

UNIT VIII: ENVIRONMENTAL GEOGRAPHY

Set I

1. What is the primary driver of climate change?

- a) Deforestation
- b) Greenhouse gas emissions
- c) Volcanic activity
- d) Solar radiation

****Answer: b) Greenhouse gas emissions****

2. Which layer of the Earth's atmosphere contains the ozone layer?

- a) Troposphere
- b) Stratosphere
- c) Mesosphere
- d) Thermosphere

****Answer: b) Stratosphere****

3. Which gas is the most abundant in the Earth's atmosphere?

- a) Oxygen
- b) Nitrogen
- c) Carbon dioxide
- d) Argon

****Answer: b) Nitrogen****

4. What is the term for the process by which water vapor changes into liquid water droplets in the atmosphere?

- a) Condensation
- b) Evaporation
- c) Precipitation
- d) Sublimation

****Answer: a) Condensation****

5. Which of the following is a non-renewable source of energy?

- a) Wind power
- b) Solar power
- c) Natural gas
- d) Geothermal energy

****Answer: c) Natural gas****

6. What is the term for the loss of a species from a particular habitat or from the entire planet?

- a) Extinction
- b) Endemism
- c) Invasive species
- d) Biodiversity

****Answer: a) Extinction****

7. Which international treaty aims to protect the ozone layer by phasing out the production of ozone-depleting substances?

- a) Kyoto Protocol
- b) Paris Agreement
- c) Vienna Convention
- d) Montreal Protocol

****Answer: d) Montreal Protocol****

8. What is the largest ocean on Earth?

- a) Atlantic Ocean
- b) Indian Ocean
- c) Arctic Ocean
- d) Pacific Ocean

****Answer: d) Pacific Ocean****

9. Which of the following is an example of a renewable resource?

- a) Natural gas
- b) Coal
- c) Wind energy
- d) Nuclear energy

****Answer: c) Wind energy****

10. What is the term for the process by which a body of water becomes overly enriched with nutrients, leading to excessive plant growth and oxygen depletion?

- a) Eutrophication

b) Desalination

c) Salinization

d) Desiccation

****Answer: a) Eutrophication****

11. Which layer of the Earth's atmosphere is closest to the planet's surface?

a) Troposphere

b) Stratosphere

c) Mesosphere

d) Thermosphere

****Answer: a) Troposphere****

12. Which greenhouse gas is primarily responsible for the greenhouse effect on Earth?

a) Carbon dioxide (CO₂)

b) Methane (CH₄)

c) Water vapor (H₂O)

d) Nitrous oxide (N₂O)

****Answer: a) Carbon dioxide (CO₂)****

13. What is the term for the process of the Earth's surface gradually rising due to the melting of glaciers?

a) Subsidence

b) Glacial rebound

c) Tectonic uplift

d) Erosion

****Answer: b) Glacial rebound****

14. Which biome is characterized by low temperatures, permafrost, and a lack of trees?

a) Tundra

b) Taiga

c) Desert

d) Grassland

****Answer: a) Tundra****

15. What is the term for the study of the Earth's past climates and the factors that influenced them?

a) Climatology

b) Paleoclimatology

c) Meteorology

d) Oceanography

****Answer: b) Paleoclimatology****

16. Which of the following is a greenhouse gas that is released during the decomposition of organic matter in anaerobic conditions?

a) Oxygen (O₂)

b) Carbon dioxide (CO₂)

c) Methane (CH₄)

d) Nitrogen (N₂)

****Answer: c) Methane (CH₄)****

17. What is the term for the process of converting waste materials into reusable materials?

a) Incineration

b) Landfilling

c) Recycling

d) Composting

****Answer: c) Recycling****

18. Which international treaty aims to combat desertification and mitigate the effects of drought through sustainable land management?

a) Kyoto Protocol

b) Paris Agreement

c) Vienna Convention

d) UNCCD (United Nations Convention to Combat Desertification)

****Answer: d) UNCCD (United Nations Convention to Combat Desertification)****

19. Which of the following is a major greenhouse gas emitted from the agricultural sector?

a) Carbon dioxide (CO₂)

b) Methane (CH₄)

c) Nitrous oxide (N₂O)

d) Hydrochlorofluorocarbons (HCFCs)

****Answer: c) Nitrous oxide (N₂O)****

20. What is the term for the process by which a river deposits sediment at its mouth, forming a fan-shaped landform?

a) Erosion

b) Alluviation

c) Sedimentation

d) Delta formation

****Answer: d) Delta formation****

21. Which gas is responsible for the formation of acid rain when it reacts with water vapor in the atmosphere?

a) Carbon dioxide (CO₂)

b) Sulfur dioxide (SO₂)

c) Nitrogen oxides (NO_x)

d) Methane (CH₄)

****Answer: b) Sulfur dioxide (SO₂)****

22. Which ocean current is responsible for the warm waters along the eastern coast of the United States and Canada?

a) Gulf Stream

b) North Atlantic Drift

c) California Current

d) Canary Current

****Answer: a) Gulf Stream****

23. Which of the following is a keystone species in marine ecosystems known for its role in maintaining biodiversity on coral reefs?

- a) Clownfish
- b) Sea turtle
- c) Parrotfish
- d) Octopus

****Answer: c) Parrotfish****

24. Which type of soil erosion occurs when water carries away the topsoil in a thin layer?

- a) Sheet erosion
- b) Gully erosion
- c) Rill erosion
- d) Wind erosion

****Answer: a) Sheet erosion****

25. What is the term for the process of converting saltwater into freshwater, making it suitable for drinking and irrigation?

- a) Desalination
- b) Filtration
- c) Distillation
- d) Purification

****Answer: a) Desalination****

26. Which greenhouse gas is primarily associated with the livestock industry?

a) Carbon dioxide (CO₂)

b) Methane (CH₄)

c) Nitrous oxide (N₂O)

d) Ozone (O₃)

****Answer: b) Methane (CH₄)****

27. What is the term for the loss of a glacier's mass due to melting and sublimation?

a) Ablation

b) Accumulation

c) Calving

d) Glacier flow

****Answer: a) Ablation****

28. Which of the following is a renewable source of energy derived from the heat of the Earth's interior?

a) Solar power

b) Wind power

c) Geothermal energy

d) Hydroelectric power

****Answer: c) Geothermal energy****

29. What is the term for the movement of ocean water away from the coast, resulting in a lowering of sea level?

- a) Upwelling
- b) Downwelling
- c) El Niño
- d) Tides

****Answer: a) Upwelling****

30. Which international agreement sets goals for the conservation and sustainable use of biodiversity?

- a) Kyoto Protocol
- b) Paris Agreement
- c) Convention on Biological Diversity (CBD)
- d) Montreal Protocol

****Answer: c) Convention on Biological Diversity (CBD)****

31. Which layer of the atmosphere contains the ozone layer, which protects us from harmful ultraviolet (UV) radiation?

- a) Troposphere
- b) Stratosphere
- c) Mesosphere
- d) Thermosphere

****Answer: b) Stratosphere****

32. What is the term for the gradual increase in the Earth's average temperature due to human activities?

- a) Global cooling
- b) Global warming
- c) Ozone depletion
- d) Acid rain

****Answer: b) Global warming****

33. Which of the following is a non-point source of water pollution?

- a) Industrial discharge
- b) Sewage treatment plant
- c) Pesticide runoff from farms
- d) Oil spill

****Answer: c) Pesticide runoff from farms****

34. Which gas is responsible for the formation of photochemical smog in urban areas?

- a) Carbon dioxide (CO₂)
- b) Nitrogen oxides (NO_x)
- c) Methane (CH₄)
- d) Sulfur dioxide (SO₂)

****Answer: b) Nitrogen oxides (NO_x)****

35. What is the term for the process of breaking down rocks into smaller particles through physical or chemical means?

- a) Erosion
- b) Weathering
- c) Sedimentation
- d) Deposition

****Answer: b) Weathering****

36. Which of the following is an example of a point source of water pollution?

- a) Urban runoff
- b) Agricultural runoff
- c) Industrial effluent from a factory
- d) Atmospheric deposition

****Answer: c) Industrial effluent from a factory****

37. What is the name of the large, swirling patch of plastic debris in the North Pacific Ocean?

- a) Great Barrier Reef
- b) Gulf Stream
- c) Pacific Garbage Patch
- d) Coral Triangle

****Answer: c) Pacific Garbage Patch****

38. Which of the following is a key factor contributing to the loss of biodiversity?

- a) Habitat restoration
- b) Protected areas
- c) Habitat destruction
- d) Sustainable agriculture

****Answer: c) Habitat destruction****

39. What is the term for the process by which rocks and sediments are carried away by wind, water, or ice?

- a) Erosion
- b) Weathering
- c) Sedimentation
- d) Deposition

****Answer: a) Erosion****

40. Which of the following is a major greenhouse gas released from the burning of fossil fuels for transportation?

- a) Carbon dioxide (CO₂)
- b) Methane (CH₄)
- c) Nitrous oxide (N₂O)
- d) Carbon monoxide (CO)

****Answer: a) Carbon dioxide (CO₂)****

41. What is the term for the process of converting organic waste materials into biogas and nutrient-rich organic material?

- a) Incineration
- b) Landfilling
- c) Recycling
- d) Composting

****Answer: d) Composting****

42. Which of the following is a primary source of indoor air pollution in many developing countries?

- a) Industrial emissions
- b) Tobacco smoke
- c) Radon gas
- d) Ozone depletion

****Answer: b) Tobacco smoke****

43. Which biome is characterized by tall trees, high rainfall, and high biodiversity?

- a) Tundra
- b) Taiga
- c) Rainforest
- d) Desert

****Answer: c) Rainforest****

44. What is the term for the process of removing salt and other impurities from seawater to make it suitable for drinking and irrigation?

- a) Desalination
- b) Filtration
- c) Distillation
- d) Purification

****Answer: a) Desalination****

45. Which of the following is a major greenhouse gas released during the production and use of synthetic fertilizers?

- a) Carbon dioxide (CO₂)
- b) Methane (CH₄)
- c) Nitrous oxide (N₂O)
- d) Sulfur hexafluoride (SF₆)

****Answer: c) Nitrous oxide (N₂O)****

46. What is the term for the process of converting solid waste into energy or useful materials through controlled combustion?

- a) Recycling
- b) Landfilling
- c) Incineration
- d) Composting

****Answer: c) Incineration****

47. Which ocean is the largest repository of plastic pollution, often referred to as the "Great Pacific Garbage Patch"?

- a) Atlantic Ocean
- b) Indian Ocean
- c) Arctic Ocean
- d) Pacific Ocean

****Answer: d) Pacific Ocean****

48. What is the term for the introduction of harmful substances into the environment, causing damage to ecosystems and human health?

- a) Pollution
- b) Conservation
- c) Restoration
- d) Mitigation

****Answer: a) Pollution****

49. Which of the following is a consequence of ocean acidification?

- a) Increased coral growth
- b) Enhanced shell formation in marine organisms
- c) Decline in coral reefs
- d) Higher fish populations

****Answer: c) Decline in coral reefs****

50. Which international agreement aims to limit global warming to well below 2 degrees Celsius above pre-industrial levels?

- a) Kyoto Protocol
- b) Paris Agreement
- c) Vienna Convention
- d) Montreal Protocol

****Answer: b) Paris Agreement****

DEPARTMENT OF GEOGRAPHY, H.M.M.C.W

Set II

1. Which of the following gases is a major component of natural gas?

- a) Oxygen
- b) Carbon dioxide
- c) Methane
- d) Nitrogen

****Answer: c) Methane****

2. What is the term for the process by which rocks are broken down into smaller particles due to the action of water, wind, and temperature changes?

- a) Subduction
- b) Weathering
- c) Deposition
- d) Orogeny

****Answer: b) Weathering****

3. Which of the following is an example of a non-renewable resource?

- a) Solar energy
- b) Wind energy
- c) Coal
- d) Hydroelectric power

****Answer: c) Coal****

4. What is the name of the atmospheric layer where weather events occur, including clouds, rain, and storms?

- a) Troposphere
- b) Stratosphere
- c) Mesosphere
- d) Thermosphere

****Answer: a) Troposphere****

5. Which type of pollution results from the excessive use of fertilizers and pesticides in agriculture?

- a) Air pollution
- b) Soil pollution
- c) Water pollution
- d) Noise pollution

****Answer: c) Water pollution****

6. What is the term for the gradual wearing away of coastlines by the action of waves, tides, and currents?

- a) Erosion
- b) Deposition
- c) Sedimentation
- d) Weathering

****Answer: a) Erosion****

7. Which gas is responsible for the greenhouse effect in Venus's atmosphere?

- a) Carbon dioxide (CO₂)
- b) Methane (CH₄)
- c) Water vapor (H₂O)
- d) Sulfur dioxide (SO₂)

****Answer: a) Carbon dioxide (CO₂)****

8. Which of the following is an example of a primary pollutant?

- a) Ground-level ozone
- b) Acid rain
- c) Carbon monoxide
- d) Particulate matter

****Answer: c) Carbon monoxide****

9. What is the term for the process of plant roots absorbing water from the soil and releasing it into the atmosphere as vapor?

- a) Photosynthesis
- b) Evaporation
- c) Transpiration
- d) Condensation

****Answer: c) Transpiration****

10. Which layer of the Earth's atmosphere contains the ozone layer, which absorbs most of the sun's harmful ultraviolet (UV) radiation?

- a) Troposphere
- b) Stratosphere
- c) Mesosphere
- d) Thermosphere

****Answer: b) Stratosphere****

11. What is the main cause of the formation of sinkholes in karst landscapes?

- a) Glacial activity
- b) Volcanic eruptions
- c) Groundwater erosion
- d) Landslides

****Answer: c) Groundwater erosion****

12. Which international treaty sets regulations to reduce emissions of pollutants that deplete the ozone layer?

- a) Kyoto Protocol
- b) Paris Agreement
- c) Vienna Convention
- d) Montreal Protocol

****Answer: d) Montreal Protocol****

13. What is the term for the process of converting waste materials into heat, electricity, and steam through controlled burning?

- a) Recycling

b) Incineration

c) Composting

d) Landfilling

****Answer: b) Incineration****

14. Which of the following is a major greenhouse gas released from the production and use of rice paddies in agriculture?

a) Carbon dioxide (CO₂)

b) Methane (CH₄)

c) Nitrous oxide (N₂O)

d) Hydrochlorofluorocarbons (HCFCs)

****Answer: b) Methane (CH₄)****

15. What is the term for the process of converting organic matter into biogas (methane) and organic fertilizer in the absence of oxygen?

a) Fermentation

b) Incineration

c) Anaerobic digestion

d) Photosynthesis

****Answer: c) Anaerobic digestion****

16. Which of the following gases is responsible for the depletion of ozone in the stratosphere?

a) Carbon dioxide (CO₂)

b) Nitrous oxide (N₂O)

c) Chlorofluorocarbons (CFCs)

d) Methane (CH₄)

****Answer: c) Chlorofluorocarbons (CFCs)****

17. What is the term for the process by which ocean water becomes denser and sinks due to cooling or increased salinity?

a) Upwelling

b) Downwelling

c) El Niño

d) Thermohaline circulation

****Answer: d) Thermohaline circulation****

18. Which of the following is a major source of indoor air pollution in homes with inadequate ventilation?

a) Carbon dioxide (CO₂)

b) Radon gas

c) Methane (CH₄)

d) Ozone (O₃)

****Answer: b) Radon gas****

19. What is the term for the process of converting wastewater into treated water that can be safely discharged into the environment or reused?

a) Desalination

b) Filtration

c) Sewage treatment

d) Disinfection

****Answer: c) Sewage treatment****

20. Which of the following is a major greenhouse gas released from the use of refrigerants and air conditioning systems?

a) Carbon dioxide (CO₂)

b) Methane (CH₄)

c) Nitrous oxide (N₂O)

d) Hydrofluorocarbons (HFCs)

****Answer: d) Hydrofluorocarbons (HFCs)****

21. What is the term for the process of converting organic matter into a stable form of carbon that can be stored in soils for long periods?

a) Carbon sequestration

b) Carbon cycling

c) Carbon fixation

d) Carbon emission

****Answer: a) Carbon sequestration****

22. Which of the following is a major factor contributing to coral bleaching in coral reef ecosystems?

a) High water temperature

b) Low salinity

c) Increased sunlight

d) High nutrient levels

****Answer: a) High water temperature****

23. What is the term for the gradual increase in the acidity of the world's oceans due to the absorption of carbon dioxide from the atmosphere?

- a) Ocean warming
- b) Ocean acidification
- c) Ocean salinity
- d) Ocean stratification

****Answer: b) Ocean acidification****

24. Which biome is characterized by cold temperatures, a layer of permafrost, and a treeless landscape?

- a) Tundra
- b) Taiga
- c) Grassland
- d) Desert

****Answer: a) Tundra****

25. What

is the term for the loss of a species from a specific geographic area, while it may still exist elsewhere?

- a) Extinction
- b) Endemism
- c) Invasive species

d) Biodiversity

****Answer: b) Endemism****

26. Which international agreement sets targets for reducing greenhouse gas emissions to combat climate change?

a) Kyoto Protocol

b) Paris Agreement

c) Vienna Convention

d) Montreal Protocol

****Answer: b) Paris Agreement****

27. What is the term for the process of restoring or repairing ecosystems that have been damaged or degraded?

a) Pollution

b) Conservation

c) Restoration

d) Mitigation

****Answer: c) Restoration****

28. Which of the following gases is a major component of smog in urban areas?

a) Oxygen

b) Carbon dioxide (CO₂)

c) Nitrogen oxides (NO_x)

d) Methane (CH₄)

****Answer: c) Nitrogen oxides (NO_x)****

29. What is the term for the process by which sediment is deposited in the middle of a riverbed, forming small ridges?

- a) Erosion
- b) Deposition
- c) Sedimentation
- d) Meandering

****Answer: d) Meandering****

30. Which layer of the Earth's atmosphere is closest to space and contains very thin air?

- a) Troposphere
- b) Stratosphere
- c) Mesosphere
- d) Thermosphere

****Answer: d) Thermosphere****

31. What is the term for the loss of soil fertility and productivity due to the excessive use of synthetic fertilizers and pesticides?

- a) Desertification
- b) Soil erosion
- c) Soil degradation
- d) Soil compaction

****Answer: c) Soil degradation****

32. Which of the following is a major cause of deforestation in tropical rainforests?

- a) Mining activities
- b) Agricultural expansion
- c) Urbanization
- d) Logging

****Answer: b) Agricultural expansion****

33. What is the term for the process by which ice sheets and glaciers gradually move and shape the landscape?

- a) Glacial retreat
- b) Glacial rebound
- c) Glacial erosion
- d) Glacial deposition

****Answer: c) Glacial erosion****

34. Which of the following gases is a major contributor to air pollution and respiratory problems in urban areas?

- a) Carbon dioxide (CO₂)
- b) Nitrous oxide (N₂O)
- c) Sulfur dioxide (SO₂)
- d) Methane (CH₄)

****Answer: c) Sulfur dioxide (SO₂)****

35. What is the term for the process of removing pollutants from contaminated soil and groundwater?

- a) Soil erosion
- b) Soil remediation
- c) Soil conservation
- d) Soil compaction

****Answer: b) Soil remediation****

36. Which of the following gases is responsible for the formation of ground-level ozone in urban smog?

- a) Carbon dioxide (CO₂)
- b) Nitrogen oxides (NO_x)
- c) Methane (CH₄)
- d) Sulfur dioxide (SO₂)

****Answer: b) Nitrogen oxides (NO_x)****

37. What is the term for the process by which water infiltrates into the ground and becomes groundwater?

- a) Evaporation
- b) Infiltration
- c) Percolation
- d) Transpiration

****Answer: b) Infiltration****

38. Which of the following is a major cause of land subsidence in coastal areas?

- a) Glacial rebound
- b) Sea-level rise
- c) Groundwater withdrawal
- d) Volcanic activity

****Answer: c) Groundwater withdrawal****

39. What is the term for the process of removing salt from seawater to make it suitable for drinking and irrigation?

- a) Desalination
- b) Filtration
- c) Distillation
- d) Purification

****Answer: a) Desalination****

40. Which of the following is a major cause of soil erosion in agricultural fields?

- a) Forest conservation
- b) Windbreaks
- c) Overgrazing
- d) Terracing

****Answer: c) Overgrazing****

41. What is the term for the process by which plants and trees release water vapor into the atmosphere through their leaves?

- a) Photosynthesis
- b) Evaporation
- c) Transpiration
- d) Condensation

****Answer: c) Transpiration****

42. Which of the following is a major cause of coral reef degradation?

- a) Ocean acidification
- b) Reduced wave action
- c) Low sea levels
- d) High nutrient levels

****Answer: d) High nutrient levels****

43. What is the term for the process by which a river's velocity and discharge increase, leading to erosion of its banks and bed?

- a) Baseflow
- b) Meandering
- c) Flooding
- d) Floodplain development

****Answer: c) Flooding****

44. Which of the following gases is primarily responsible for the greenhouse effect on Earth?

a) Carbon dioxide (CO₂)

b) Methane (CH₄)

c) Water vapor (H₂O)

d) Nitrous oxide (N₂O)

****Answer: a) Carbon dioxide (CO₂)****

45. What is the term for the process of converting organic waste materials into biogas and nutrient-rich organic material?

a) Incineration

b) Landfilling

c) Recycling

d) Composting

****Answer: d) Composting****

46. Which of the following is a key factor contributing to the loss of biodiversity?

a) Habitat restoration

b) Protected areas

c) Habitat destruction

d) Sustainable agriculture

****Answer: c) Habitat destruction****

47. What is the term for the movement of ocean water away from the coast, resulting in a lowering of sea level?

a) Upwelling

b) Downwelling

c) El Niño

d) Tides

****Answer: a) Upwelling****

48. Which international agreement sets goals for the conservation and sustainable use of biodiversity?

a) Kyoto Protocol

b) Paris Agreement

c) Convention on Biological Diversity (CBD)

d) Montreal Protocol

****Answer: c) Convention on Biological Diversity (CBD)****

49. Which layer of the atmosphere contains the ozone layer, which protects us from harmful ultraviolet (UV) radiation?

a) Troposphere

b) Stratosphere

c) Mesosphere

d) Thermosphere

****Answer: b) Stratosphere****

50. What is the term for the process of converting saltwater into freshwater, making it suitable for drinking and irrigation?

a) Desalination

b) Filtration

c) Distillation

d) Purification

****Answer: a) Desalination****

DEPARTMENT OF GEOGRAPHY, H.M.M.C.W.