Yeka Sub City
Woreda 08 Education Office

2012 Biology Model Examination for Grade 8

March 2012
Addis Ababa

1. *Which of the following is **TRUE** about biology?*
   A. Biology is a science dealing with non living things.
   B. Biology studies about astronomy
   C. Biology is a science dealing with life
   D. Biology studies about the past history of human population
2. *Which of the following characteristics is **NOT** common for all living organisms?*
   A. Reproduction
   B. Movement
   C. Growth
   D. Metabolism
3. *Which one of the following branches of biology studies about plants?*
   A. Botany
   B. Zoology
   C. Microbiology
   D. Cytology
4. *Which one of the following practices indicates how biological knowledge is utilized in agriculture?*
   A. Controlling number of human
   B. Population Processing food in industries
   C. Protecting soil erosion
   D. Researching for new vaccines
5. *Suppose you are served all food groups except Vitamin C and Vitamin D. What will be the possible deficiency diseases that you develop respectively?*
   A. Anemia and Goiter
   B. Beriberi and Pellagra
   C. Goiter and Marasmus
   D. Scurvy and Rickets
6. *The first working microscope was made by:*
   A. Anton van Leeuwenhoek
   B. Robert Koch
   C. Robert Hook
   D. Pasteur
7. *Which one of the following is useful instrument to observe and study different type of cells?*
   A. Binocular
   B. Microscope
   C. Telescope

D. Thermometer

8. *type of microscope with two lenses is:*
   A. compound microscope
   B. hand lens
   C. ocular lens
   D. simple microscope
9. *The bottom part which supports microscope is:*
   A. Stage
   B. Diaphragm
   C. Base
   D. Arm
10. *What is the magnification of the image of an object observed using an eye piece lens with 10X magnification power and middle power objective lens labeled as 40X?*
   A. 4X
   B. 30X
   C. 50X
   D. 400X
11. *Which one of the following is a characteristic of animal cell?*
   A. Presence of largest vacuoles
   B. Absence of largest vacuoles
   C. Making their own food
   D. cellulose cell wall
   E. Presence of chloroplast

12 *The difference between plant and animal cells is:*
   A. plant cells have small vacuoles while animal cells have big vacuoles
   B. plant cells have chloroplast while animal cells do not
   C. plant cells have cell membrane while animal cell have cell wall
   D. plant cells have irregular shape while animal cells have regular shape

13. *Which of the following parts of human skeleton are axial?*
   A. skull, sternum, ribs and vertebral column
   B. Skull, hip and vertebral column,
   C. Sternum, hip, vertebral column, skull
   D. Ribs, skull, shoulder and ribs
14. *Which one of the following types of joints allows twisting movement?*
   A. Ball and socket
   B. Gliding
   C. Hinge
   D. Pivot
15. *Which one of the following muscles is correctly matched with its function?*
   A. Smooth muscle -- contracts and moves blood in intestine
   B. Cardiac muscle -- contracts and moves water in the body

C. Skeletal muscle -- contracts and moves blood in blood vessels
D. Smooth muscle -- contracts and moves food in intestine

16. The inner part of a tooth with blood vessels and nerves is:
A. pulp cavity
B. dentine
C. enamel
D. crown

17. X is used to cutting food; Y is used for tearing and piercing food; Z is used for crushing and grinding food. From the above terms which one fill the missing letter X, Y, and Z respectively?
A. X: Premolar, Y: Incisor, Z: Molar
B. X: Canine, Y: Molar, Z: Premolar
C. X: Incisor, Y: Canine, Z: Molar
D. X: Molar, Y: Premolar, Z: Canine

18. What is the total number of canines in the dental formula of 2/2,1/1,2/2,3/3?
A. 4
B. 8
C. 12
D. 2

19. Which of the following is an example of non- flowering plants?
A. Bahr zaf'
B. Koso'
C. Tid'
D. Wanza'

20. The part of a plant which is responsible for sexual reproduction is:
A. flower
B. leaf
C. root
D. stem

21. Which parts of the flower develop into fruit and seed respectively?
A. cotyledon, testa
B. ovary, ovule
C. ovule, ovary
D. embryo, ovary

22 Which animal uses limbs to run on the land?
A. Snakes
B. Whales
C. Frogs
D. Goats

23. Which of the following correctly matches an animal with its living place?

A. Arial animals →Live on branch of tree
B. Arboreal → Live in water
C. Aquatic animals → Live in air
D. Terrestrial animals → Live on land

24. Incomplete metamorphosis differs from complete metamorphosis in that its larval stage
A. completely differ from adult
B. involves complete change of form
C. closely resembles the adult
D. molts to pupa

25. Why do we use light colored clothing during honey harvesting?
A. Bees cannot see light colored clothing
B. Colorful clothing attracts bees
C. Colorful clothing makes bees run away
D. Light colored clothing attract the bees

26. A place where biotic factors interact with abiotic factors is:
A. community
B. ecology
C. habitat
D. population

27. The question below is based on the following lists of habitats.
1. Ponds, streams, hills and rivers
2. Forests, mountains, rocks and soils
3. Streams, ponds, rivers and seas
4. Forests, rocks, streams and soil
Which one of the list of habitats represents aquatic and terrestrial habitats respectively?
A. 1 & 2
B. 3 & 4
C. 1 & 4
D. 3 & 2

28. Which of the following tools is used to extract insect from the soil?
A. Sweep net
B. Tullgren funnel
C. Pooter
D. Pitfall trap

29. Which of the following procedure is correct about preserving plant specimens?
A. Mounting→ Labeling→ Collecting→ Pressing
B. Labeling→ Mounting→ Pressing→ Collecting
C. Collecting→ Pressing→ Mounting→ Labeling
D. Pressing→ Labeling→ Collecting→ Mounting

30. Which one of the following organisms belongs to the first tropics level in food chain?

A. Cat
B. Grass
C. Fox
D. Rat

31. Which of the following natural products is used to keep the beauty of our body?
A. Dingetegna
B. Enkoko
C. Ensosila
D. Kosso

32. Which one of the following is NOT the contribution of biology?
A. Keeping community health
B. Encouraging deforestation
C. Food production
D. Using selective breeding

33. Which of the following is the contribution of biology to society?
A. Conservation and protection of environment
B. Discovery of minerals in the ground
C. Innovation of computer
D. Discovery of planets in the universe

34. Which of the following technological products is correctly paired with its function?
A. Refrigerator- Enlarge and see objects
B. Balance-Listen internal body sound
C. Sphygmomanometer-Measure weight
D. Centrifuges- Separate components in a solution

35. Alemu was a grade 8 student. He was sick and taken to a hospital. The doctor took an apparatus and tied to it around his arm and measured something and recorded. What do you think the doctor did? He measured Alemu's:
A. body temperature
B. heart beat
C. blood pressure
D. breathing rate

36. Which technological product is used by biologists to study smaller organisms and cells?
A. Binoculars
B. Centrifuges
C. Microscope
D. Thermometer

37. Which of the following technological products maintains a constant temperature and humidity level in poultry?
A. Freezer
B. Incubator
C. Refrigerator

D. Thermometer

38. *Which of the following instruments is used to observe objects at a distant?*
    A. Binocular
    B. Microscope
    C. Hand lens
    D. Electron microscope
39. *Which of the following organisms feeds on algae and plays significant role in carbon cycle?*
    A. Bacteria
    B. Euglena
    C. Paramecium
    D. Yeast
40. *Which one of the following organisms is unicellular?*
    A. Fly
    B. Flea
    C. Protozoan
    D. Bee
41. *Which of the following is True about paramecium? Paramecium is _____.*
    A. irregular shaped structure
    B. slipper shaped structure
    C. parasitic microorganism
    D. can live in salt water habitat
42. *Which of the following unicellular organisms is mismatched with its locomotory structure?*
    A. Amoeba- Pseudopodia
    B. Paramecium- Cilia
    C. Yeast-Cilia
    D. Euglena-Flagellum
43. *A baker used baking powder into dough for the rising of dough. What similar effect does the baking powder have on the yeast?*
    A. Absorption
    B. Decomposition
    C. Digestion
    D. Fermentation
44. *Which one of the following is an economic importance of yeast?*
    A. Formation of alcoholic drinks
    B. The making of methane used as biogas
    C. Baking by providing oxygen to make bread rise
    D. Used as source of food for humans
45. *Which one of the following cell is found in plants?*
    A. Muscle cell
    B. Skin cell
    C. Sperm cell

D. Palisade cell

46. Which one of the following is true about both plant cell and animal cell?

A. Both plant and animal cells contain a nucleus
B. Both plant and animal cells contain cell wall
C. Both plant and animal cells contain large vacuole
D. Both plant and animal cells contain chloroplast

47. What are the long and branched cells that are involved in the messages in the body?

A. Blood cells
B. Muscle cells
C. Nerve cells
D. Skin cells

48. Which one of the following statements best describes the function of red blood cells?

A. transport oxygen through the body
B. transport wastes through the body
C. transports food through the body
D. defend the body against diseases

49. Which of the following is an animal tissue?

A. Mesophyll
B. Phloem
C. Xylem
D. Epithelial

50. An organ which is found in plants and involves in gas exchange is:

A. leaf
B. flower
C. root
D. stem

51. An organ that controls and coordinates the overall activities of the animal's body is:

A. eye
B. brain
C. heart
D. liver

52. Which one of the following is an example of the organ of digestive system?

A. Heart
B. Lymph
C. Liver
D. Blood

53. Which one of the following is correct about the primary sexual characteristics of males?

A. Sperm production

B. Hair growth around armpits
C. Having sex organs
D. Strengthening muscles of body

54. Which of the following is correct about human male and female secondary sexual characteristics
A. Female-deepening of voice; Male-enlargement of breast
B. Female-widening of voice; Male-widening of chest
C. Female-fast body growth; Male-fast body growth
D. Female-reduce desire to the opposite sex

55. The part of the female reproductive system where fertilization occurs is
A. cervix
B. uterus
C. oviduct
D. vagina

56. Which of the following reproductive structures produces sperm?
A. Penis B. Vagina C. Testes D.Ovaries

57. Which of the following is TRUE about female reproductive structure?
A. Fallopian tube(oviduct is the site of fertilization
B. Uterus (womb) is the site of fertilization
C. Cervix is the internal part of genitalia
D. Vulva is the internal part of the female genitalia

58. The ceasing age of menstruation in human female is between the ages of 45 and 50 years. This age is called:
A. puberty
B. menopause
C. old age
D. fertile age

59. If X is the site of fertilization and Y is the site for implantation, then X and Y respectively are:
A. vulva and uterus
B. vagina and uterus
C. oviduct and uterus
D. uterus and Fallopian tube

60. Which of the following statements is correct about the function of placenta?
A. Nutrients and wastes are exchanged across it
B. Secretes hormones necessary for growth
C. Exchanges blood from fetus to mother and vice versa
D. used in digestion in fetus

THE END