

9. One of the following is true about $\text{Mg} + 2$
- A. It has 14 electrons, 12 protons and 12 neutrons
 - B. It has 10 protons, 12 electrons and 12 neutrons
 - C. It has 10 electrons, 12 protons and atomic number of 12
 - D. It has 10 neutrons, 12 protons and 12 electrons
10. The first hormone secreted on boys' secondary sexual characters is
- A. Testosterone
 - B. LH
 - C. FSH
 - D. Progesterone
11. A symbiotic association in which two partners are benefited from their partnership and they can live separately is.....
- A. Mutualism
 - B. Protocooperation
 - C. Commensalism
 - D. Amensalism
12. What kind of image is formed on regularly polished flat mirror?
- A. Upside down inverted and virtual
 - B. Erected and virtual
 - C. Laterally inverted and virtual
 - D. Upside down inverted and real
13. One of the following planets has no ring around it
- A. Saturn
 - B. Mercury
 - C. Venus
 - D. Neptune
14. Acacia tree....> giraffe...> lion.....> Vulture.....> microorganisms. One of the following is false about the above food chain.
- A. The highest energy is found in the tree
 - B. Giraffes are primary consumers
 - C. Vulture killed and eat lion
 - D. The lowest energy is found in microorganisms

15. One of the following is secondary sexual characteristics of girls.
- A. Deepening of voice
 - B. Mensuration
 - C. Sperm production
 - D. Chest widening
16. One of the following compounds is not neutral.
- A. Hydrogen oxide
 - B. Nitric oxide
 - C. Carbon monoxide
 - D. Nitrogen dioxide
17. One is false about acids
- A. Acids have pH value of 0 -7
 - B. Acids are prepared from acidic oxide
 - C. Acids change red litmus to blue
 - D. Acids have sour taste
18. One is incorrect about magnets.
- A. Magnetic fields can't intersect one another
 - B. Like poles of magnet repelled each other
 - C. Any fraction of magnet has two poles
 - D. Opposite poles attract each other
19. One of the following is correct about menstrual cycle
- A. Normal menstrual cycle happens in average of 30 days
 - B. A woman in menopause period can have pregnancy
 - C. Normal menstrual cycle has three phases
 - D. Uterine phase is controlled by estrogen hormone
20. One is false about STD
- A. AIDS is considered as STD
 - B. Chancroid is caused by virus

- C. Syphilis can be transmitted through saliva
- D. Syphilis can be transmitted mother to child
21. Which one of the following hydrocarbon is the least saturated?
- A. Alkanes
- B. Alkynes
- C. Alkenes
- D. Alcohols
22. The male reproductive structure that produces alkaline solution for safe sperm journey is:
- A. Prostate gland
- B. Cowper's gland
- C. Testicle
- D. Seminal vesicle
23. Which one is false about men and women reproductive system?
- A. Women have longer urethra than men
- B. Both men and women produce sex hormones and sex cells in their gonads
- C. There is estrogen hormone in women as well as testosterone in men
- D. Women can get pregnant but men can't
24. One is incorrect about salts
- A. Can be formed from acidic oxide and base
- B. All salts are edible
- C. Salts have neutral pH
- D. There will be salt in rocks
25. A system in our body that is adapted to transportation of materials is:
- A. Digestive system
- B. Circulatory system
- C. Respiratory system
- D. Integumentary system
26. Which one of the following is correct about mutualism mode of symbiotic association?
- A. One partner is harmed
- B. Both partners are harmed

- C. Both partners are benefited
D. Partners must live together
E. D and C
27. The thickest blood vessel is:
- A. Aorta
B. Arterioles
C. Vena cava
D. Veinules
28. If we say penis for boys..... for girls.
- A. Vagina
B. Labium majora
C. Clitoris
D. Labium minora
29. Which one is the coldest planet ?
- A. Jupiter
B. Saturn
C. Uranus
D. Venus
30. One of the following is applied to conserve biodiversity.
- A. Deforestation
B. Reforestation
C. Afforestation
D. All except A
31. About 98% mass of our solar system is found on:
- A. Earth
B. Jupiter
C. Sun
D. Moon
32. One of the following is renewable natural resources
- A. Sun light energy
B. Plants
C. Wind energy
D. All
33. One of the following is false about female secondary sexual character
- A. Started by production of FSH
B. Testosterone production is increased
C. Some Physical and biological changes are visible
D. Size of genital organs is increased

34. Which planet of our solar system carries life?
- A. Jupiter B. Earth C. Saturn D. mercury
35. Which one of the following is false about RBC?
- A. Transports oxygen through body
- B. Have disc shape
- C. Don't have nucleus at maturity
- D. Hemoglobin has no role in oxygen transport
36. What is the function of platelets in our blood?
- A. Blood clotting at accident
- B. Prevent excess blood loss during accident
- C. Make blood with ideal thickness
- D. All
37. Which system is different on boys and girls from the eleven systems?
- A. Circulatory system C. Reproductive system
- B. Respiratory system D. Lymphatic system
38. Which one of the following is not an indigenous measurement ?
- A. Cubit B. Meter C. Weqet D. Feresula
39. The proliferative phase of menstrual cycle is controlled by the hormone.....
- A. Estrogen B. Progesterone C. LH D.FSH
40. What was the main idea of vital force theory?
- A. Living organisms can be made of organic compounds
- B. Organic compounds are found on both earth and living matter
- C. Organic compounds are formed only from living organism
- D. Earth is made up of organic matter

41. One of the following is incorrect about an atom
- A. Atoms are the smallest particle
 - B. An atom can be divided in to parts
 - C. An atom has two regions
 - D. An atom positively charged
42. One of the following is organic acid
- A. Carbonic acid
 - B. Nitric acid
 - C. Sulphuric acid
 - D. Ascorbic acid
43. A salt that is formed during the reaction of sodium metal and nitric acid is:
- A. Sodium phosphate
 - B. Calcium chloride
 - C. Sodium chloride
 - D. Sodium nitrate
44. One of the following is amphoteric oxide
- A. ZnO
 - B. Al₂O₃
 - C. PbO
 - D. All
45. $\text{Ca(OH)}_2 + \text{H}_3\text{PO}_4 \rightarrow \dots\dots\dots + \text{H}_2\text{O}$
- A. CaPO₃
 - B. Ca₃(PO₄)₃
 - B. Ca₃(PO₄)₂
 - D. CaPO₄
46. One of the following is mutualistic association
- A. Honey bees and flower
 - B. Algae and fungi in lichen
 - C. Termites and protozoa in their gut
 - D. Add
47. The functional unit of our lung is:
- A. Trachea
 - B. Brochi
 - C. Bronchioles
 - D. Alveoli

48. The smallest blood vessels where material exchange happen is:
- A. Arteries B. Veins C. Arterioles D. Capillaries
49. Where does the emulsification of fats happen in our digestive system?
- A. In mouth C. In stomach
- B. In small intestine D. In large intestine
50. The end products of carbohydrates can't be:
- A. Glucose B. Galactose C. Cellulose D. Fructose
51. The layer of our skin that prevent loss of excess heat by containing fat is:
- A. Epidermis C. Dermis
- B. Hypodermis D. All
52. One is axial skeleton
- A. Phalanges C. Tarsals
- B. Vertebrae D. Ulna
53. Plants cell wall is made up of
- A. Starch B. Cellulose C. Glycogen D. Amilopectin
54. Which one of the following statement is incorrect about stomach
- A. Muscular and elastic digestive bag
- B. Contains hydrochloric acid and pepsin
- C. Place of fat chemical digestion
- D. Found between esophagus and small intestine
55. On which part of our digestive system alcoholic drink is digested ?
- A. Mouth C. Stomach
- B. Small intestine D. It doesn't need digestion

56. Why do planets rotate around the sun? because
- A. They heat and light energy
 - B. They have their own moon
 - C. Sun's gravitational attraction force
 - D. Of Jupiter's high density
57. The red planet is:
- A. Mercury
 - B. Venus
 - C. Mars
 - D. Earth
58. One is incorrect about muscles:
- A. All muscles are made of fibers
 - B. Smooth muscles made blood vessels
 - C. Cardiac muscles make heart
 - D. Skeletal muscles make stomach
59. One of the following animal groups is characterized by feather and scale covered living things
- A. Mammals
 - B. Birds
 - C. Reptiles
 - D. Amphibians
60. Ethiopian scientists who discovered medicine for schizophrenia is:
- A. Zeresenay Tadesse
 - B. Akililu Lemma
 - C. Legese Worto
 - D. Gebisa ejita