SUBJECT::: SCIENCE REVISION QUESTIONS.

TOPIC:::: EXCRETORY SYSTEM.

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1. INTRODUCTION TO EXCRETION

1. What is excretion?

Excretion is the process by which living organisms remove waste products formed inside their bodies.

- 2. Why is excretion important?
 It prevents the build-up of harmful substances that can damage body organs.
- What are waste products in excretion?Urea, excess salts, carbon dioxide, and water.
- 4. Which system removes waste from the body?

 The exerctory system

The excretory system.

5. How is excretion different from egestion? Excretion removes waste from body cells, while egestion removes undigested food from the digestive system.

6. What happens if waste is not removed from the body?

The body becomes poisoned and can lead to death.

- 7. **Mention four organs involved in excretion.** Kidneys, skin, lungs, and liver.
- 8. How does the body maintain internal cleanliness?

By removing waste products through excretion.

9. What is urea?

Urea is a nitrogenous waste formed from the breakdown of proteins.

10. What is the difference between sweat and urine?

Sweat is excreted through the skin and urine is removed by the kidneys.

◆ 2. EXCRETORY ORGANS AND THEIR FUNCTIONS

11. What are the main excretory organs in humans?

Kidneys, lungs, skin, and liver.

12. What is the function of the kidneys?

To filter blood and remove urea and excess water as urine.

- 13. What is the role of the lungs in excretion? To remove carbon dioxide and water vapor during breathing.
- 14. How does the skin help in excretion?
 It removes sweat containing water, salts, and urea.
- 15. What is the function of the liver in excretion?It breaks down harmful substances and forms urea.
- 16. Which organ stores urine before removal? The urinary bladder.
- 17. **What does the ureter do?**It carries urine from the kidney to the bladder.
- 18. What is the function of the urethra? It carries urine from the bladder out of the body.
- 19. Which tubes connect the kidneys to the bladder? Ureters.
- 20. Which part controls the release of urine from the bladder?Urethral sphincter.

3. STRUCTURE OF THE URINARY SYSTEM

- 21. What organs make up the urinary system? Kidneys, ureters, bladder, and urethra.
- 22. What is the structure of the kidney like? It is bean-shaped and contains filtering units called nephrons.
- 23. **What are nephrons?**Tiny structures in the kidney that filter blood.
- 24. How many kidneys does a human being have?
 Two.
- 25. Which organ produces urine? The kidneys.
- 26. Which organ temporarily stores urine? The urinary bladder.
- 27. What connects the bladder to the outside of the body?

 The urethra.
- 28. **What is urine?**A liquid waste made of water, salts, and urea.
- 29. Where is the bladder located in the body? In the lower abdomen.
- 30. Why is the right kidney lower than the left? Because the liver is on the right side and pushes it down.

4. COMPONENTS OF URINE

- 31. What are the main components of urine? Water, urea, salts, uric acid, and creatinine.
- 32. Which component forms the largest part of urine?
 Water.
- 33. **What makes urine yellow?**Urochrome, a pigment from the breakdown of red blood cells.
- 34. **What is creatinine?**A waste from muscles found in urine.
- 35. Which waste in urine comes from proteins?
 Urea.
- 36. Which mineral salts are present in urine? Sodium, potassium, and chloride.
- 37. **Is glucose found in normal urine?**No, glucose in urine may indicate diabetes.
- 38. Why is urine slightly acidic?

 Due to the presence of urea and other wastes.
- 39. What is the normal color of urine? Pale yellow.
- 40. How can urine indicate health problems? Its color, smell, or presence of unusual substances can show infection or disease.

◆ 5. DISEASES AND DISORDERS OF THE EXCRETORY SYSTEM

- 41. **What are common kidney diseases?**Kidney stones, kidney failure, and urinary tract infections.
- 42. What causes kidney stones?
 A build-up of calcium and other minerals in the kidney.
- 43. **What is kidney failure?**When the kidneys stop working properly to remove waste.
- 44. What are symptoms of kidney failure? Swelling, tiredness, and little or no urine.
- 45. **What is a urinary tract infection (UTI)?** An infection in any part of the urinary system.
- 46. **What causes UTIs?**Bacteria entering the urethra.
- 47. **How can kidney diseases be prevented?**By drinking plenty of water and avoiding harmful drugs.
- 48. Which organ is affected by pneumonia? The lungs.
- 49. What causes lung diseases? Inhaling smoke, dust, or infections.

50. **Mention any one skin disorder.** Eczema.

• 6. CARE FOR THE EXCRETORY SYSTEM

51. Why is it important to drink plenty of water?

To help the kidneys remove waste effectively.

- 52. **How do we keep our skin healthy?**By bathing regularly and eating a balanced diet.
- 53. **Why should we urinate regularly?**To avoid the build-up of harmful waste in the bladder.
- 54. How does exercise help the excretory system?

It increases sweating and blood circulation.

55. What should be avoided to protect the kidneys?

Alcohol, harmful drugs, and dehydration.

- 56. **How do we care for our lungs?**Avoid smoking and breathe clean air.
- 57. What should be done to avoid urinary infections?

 Maintain good hygiene and drink enough water.

58. How can poor hygiene affect the excretory system?

It can lead to infections like UTIs and skin disorders.

- 59. What type of food helps the kidneys? Fruits, vegetables, and foods with low salt.
- 60. Why is rest important for body organs? It allows them to recover and work efficiently.

7. LUNGS AS EXCRETORY ORGANS

- 61. What do lungs remove from the body? Carbon dioxide and water vapor.
- 62. **How does breathing help in excretion?** It removes waste gases from the blood.
- 63. What gas is released when we breathe out? Carbon dioxide.
- 64. How does smoking affect the lungs?
 It damages lung tissues and causes diseases.
- 65. **How can we keep the lungs clean?**Avoid dusty environments and smoking.
- 66. What is the effect of polluted air on the lungs?
 It causes lung diseases like asthma.
- 67. **What is bronchitis?** Inflammation of the air passages in the lungs.

68. What happens when carbon dioxide is not removed?

The blood becomes acidic and harmful.

69. **What is tuberculosis (TB)?**A lung disease caused by bacteria.

70. Which body system works with the lungs in gas exchange?

The circulatory system.

8. THE SKIN AND EXCRETION

- 71. What waste is removed by the skin? Sweat.
- 72. What is sweat made up of? Water, salts, and urea.
- 73. Which part of the skin produces sweat? Sweat glands.
- 74. Why does the body sweat?

 To remove waste and cool the body.
- 75. How does sweating help in temperature control?

 It cools the body through evaporation.
- 76. Why should we bathe daily?

 To remove sweat and prevent skin diseases.
- 77. **What is acne?**A skin condition caused by blocked pores.

- 78. Which mineral is mostly lost in sweat? Salt (sodium chloride).
- 79. **What is the role of skin pores?** To allow sweat to pass out.
- 80. How can sweat help tell our health condition?

 Excessive or no sweating may show a problem.

9. GOOD HEALTH HABITS

- 81. Why is a balanced diet important?

 It supports organ function and prevents diseases.
- 82. **How does drinking water benefit kidneys?** It helps flush out waste more easily.
- 83. What kind of drinks should be avoided? Sugary and alcoholic drinks.
- 84. Why is sleep important for the body? To allow organs to rest and function well.
- 85. What is the importance of personal hygiene?
 It prevents infections and body odor.
- 86. Which fruits are good for kidneys? Watermelon, cucumber, and oranges.
- 87. **How can poor diet affect the kidneys?** It can cause kidney stones or overload.

88. Why should we avoid holding urine for long?

It can lead to infections and bladder problems.

- 89. What does regular exercise help?
 Improves blood flow and removes waste through sweat.
- 90. Why should we avoid processed foods? They contain harmful salts that affect kidneys.

◆ 10. COMPARISON WITH ENVIRONMENTAL SYSTEMS

- 91. **How is the kidney like a water filter?** It removes waste from liquids.
- 92. **How are lungs like a car exhaust?** They release waste gases.
- 93. **How is excretion like garbage collection?**Both remove unwanted materials from a system.
- 94. Why should we keep our environment clean?

To protect the excretory organs from diseases.

95. What can we learn from nature about waste removal?

That every system must remove waste to stay healthy.

- 96. **How is the bladder like a septic tank?**Both store waste before disposal.
- 97. What is the importance of sewage treatment?To prevent pollution and disease, just like

excretion.

98. Why are proper toilets important in schools?

To help children excrete safely and cleanly.

99. What does a blocked sewer system compare to in the body?
Blocked urethra or kidney failure.

100. Why is it important to study how machines remove waste?

To design better systems and care for our health.