Unit 5 Section 5.2: Conservation of Natural Resources

(Grade 8 General Science Textbook – Amhara Edition)

1. Remembering (Knowledge) – Questions 1–15

1. What is the main idea of sustainable development?

A. Use all resources quickly

B. Secure the future of Earth’s ecosystems for growing human population

C. Focus only on mining

D. Ignore future generations

2. What are the three basic types of soil mentioned in the textbook?

A. Rock, sand, clay

B. Loam, sand, and clay

C. Mud, silt, gravel

D. Humus, peat, loam

3. Which soil type is described as the smallest particle size and very sticky when wet?

A. Sand

B. Loam

C. Clay

D. Silt

4. What is the main abiotic reservoir for phosphorus and sulfur?

A. Air

B. Water

C. Atmosphere

D. Soil

5. If fossil fuels are burned, what major pollutant is released that contributes to acid rain?

A. Oxygen

B. Nitrogen

C. Sulfur dioxide

D. Carbon monoxide

6. What percentage of Earth’s surface is covered by water?

A. 50%

B. 71%

C. 96%

D. 25%

7. Which gas is the largest component of air?

A. Oxygen

B. Carbon dioxide

C. Nitrogen

D. Water vapour

8. What is the main cause of global warming according to the textbook?

A. Increased oxygen

B. Deforestation and burning fossil fuels

C. Too much rain

D. Planting more trees

9. What does deforestation mean?

A. Planting more trees

B. Temporary or permanent removal of large expanses of forest

C. Building dams

D. Harvesting rainwater

10. Which of the following is a natural factor causing soil erosion?

A. Overgrazing

B. Flood, wind and landslide

C. Housing construction

D. Mining activities

11. What is the main use of soil for plants?

A. Provides anchorage and nutrients

B. Only for building houses

C. Only for making cups

D. Only for storing carbon

12. Which activity is an example of man- made soil erosion?

A. Flood

B. Excessive use of inorganic fertilizers

C. Wind

D. Landslide

13. What is acid rain?

A. Normal rainwater

B. Rain that contains sulfur dioxide and nitrogen oxide

C. Rain with extra oxygen

D. Pure distilled water

14. Which gas is released by factories and vehicles that traps heat in the atmosphere?

A. Oxygen

B. Nitrogen

C. Carbon dioxide

D. Water vapour

15. What is the main purpose of soil conservation strategies?

A. To increase erosion

B. To manage soil erosion and sedimentation

C. To remove all plants

D. To build more houses

2. Understanding (Comprehension) – Questions 16–30

16. What is the main reason we worry about freshwater even though 71% of Earth is water?

A. Most water is saline in oceans

B. There is too much rain

C. Freshwater is unlimited

D. Oceans are drinkable

17. If trees are cut down, what happens to the carbon cycle?

A. More carbon dioxide is absorbed

B. Less carbon dioxide is removed from the air

C. No change

D. Only oxygen increases

18. Which statement is true about the greenhouse effect?

A. It cools the planet

B. Heat- trapping pollutants keep the planet warmer

C. It only affects plants

D. It reduces sea levels

19. What is the main impact of acid rain on soil?

A. Makes soil more fertile

B. Washes away calcium and nutrients

C. Increases plant growth

D. Blocks stomata in leaves only

20. If we use wastewater after cycling, what does this help?

A. Increase pollution

B. Conserve clean water

C. Waste more water

D. Raise sea levels

21. What do soil functions include according to the textbook?

A. Only food production

B. Food production, environmental filtering, biological habitat

C. Only building materials

D. Only water storage

22. Which strategy is used for both soil and water conservation?

A. Planting trees on hillsides

B. Burning fossil fuels

C. Cutting forests

D. Overgrazing

23. What is the main effect of global warming mentioned in the textbook?

A. Rise of sea levels due to melting polar ice caps

B. More rainfall everywhere

C. Less food shortage

D. Cooler oceans

24. If we plant trees, what positive effect does it have on the oxygen cycle?

A. Less oxygen is produced

B. More oxygen is released through photosynthesis

C. No effect

D. Only carbon dioxide increases

25. What is the main cause of water scarcity in Ethiopia?

A. Too much freshwater

B. Pollution and poor management

C. No rainfall

D. Too many dams

26. Which human activity causes the most air pollution according to the textbook?

A. Planting trees

B. Burning fossil fuels in vehicles and factories

C. Rainwater harvesting

D. Terracing

27. What does contour plowing help to do?

A. Increase erosion

B. Reduce soil erosion on slopes

C. Waste water

D. Cut trees

28. If smog is present, what health effect does it have?

A. It improves breathing

B. It irritates eyes, throat and damages lungs

C. It makes air cleaner

D. It only affects plants

29. What is the main benefit of rainwater harvesting?

A. Increases flooding

B. Conserves water resources

C. Pollutes groundwater

D. Raises sea levels

30. Which statement best explains why soil conservation is important?

A. Soil is not needed for life

B. Soil provides anchorage, nutrients and prevents flooding

C. Soil only stores carbon

D. Soil is only for building

3. Applying (Application) – Questions 31–45

31. If you see a picture of terraced hillsides in Ethiopia, what conservation practice is shown?

A. Deforestation

B. Soil conservation by terracing

C. Overgrazing

D. Mining

32. What would happen if you cut all trees in your area (oxygen cycle)?

A. More oxygen in air

B. Less oxygen produced

C. No change in oxygen

D. More carbon dioxide absorbed

33. In your local area, if you plant trees on eroded slopes, what is the expected result?

A. More erosion

B. Reduced soil erosion and better moisture

C. Less biodiversity

D. More flooding

34. If a factory releases smoke containing sulfur dioxide, what type of pollution occurs?

A. Water pollution

B. Air pollution leading to acid rain

C. Soil improvement

D. Clean air

35. What strategy would you use to conserve water in a school?

A. Leave taps running

B. Fix leaks and harvest rainwater

C. Use more detergent

D. Pollute rivers

36. If you see overgrazing in your area, what soil problem will increase?

A. Better fertility

B. Soil erosion

C. More trees

D. Less flooding

37. What would you suggest to reduce global warming in your community?

A. Cut more trees

B. Plant trees and reduce fossil fuel use

C. Burn more coal

D. Increase cars

38. If you see a picture of a polluted river with factory waste, what is the main effect?

A. Cleaner water

B. Water pollution harming living things

C. More fish

D. Better irrigation

39. What conservation practice is shown by building small dams and reservoirs?

A. Soil erosion increase

B. Water conservation

C. Air pollution

D. Deforestation

40. If you organise an environmental club at school to plant trees, what is your contribution?

A. To air pollution

B. To soil and air conservation

C. To global warming

D. To water waste

41. What would happen if we use contour plowing on sloppy land?

A. More soil loss

B. Reduced soil erosion

C. Less plant growth

D. More flooding

42. If acid rain falls, what happens to fish in lakes?

A. They increase

B. They are harmed

C. No effect

D. They grow bigger

43. What is the best way to conserve groundwater?

A. Overuse it

B. Protect it and reduce pollution

C. Mix with sea water

D. Ignore it

44. If you see Sheger Park or Entoto Park, what conservation activity is it?

A. Cutting trees

B. Planting trees and making the area green

C. Mining

D. Overgrazing

45. What would you do to reduce air pollution from vehicles in your area?

A. Use more cars

B. Use public transport or plant trees

C. Burn more fuel

D. Ignore it

4. Analyzing (Analysis) – Questions 46–53

46. Which is different between natural and man- made soil erosion?

A. Both are caused by humans

B. Natural includes flood and wind; man- made includes deforestation and overgrazing

C. Both help soil fertility

D. Both are the same

47. Compare soil conservation and water conservation strategies

A. Both use the same methods only

B. Both include planting trees and terracing

C. Soil uses only dams; water uses only plowing

D. They have no common strategies

48. What is the main difference between acid rain and smog?

A. Both are the same

B. Acid rain contains sulfur dioxide; smog is smoke and particulates

C. Both help breathing

D. Both cool the planet

49. If you compare cutting trees and planting trees, what is the effect on carbon cycle?

A. Both remove carbon dioxide

B. Cutting trees increases CO_2; planting trees decreases CO_2

C. Both increase oxygen only

D. No difference

50. Which factor most limits soil fertility in Ethiopia?

A. Too much water

B. Erosion caused by deforestation and overgrazing

C. Perfect farming

D. No wind

51. Analyze why global warming is called the greenhouse effect

A. It cools the Earth

B. Greenhouse gases trap heat like a car window coating

C. It only affects oceans

D. It reduces CO_2

52. What is the main difference between freshwater and saline water?

A. Both are drinkable

B. Freshwater is only 2.5% and usable; saline is 96% in oceans

C. Both are in rivers

D. No difference

53. Compare the effects of deforestation and afforestation

A. Both increase erosion

B. Deforestation causes erosion and global warming; afforestation reduces them

C. Both help biodiversity equally

D. Both cause acid rain

5. Evaluating (Evaluation) – Questions 54–60

54. Which is the best way to conserve natural resources for future generations?

A. Use all resources now

B. Practice sustainable development

C. Ignore pollution

D. Cut all forests

55. If you want to reduce global warming in Ethiopia, which is the most effective?

A. Burn more fossil fuels

B. Plant trees and use clean energy

C. Increase cars

D. Cut trees for farming

56. Which conservation strategy is most important for soil in sloppy Ethiopian highlands?

A. Overgrazing

B. Terracing and contour plowing

C. Mining

D. Building houses

57. Evaluate why water conservation is urgent in Ethiopia

A. There is too much freshwater

B. Pollution and poor management cause scarcity

C. No one uses water

D. Oceans are fresh

58. What is the best evaluation of Sheger Park projects?

A. They cause pollution

B. They show successful conservation and greening

C. They increase erosion

D. They waste water

59. Which interaction with nature is most beneficial for all life?

A. Deforestation

B. Sustainable conservation of soil, water, air and forests

C. Burning fossil fuels

D. Overgrazing

60. If you evaluate the role of environmental clubs in schools, what is the best outcome?

A. More pollution

B. Students contribute to conservation and better environment

C. No change

D. Less trees

ANSWER KEY

1. D 2. D 3. D 4. D 5. C 6. B 7. D 8. D 9. D 10. B

11. A 12. B 13. B 14. C 15. B 16. A 17. B 18. B 19. B 20. B

21. B 22. B 23. B 24. B 25. B 26. B 27. B 28. B 29. B 30. B

31. B 32. B 33. B 34. B 35. B 36. B 37. B 38. B 39. B 40. B

41. B 42. B 43. B 44. B 45. B 46. B 47. B 48. B 49. B 50. B

51. B 52. B 53. B 54. B 55. B 56. B 57. B 58. B 59. B 60. B