

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