

**ST. JOHN NURSERY AND PRIMARY  
SCHOOL – KIKWAYA**  
**P.O BOX 500, KAKUMIRO**



**SCIENCE DEPARTMENT**

**TERM 1**

**TOPIC BASED ANALYTICAL  
QUESTIONS FOR REVISION**

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**"LUCK IS WHEN OPPORTUNITY MEETS PREPARATION"**

**"WISH YOU GOOD LUCK"**

## ALCOHOL, SMOKING AND DRUGS IN SOCIETY

### ALCOHOL

1. Define the term alcohol?
2. State the two types of alcohol
3. Which of the above types is poisonous to man?
4. What are some of the reasons to why some people take alcohol.(3)
5. State 4 ways in which alcohol is useful.
6. Define the term alcoholism?
7. Give the two methods of making alcohol.
8. What is fermentation?
9. Fermentation as a process of making alcohol involves the functioning of yeast;
  - a) Give the use of yeast during fermentation
  - b) Give the two products produced by fermentation.
  - c) Which two enzymes are found in yeast?
  - d) Name any two cereals can be used during fermentation.
10. State any three body organs affected by alcoholism.
11. Methanol as a type of alcohol is said to be poisonous when drank.
  - a) Give two negative effects it may have on human life.

b) In which two other ways can it be useful in daily life then.

12. State any two laws related to alcoholism in Uganda.

13. How does alcoholism contribute to the following;

a) Poverty

b) Spread of diseases like HIV

14. Distillation is a method of making alcohol involving boiling fermented liquid and collecting the cold liquid as pure alcohol.

(a) State any two physical processes involved in distillation

(b) What name is given to the final liquid collected as alcohol?

(c) Give the reason for each of the following as related to distillation.

(i) The delivery tube is coiled on the section of cold water.

(ii) Most delivery tubes are made up of copper

(iii) Distillation should be done in cold water.

(d) What would happen if warm water was used instead of cold water?

SMOKING

1. Define the term smoking?

2. Give any 3 reasons to why people smoke

3. In which 3 ways do people smoke?

4. What are the two types of smoking?
5. Distinguish between active and passive smoking?
6. Which two body organs can be affected by smoking?
7. Name three poisonous chemicals found in tobacco.
8. Give the effect of the above chemicals.

Chemical	Effect
a)	
b)	
c)	

9. Give two effects of smoking to the pregnant women.
10. Name any two diseases that can be worsened by smoking.
11. Which chemical in tobacco may result into under weight babies?
12. How does smoking affect the circulatory stem?
13. State any 3 life skills that can help avoid smoking.

## DRUGS

1. Define the term drugs?
2. State the two types of drugs?
3. Give the two groups of essential drugs

4. Differentiate between traditional and manufactured drugs.

5. List three qualities that essential drugs must possess.

6. Distinguish between pain killers and curative drugs.

7. Give 2 common examples of pain killers.

8. Define the term drug prescription?

9. Give 3 uses of drug prescription.

10. Give the meaning of these terms.

a) Over dose

b) Under dose

11. Give 3 examples of narcotic drugs

12. State any 3 harmful effects of narcotic drugs.

13. In which 2 ways are drugs misused.

14. Distinguish between;

a) Addiction and drug dependency.

b) Drug abuse and drug misuse.

c) Drugs of dependency and drug dependency.

15. What 3 factors ought to be followed when prescribing the drugs?

16. In which 3 ways can drugs be introduced into our bodies?

17. State any 4 piece of information found on a prescribed drugs.

18. In which 3 ways do people abuse drugs.

19. State any 3 dangers of buying drugs from local drug local drug shops.

20. Name the poisonous gas found in tobacco.

21. Which gas is produced by both fermentation and respiration?

22. Emeka visited the doctor complaining of the daily failure to sleep with his eyes red.

(i) What scientific term is used to describe his situation?

(ii) What bad life style might he be practicing?

(iii) What advice can you give Emeka?

(iv) Define the term insomnia?

23. Mr. Mulindwa was instructed by a doctor to take paracetamol using a 2x3 formal but he instead used a 3x3 formula.

(i) Which kind of drug abuse did he practice?

(ii) State two effects he is likely to face?

(iii) How many tablets was he supposed to take?

(iv) How many tablets did he them take?

(v) How many tablets did he take for 2 days?

24. Give 2 best ways of storing drugs.

25. Define the term a life skill.

26. Why do people abuse drugs?

27. ~~Read~~ ~~Lend~~ on effects of drugs, smoking and alcohol.

### CLASSIFICATION OF LIVING THINGS (ANIMALS)

1. How are mammals similar to birds and reptiles in terms of reproduction (fertilization)?

2. How is an Ostrich adapted to run very fast?

3. To which group of carnivorous mammals do the following animals belong?

a) Hyena

b) Leopard

4. Give two adaptations of a lion to its mode of feeding.

5. How are dogs able to walk towards the prey with the knowledge of the prey realizing it?

6. Why are monotremes regarded as the least developed group of mammals?

7. Name the second most intelligent group of mammals.

8. State any one lagomorph commonly kept at home.

9. Apart from a duck billed platypus, Name the other example of egg laying mammal (monotreme)
10. How useful is the long sticky tongue to the chameleon?
11. Name the largest sea mammal.
12. Which reptile lives both on land and water?
13. How are geckoes able to walk upside down on ceilings?
14. Of what use is the long tail to the Kangaroo?
15. Why is the marsupial of a kangaroo located on the belly?
16. Apart from whales, state other two examples of sea mammals.
17. Name the reptile that does not lay eggs outside the body.
18. Why is the body of fish streamlined?
19. Which part of fish serves the role as the human ear?
20. Why can a fish die if shortly taken out of water?
21. How are crocodiles and alligators adapted to their mode of feeding?
22. How are the gills of fish different from those of the mushroom in terms of function?
23. Apart from zymase, name another enzyme found in yeast.
24. Give the use of yeast during fermentation.

25. What does the amoeba use for its movement?
- .....
26. Give two examples of single celled organisms with similar characteristics as green plants.
- .....
27. How is reproduction of a frog different from that of a toad?
- .....
28. How is the fertilization (reproduction) of a frog different from that of reptiles?
- .....
29. How is a tadpole similar to fish?
- .....
30. How is a frog adapted to live both in water and on land?
- .....
31. Why are viruses not regarded as true living things?
- .....
32. Which fungus is used in making drugs?
- .....
33. Give 3 examples of useful fungi.
- .....
34. How are the following parts useful to the mushroom?
- i) Cap
- .....
- ii) Gills
- .....
- iii) Hypha
- .....
- iv) Scales
- .....
35. Which sanitary disease is caused by amoeba?
- .....
36. Which type of bacteria causes typhoid and anthrax?
- .....
37. Name the bacteria which cause these diseases.
- a) Cholera
- .....
- b) Typhoid
- .....

38. Name one insect which does not lay eggs outside the body in its life time?

39. What is the dangerous stage of growth in the lifecycle of butterfly which destroys farmer's crops?

40. State the role played by chameleons in controlling the spread of malaria.

41. How does oiling of water bodies affect the aquatic life?

42. How does oiling of stagnant water help to control the spread of malaria?

43. How useful are scavengers in our environment?

44. Why is it useful to drain stagnant water?

45. State any two examples of moulds.

46. How useful are mandibles to some insects?

47. What general name is given to the following;

a) Head of tape worm

b) Teeth of poisonous snake

c) Poison of snakes

d) Teeth found in frogs

48. Of what use are the hooks to the tape worm.

49. Give the effect of hook worm infestation :

50. Which flat worm may have the same effect as hook worms?

51. Define the terms;

a) Metamorphosis

b) Parasitic feeding

c) Saprophytic feeding

52. How are some bacteria useful to crop farmers (2)?

53. How can bacteria be of good use to the health department?

54. How do fungi contribute to the improved health care system?

55. How is a spider similar to insects?

56. Give the use of cob webs to spiders.

57. Give three reasons why is a spider not regarded as true insects?

58. Give the common mollusk which is a vector.

59. How useful are the shells to snails and tortoises.

60. How are earthworms useful to farmers?

61. What general name is given to germs which causes diseases?

62. Give two examples of myriapods.

63. Apart from spiders, give two other examples of Arachnids.

64. How do crustaceans contribute to the fishing industry?

65. By what process do arthropods remove the outer exoskeleton?

66. How is the function of hooks in tape worms different from that in hookworms?

67. How does fish help to prevent Kwashiorkor?

68. Why is a kangaroo grouped under pouched mammals?

69. Why are primates called most advanced mammals?

70. Mention the three types of bats.

71. Why are lizards grouped under cold blooded animals?

72. Why goats are called ungulates?

73. How useful are oil glands found in swimming birds.

74. How is a scorpion different from a spider yet they are all arachnids?

75. How do the algae support aquatic life?

76. How do scavengers help to clean the environment?

77. Name the fungi which may be poisonous to man when eaten.

78. What is the use of cilia found in paramecium?

79. Which structure helps most bacteria in movement?

80. Of what use are the tentacles found in coelenterates?

81. Name two largest and most intelligent molluscs known.

82. How do we call the process of movement in molluscs?

END

Read the diagrams of; Bacteria, amoeba, paramecium, Algae, Euglena and other organism.

### CIRCULATORY SYSTEM

1. Define the following terms.

(a) Circulatory System

Blood Plasma

2. Name the 3 main parts of the heart

3. State the role of heart in the circulatory system.

4. In which body cavity do we find the heart?

5. Which membrane encloses the heart?

6. Name the part of the skeleton which protects the heart?

7. What name is given to the muscles of the heart?

8. Why can't blood flow back wards to the heart?

9. Give the difference between blood carried in the left and right side of the heart

10. Give two reasons why blood goes to the lungs during its circulation.

11. Give the reason for the following observations

(a) The right side of the heart is thin and weaker than the left side

(b) The left cardiac muscles are strong and thick

12. What would happen if the pressure of pushing blood suddenly increased while in pulmonary artery?

13. What name is given to;

(a) Main vein in the body

(b) Main artery in the body

14. Which part of the heart separates the right side from left side of the heart?

15. Which artery carries de-oxygenated blood from heart to the lungs?

16. Which type of blood is carried by aorta?

17. Define the term blood.

18. Name any 4 components of blood

19. Which blood component transports oxygen to all body parts.

20. Where are the red blood cells manufactured in the body?

21. How useful are the red blood cells.

22. Name the circulatory disease which affects the red blood cells.

23. Give 2 adaptations of Red blood cells to their use.

24. What scientific name is given to Red blood cells?

25. Give the use of white blood cells in the body.

26. Give the effect of having too many white blood cells.

27. What scientific name is given to white blood cells?

28. Give three ways in which white blood cells defend the body against disease germs.

29. How does immunization support the functioning of white blood cells?

30. How are white blood cells adapted to their function?

31. Give the structural and functional difference between white and Red blood cells.

a) Structural

b) Functional

32. State any four substances found in blood plasma.

33. State any 3 uses of plasma.

34. How useful are the blood platelets.

35. What scientific condition affects the functioning of platelets?

36. Which blood component fights against germs?

37. Which condition results from over bleeding?

38. Define these terms.

a) Universal donor.

b) Universal recipient.

c) Donor.

39. Why should blood be screened before it is transferred from one person to another?

40. How can one increase capacity of blood in body (2)?

41. Give the two types of blood vessels.

42. Why do arteries have thick walls and narrow lumen?

43. Give the difference between the following;

a) Pulmonary artery and other arteries.

b) Pulmonary vein and other veins.

44. Which blood vessel carries absorbed food from ileum to the liver?

45. State the structural and functional difference between veins and arteries.

a) Structural (2)

b) Functional (1)

46. Which mineral is responsible for blood formation?

47. In which form is oxygen transported?

48. Name the protozoan that causes malaria.

49. How does the above protozoan affect the functioning of a circulatory system?

50. How is plasmodium parasite harmful to the body?

51. Which blood element is affected by malaria germ?

52. State one effect of sickle cell anemia to the body.

53. a) Which component of blood is destroyed by HIV.

c) It is said that AIDS does not kill its victims. Give a reason for this.

d) State any two body fluids where HIV can be found.

e) Name 2 traditional practices which may lead to easy spread of AIDS.

f) Why do Gonorrhea patients easily contract HIV or AIDS?

54. Why is AIDS more dangerous than malaria?

55. How is blood clotting useful in body. (3)

56. a) Name the vitamin involved in the process of blood clotting?

b) Which enzyme is involved in blood clotting?

57. Give the significance of the following;

a) Wide lumen in veins.

b) Thin walls in veins.

c) Thick walls in arteries.

d) Narrow lumen in arteries.

58. What structures help to prevent the back flow of blood in veins?

59. Of what use is blood transfusion?

.....  
60. Define these terms.

a) Double circulation.

b) Coronary thrombosis

.....  
61. Give three body areas where white blood cells can be made.

.....  
62. How are short bones useful to the circulatory system.

.....  
63. Which heart disease results from eating too much fat?

.....  
64. Which valves separate the following?

a) Right ventricle from Right atrium.

b) Left ventricle from Left atrium.

.....  
65. Why does the blood;

a) Go to lungs in its circulation?

.....  
b) Go to the kidney when circulation?

### Read on structures

## SOUND ENERGY

1. Define the term sound energy?

.....  
2. If sound is not used for hearing; give 3 uses of sound energy.

.....  
3. How is sound produced?

4. Define these terms;

a) Vibration.

b) Artificial source of sound.

c) Natural source of sound.

5. How do the following animals produce sound.

a) Birds.

b) Bees and mosquitoes

c) Crickets

d) Higher animals

6. In which way does sound travel?

7. Why doesn't sound travel through the vacuum?

8. In which state of matter does sound;

i) Travel slowly

ii) Slower

iii) Slowest

9. Mention any three factors that affect the speed of sound.

10. What do you understand by the term sound waves?

11. Explain shortly how these factors affect the pitch of sound.

a) Length of vibrating objects.

b) Size of the vibrating object.

c) Tension in the vibrating object.

d) Size of the vibrating surface.

12. How do factors listed in number 9 affect the speed of sound?

13. Why is it always hard to hear very easily during the day than at night.

14. Why can't a person in a lorry hear his friend clearly?

15. How can the pitch of sound in string instruments be;

a) Increased

b) Reduced

16. Why is sound more clearly at night than during the day?

17. What causes echo?

18. Why can echo be regarded as a necessary evil?

19. How is echo useful to;

a) The bat (2).

b) Sailors (1).

20. Give any 2 possible disadvantages of echo.

21. How can echo be prevented?

22. How do bats and dolphins apply echo to know the distance?
23. Distinguish between noise and music
24. Define the term echo location.
25. List the 3 types of musical instruments.
26. Differentiate between melodic and non-melodic Instruments.
27. How can the pitch of percussion Instruments be increased?
28. To which group of musical Instruments do we put bells and keyboards?
29. Name one percussion instrument made using animal skin.
30. Give a reason why a drum is grouped together with a brass band.
31. Why are walls of studios made of soft boards and porous materials?
32. Why a guitar is called a string instrument?
33. How can pitch of wind instrument be increased?
34. Which part of human ear is responsible for;
- a) Collecting sound waves.
  - b) Production of wax.
  - c) Equalizing pressure in the ear
  - d) Body balance.

35. Name the two fluids found in human ear.

36. Apart from hearing, in which two other ways are ears important?

37. How is the ear drum related to its function?

38. How are the fluids found in human ear useful?

39. State the role of these parts of human ear.

(a) Cochlea

(b) Auditory nerve

40. Mention any two;

(i) Diseases of human ear

(ii) Disorders of human ear

41(a) Which part of human ear produces wax?

(b) State any two uses of wax found in ears.

(c) List any three dangers of too much wax in the ears.

42. Why is it dangerous to remove wax from ear using sharp objects?

43(a) State any two methods of storing sound.

(b) List down any three devices used to reproduce sound.

44. What do the following animals use to detect sound waves?

(a) Fish

(b) Amphibians

(c) Insects

(d) Birds

(e) Snake

45 Mujuni was standing 165m away from his father who called him by clapping.

(a) How long did it take the father to hear the echo?

(b) How long did it take the boy to hear the clapping?

(c) Why is it easy for the person on hill bottom to hear the person talking from the top of the hill better than one on top to hear the other on hill bottom?

46 Define the terms as used in sound.

a) Amplitude

b) Frequency

c) Volume

d) Vibration

e) Pitch

f) Sound waves

47 Why does sound travel;

a) Fastest in solids?

b) Slowest in gases?

A general name is given to the bones found in human ear?

Q. In which part of human ear are sound vibrations are changed into nerve impulses?

Q. Which part of fish serves the same role as the human ear?

Q. Name any one device used to reproduce sound by sol-fa notation?

Q. How do industrial machines affect the functioning of hearing organs for animals?

Q. Why do people working in noisy places put ear plugs in ears?

WISH YOU SUCCESS AS YOU PREPARE TO SUCCEED

END

If Akena inhales tobacco smoke from Olemu,  
Akena is said to have smoked.  
Q. Which type of smoking is carried out by?  
a) Olemu  
b) Akena

b) Why is smoking prohibited in Public places?

Q. How does smoking affect the?  
a) Circulatory system?  
b) Digestive system?

(a) How can you advise a person who is  
addicted to smoking?  
(c) Define the term addiction.