
 - c) Spray pesticides
 - d) Injection
- 9) Write the name of the disease which is caused by bacteria in human body.
- a) Measles
 - b) Chicken pox
 - c) Diarrhoea
 - d) Diphtheria
- 10) In near future there is a high probability of increase in patients of skin cancer because of _____.
- a) Increasing use of synthetic clothes
 - b) Increasing use of perfume spray
 - c) Harmful rays reaching Earth due to increasing pollution
 - d) All the above
- 11) Insectivorous plants are usually found in _____.
- a) Natural atmospheric condition
 - b) Atmosphere rich in CO₂
 - c) Atmosphere deficient in Nitrogen
 - d) None of these
- 12) An artery differs from the vein in having _____.
- a) Narrow lumen
 - b) Thicker walls
 - c) Valves to control direction of flow of blood towards the heart
 - d) None of the above

13) Which one of the following changes do not occur in Xerophytes?

- a) Developed root system
- b) Stem is green and fleshy
- c) Possess epiphytic roots
- d) Water storage tissue occur in mesophyll

14) Reproduction of plants without seed is _____.

- a) Sexual
- b) Asexual
- c) Vegetative
- d) All the above statements are false

15) Hair, hoof, nail, claw, fur, horns, feathers, scales etc. are exoskeletal elements; find out the group of having at least 3 of the above:

- (A) Fish (B) Mammal (C) Birds (D) Reptiles
- a) A, B, D
 - b) B, D
 - c) A, B, C
 - d) B, C

16) The atmosphere on Earth in the beginning was with less ____ and more ____
Slowly ____ was made available by green plants and therefore we exist today.

- a) N₂, CO₂, O₂
- b) H₂, O₂, CO₂
- c) CO₂, H₂, O₂
- d) N₂, O₂, CO₂

17) Mammals are widely distributed in the world because they are _____.

- a) Cold blooded animals
- b) Can eat different types of food
- c) Can tolerate temperature variations
- d) Are highly evolved

18) Which of the following is the membrane system in a cell?

- a) Nuclear membrane
- b) Plasma membrane
- c) Endoplasmic reticulum membrane
- d) Golgi bodies

19) The liquid filtered out in a Bowman's capsule is _____.

- a) Excreted by the kidney
- b) Absorbed back into the blood
- c) Selectively absorbed back into the blood circulation and then excreted
- d) Red in colour

20) These are examples of Monocotyledon plants _____.

- a) Rice, Wheat, Pea
- b) Rice, Wheat, Jowar
- c) Wheat, Rice, Mango
- d) Mnago, Pea, Ground nut

21) The use of mouth parts in the honey bee is for _____.

- a) Only sucking the nectar
- b) Piercing the flower and sucking the nectar
- c) Sponging the nectar and biting the fruits
- d) Chewing the pollen grains and sucking the nectar

22) Vertebrate fossils have only teeth and bones because _____.

- a) They are hard
- b) They are not easily decomposed
- c) As they are white, they are prominently seen in stones
- d) They are more in amount in the body of an animal

23) $6\text{CO}_2 + 6\text{H}_2\text{O} + \text{Sunlight} \rightarrow \text{C}_6\text{H}_{12}\text{O}_6 + 6\text{O}_2$. This chemical reaction represents the process of _____.

- a) Respiration
- b) Photosynthesis
- c) Oxygen revival process
- d) None of the above

24) Nutrients are supplemented to plants by providing them with _____.

- a) Rodents
- b) Weedicides
- c) Insecticides
- d) Fertilizers

25) Malaria is caused by _____.

- a) Leishmania
- b) Giardia
- c) Plasmodium
- d) Entamoeba

26) Tobacco smokers face a high risk of _____.

- a) Lung cancer
- b) Liver cancer
- c) Brain cancer
- d) Blood cancer

27) A hole in the ozone layer can cause _____.

- a) Rise in temperature
- b) Leaking of lava
- c) Skin cancer
- d) None of the above

28) Solar energy can be converted into chemical energy by_____.

- a) Consumers
- b) Green plants
- c) Decomposers
- d) Omnivorous

29) Due to industrial revolution there is pollution of _____.

- a) Air
- b) Water
- c) Soil
- d) All of the above

30) Which of the following is bio - degradable?

- a) Rubber
- b) Plastic
- c) Animal excreta
- d) None of the above

31) Which one of the following is renewable resource?

- a) Coal
- b) Metal ore
- c) Water
- d) Both a & c

32) Which are of the following is non bio – degradable?

- a) Paper
- b) Glass bottle
- c) Bone
- d) None of the above

33) Skin cancer is caused due to _____.

- a) Radio waves
- b) X - rays
- c) Ultra - violet rays.
- d) All of the above

34) Human body has _____ of total body weight as water.

- a) 60%
- b) 65%
- c) 70%
- d) 75%

35) The most abundant constituent of air is _____.

- a) Carbon dioxide
- b) Nitrogen
- c) Water vapour
- d) Oxygen

36) The main consumers of carbon dioxide are _____.

- a) Plants
- b) Oceans
- c) Living organisms
- d) Both a & b

37) Which one of the following is a green house gas?

- a) Argon
- b) Nitrogen
- c) Ozone
- d) Carbon Monoxide

38) Green plants synthesize their food from simple substances like _____.

- a) Carbon dioxide & Monoxide
- b) Carbon monoxide & water
- c) Water & carbon tetrachloride
- d) Water and carbon dioxide

39) Arrangement of various stages in the life of an organism sequentially should be _____.

- a) Birth, Reproduction, Growth, Death
- b) Growth, Reproduction, birth, Death
- c) Birth, Reproduction, Death, Growth
- d) Birth, Growth, Reproduction, Death

40) Greenhouse effect refers to increase in _____.

- a) Global temperature.
- b) Carbon monoxide
- c) Atmospheric pressure
- d) Greenery

- 41) Which of the following are bio-degradable wastes?
- a) Glass bottle
 - b) Paper
 - c) Wheat
 - d) None of the above
- 42) Environment means _____.
- a) All living as well as non living constituents of the surrounding together
 - b) Which changes constantly
 - c) Components which change constantly
 - d) Which is different at different places
- 43) The root rot disease is caused by:
- a) Pseudomonas
 - b) Xanthomonas
 - c) Erwinia
 - d) Plasmodium
- 44) Curd can not be formed from fresh milk because:
- a) Increase in temperature is necessary for the growth of microbes
 - b) Naturally occurring different microbes are present in the milk
 - c) Fats in milk melt
 - d) Any other reason
- 45) Morphology is a study of _____.
- a) Form and structure of plants and animals
 - b) Various parts of body
 - c) Micro - organisms
 - d) None of these
- 46) The substance obtained as a result of decomposition of plants and animals is called _____.
- a) Fertilizers
 - b) Molasses
 - c) Humus
 - d) Antibiotics
- 47) _____ roots are the orchid's adaptive features.
- a) Tap
 - b) Hanging
 - c) Epiphytic
 - d) Tendrils

48) A lichen is a combined growth of _____ and _____.

- a) Algae and chlorella
- b) Fungus and chlorophyll
- c) Algae and fungus
- d) Any other

49) Frog has bulging eyes because _____.

- a) Structure of the body
- b) Suitable to body
- c) To see around because neck is absent
- d) All above are correct

50) Adaptation means _____.

- a) Structural changes due to environmental changes
- b) Response given by living thing to external change
- c) Necessary to survive living things
- d) Above (a) and (c)

51) Micro-organisms means _____.

- a) Pathogens of extremely small size
- b) Invisible living things
- c) Living things visible to naked eye
- d) Living things which are not visible to naked eyes

52) Salination of land is due to _____.

- a) Basic substances in fertilizers react with the acids in the soil
- b) Salts are added to the soil
- c) CO₂ and N₂ from air react with acidic substances in soil
- d) Salts dissolve in water in soil

53) Which of the following is not an aerial adaptation of bird?

- a) Fore limbs modified to wings
- b) Hollow bones
- c) Ovipary
- d) Tapering on both sides

54) Housefly: Cholera::? : ?

- a) Malaria, Mosquito
- b) Dog, Rabies
- c) Plague, Fleas
- d) Typhus, Head-louse

55) _____ elements are necessary for the growth and nurture of plants.

- a) Sodium, Phosphorus, Potassium
- b) Nitrogen, Sodium, Calcium
- c) Nitrogen, Potassium, aluminum
- d) Sodium, Potassium, Aluminum

56) Streptomycin destroys _____ micro organisms.

- a) Diphtheria
- b) Pneumonia
- c) Tuberculosis
- d) Typhoid

57) The largest cell in the human body is _____.

- a) Nerve cell
- b) Muscle cell
- c) Liver cell
- d) Kidney cell

58) The barrier between protoplasm and the outer environment in an animal cell is _____.

- a) Cell wall
- b) Nuclear membrane
- c) Tonoplast
- d) Plasma membrane

59) Maximum magnification that an electron microscope can give us is _____.

- a) 100X
- b) 1,000X
- c) 20,000X
- d) 2, 00,000X

60) The term cell is given by _____.

- a) Leeuwenhoek
- b) Robert Hooke
- c) Flemming
- d) Robert Brown

61) Who proposed the cell theory?

- a) Schleiden and Schwann
- b) Watson and Crick
- c) Darwin and Wallace
- d) Mendel and Morgan

62) A plant cell differs from an animal cell in the absence of _____.

- a) Endoplasmic reticulum
- b) Mitochondria
- c) Ribosomes
- d) Centrioles

63) Centrosome is found in _____.

- a) Cytoplasm
- b) Nucleus
- c) Chromosomes
- d) Nucleolus

64) The power house of cell is _____.

- a) Chloroplast
- b) Mitochondrion
- c) Golgi apparatus
- d) Nucleolus

65) Within a cell the site of respiration (oxidation) is the _____.

- a) Ribosome
- b) Golgi apparatus
- c) Mitochondrion
- d) Endoplasmic reticulum

66) Which is called the 'suicidal-bag'?

- a) Centrosome
- b) Lysosome
- c) Mesosome
- d) Chromosome

67) Ribosomes are the centre for _____.

- a) Respiration
- b) Photosynthesis
- c) Protein synthesis
- d) Fat synthesis

68) Double membrane is absent in _____.

- a) Mitochondria
- b) Chloroplast
- c) Nucleus
- d) Lysosomes

69) Cell organelle found only in plants is _____.

- a) Golgi apparatus
- b) Mitochondria
- c) Plastids
- d) Ribosomes

70) Organisms lacking nucleus and membrane bound organelle are _____.

- a) Diploids
- b) Prokaryotes
- c) Haploids
- d) Eukaryotes

71) Animal cell is limited by _____.

- a) Plasma membrane
- b) Cell membrane
- c) Cell wall
- d) Basement membrane

72) The network of endoplasmic reticulum is present in the _____.

- a) Nucleus
- b) Nucleolus
- c) Cytoplasm
- d) Chromosomes

73) Lysosomes are reservoirs of _____.

- a) Fat
- b) RNA
- c) Secretory glycoprotein
- d) Hydrolytic enzymes

74) The membrane surrounding the vacuole of a plant cell is called _____.

- a) Tonoplast
- b) Plasma membrane
- c) Nuclear membrane
- d) Cell wall

75) Cell secretion is done by _____.

- a) Plastids
- b) Endoplasmic reticulum
- c) Golgi apparatus
- d) Both b) and c)

76) Centriole is associated with _____.

- a) DNA system
- b) Reproduction
- c) Spindle formation
- d) Respiration

77) Main difference between animal cell and plant cell is _____.

- a) Nutrition
- b) Growth
- c) Movement
- d) Respiration

78) Animal cell lacking nuclei would also lack in _____.

- a) Chromosome
- b) Ribosome
- c) Lysosome
- d) Endoplasmic reticulum

79) Centromere is part of chromosome which helps in _____.

- a) Division of centrosome
- b) Formation of spindle fibers
- c) Movement of chromosomes
- d) Reappearance of nuclear membranes

80) DNA replication takes place in _____.

- a) G1 phase
- b) G2 phase
- c) S phase
- d) In all above phases

81) A cell has 4 chromosomes. After mitotic cell divisions the number of chromosomes in the daughter cell will be _____.

- a) 4
- b) 8
- c) 16
- d) 32

82) Which of the following stages is the longest in the first division of meiosis?

- a) Prophase
- b) Metaphase
- c) Anaphase
- d) Telophase

83) Division of cytoplasm is known as _____.

- a) Cytokinesis
- b) Karyokinesis
- c) Plasmolysis
- d) None of the above

84) Genes (hereditary units) are located on the _____.

- a) Chromosomes
- b) Nucleolus
- c) Nuclear membrane
- d) Plasma membrane

85) In which of the mitotic stages, all the chromosomes arranged on equatorial plane?

- a) Prophase
- b) Metaphase
- c) Anaphase
- d) Telophase

86) First division of meiosis is _____.

- a) Equational
- b) Reductional
- c) Reconstititional
- d) Homotypic

87) Synapsis occurs during _____.

- a) Meiosis
- b) Mitosis
- c) Amitosis
- d) None

88) The points where two of the four chromatids cross each other are known as _____.

- a) Chromomeres
- b) Centromeres
- c) Chiasmata
- d) Kinetochore

89) The branch of science which deals with the functions of different organs and tissues is called _____.

- a) Nutrition
- b) Morphology
- c) Physiology
- d) Anatomy

90) Metabolic processes in the body are catalyzed by _____.

- a) Enzymes
- b) Lipids
- c) Proteins
- d) Carbohydrates

91) The mode of nutrition in green plants is called _____.

- a) Holozoic
- b) Heterotrophic
- c) Saprophytic
- d) Halophytic

92) The mode of nutrition in non green plants is called _____.

- a) Holozoic
- b) Saprophytic
- c) Heterotrophic
- d) Autotrophic

93) Animals, which feed on plants as well as on animals, are called _____.

- a) Omnivorous
- b) Herbivorous
- c) Carnivorous
- d) Carrion-eaters

94) Hardest part in human body is _____.

- a) Dentine
- b) Enamel
- c) Keratin
- d) Chitin

95) Bulk of the tooth in mammals is made up of _____.

- a) Enamel
- b) Dentine
- c) Pulp cavity
- d) Root

96) In Stomach of man acidic pH helps in hydrolysis of _____.

- a) Carbohydrates
- b) Fats
- c) Proteins
- d) All

97) The process of carbon assimilation is known as _____.

- a) Transpiration
- b) Respiration
- c) Photosynthesis
- d) None of the above

98) The process of taking in CO_2 by plants and releasing O_2 is termed as _____.

- a) Transpiration
- b) Respiration
- c) Endosmosis
- d) Photosynthesis

99) Green plants manufacture sugar with the help of raw materials, water and _____.

- a) Chlorophyll
- b) CO_2
- c) Sunlight
- d) Oxygen

100) The source of energy for photosynthesis (or carbon assimilation) is _____.

- a) Water
- b) Chlorophyll
- c) Sunlight
- d) CO_2

101) The radiant energy is stored in the form of chemical energy _____.

- a) Stored food
- b) ATP
- c) DNA
- d) RNA

102) Which of the following sugar is present in considerable amount in the body?

- a) Galactose
- b) Fructose
- c) Sucrose
- d) Glucose

103) The commonest thing which can respire in the absence of oxygen is _____.

- a) Potato
- b) Fish
- c) Yeast
- d) Spirogyra

104) Instant source of energy is _____.

- a) Glucose**
- b) Fats**
- c) Proteins**
- d) Amino acids**

105) Glycolysis operates in _____.

- a) Cytoplasm**
- b) Endoplasmic reticulum**
- c) Golgi apparatus**
- d) Mitochondrion**

106) The final product of glycolysis is _____.

- a) Pyruvic acid**
- b) Malic acid**
- c) Acetyl-C₀ Enzyme**
- d) Glucose**

107) Krebs cycle occurs in _____.

- a) Cytoplasm**
- b) Lysosome**
- c) Mitochondria**
- d) Mitochondrial matrix**

108) Energy rich compound produced during biological oxidation of glucose is _____.

- a) Pyruvic acid**
- b) Adenosine triphosphate**
- c) Acetoacetate**
- d) Adenosine monophosphate**

109) Total number of ATP molecules formed (net gain) during the process of aerobic respiration is _____.

- a) 42**
- b) 14**
- c) 30**
- d) 38**

110) Your body loses water by the way of _____.

- a) Sweating, breathing and excretion**
- b) Excretion only**
- c) Breathing and excretion**
- d) Sweating and breathing**

111) Transpiration takes place from _____.

- a) Stem
- b) Leaves
- c) All parts of the plant
- d) Aerial parts only

112) Much of the transpiration takes place through _____.

- a) Lenticels
- b) Stomata
- c) Cuticle
- d) Epidermis

113) Translocation of the food material in plants takes place by _____.

- a) Xylem
- b) Phloem
- c) Epidermis
- d) Pith

114) The stomata open and close due to _____.

- a) Turgor pressure of guard cells
- b) Pressure of gases inside
- c) Their genetic constitution
- d) None

115) In plants, ascent of sap / food and water transportation takes place through _____ and _____.

- a) Cambium
- b) Xylem, Phloem
- c) Phloem, Xylem
- d) Epidermis

116) Pericardium is the enclosing double-walled membrane around _____.

- a) Cytoplasm
- b) Mitochondria
- c) Heart
- d) Nucleus

117) Leukocyte is the other name for _____.

- a) Red blood corpuscle
- b) White blood cells
- c) Blood platelet
- d) None

118) Blood minus all cells is called _____.

- a) Plasma
- b) Capillary
- c) Serum
- d) Platelets

119) Blood vessels carrying blood from lung to heart is called _____.

- a) Pulmonary artery
- b) Pulmonary vein
- c) Coronary artery
- d) Coronary vein

120) Which of the following has no muscular walls?

- a) Artery
- b) Vein
- c) Arteriole
- d) Capillary

121) Oxygenated blood is carried by _____.

- a) Pulmonary vein
- b) Pulmonary artery
- c) Renal vein
- d) Hepatic portal vein

122) A vein differs from artery in having _____.

- a) Narrow lumen
- b) Strong muscular walls
- c) Valves to control direction of flow
- d) Pigmented wall to give it a darker appearance

123) The smallest blood vessel in the body is a _____.

- a) Capillary
- b) Vein
- c) Artery
- d) Vena cava

124) Pulse beat is measured from _____.

- a) Artery
- b) Vein
- c) Nerve
- d) Capillary

125) Normal human blood pressure is _____.

- a) 120/80 mm of Hg**
- b) 80/120 mm of Hg**
- c) 100/80 mm of Hg**
- d) 80/1000 mm of Hg**