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ENVIRONMENTAL EDUCATION
EDB 415

MAIN EXAMINATIONS
BEd
MAY/JUNE - 2023

Time : 3 hours **Marks: 100**

This paper consists of **15** pages including the cover

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INSTRUCTIONS

1. You are required to answer all questions.
2. Use the Multiple-Choice Answer Sheet provided.

SECTION A:QUESTION 1

Select the answer that best answers the question. Shade the letter of the correct answer in the given answer sheet.

1. **The modern-day definition of the term "environment" encompasses...**

   a) all living microorganisms that occur in nature
   b) resources such as air, water, soil and minerals
   c) human infrastructures
   d) living macro-organisms such as animals (including humans) and plants

   Choose ONE of the options below.

   A. a, band d
   B. a, bandc
   C. a and b
   D. All of the above

2. **The aim of environmental education is to ...**

   a) enable people to make informed decisions about the environment.
   b) help people develop a positive attitude towards theenvironment.
   c) sensitize people to environmental issues and risks.
   d) enhance environmental literacy.

   Choose ONE of the options below.

   A. a, bandc
   B. a, band d
   C. d
   D. All of the above

3. **Which of the following types of education is most beneficial in addressing environmental education?**

   A. Education about the environment
   B. Education for the environment
   C. Education 1n the environment
   D. Education through the environment

4 **Which environmental ethic does the scenario described below depict?**

Eucalyptus was introduced to Mauritius after the French introduced sugar cane farming Wood was required to fuel the urns in order to produce sugar Farmers had to ensure that productive lands were used for crop and food production, and a small herd of cattle was kept for domestic purposes. A forest reserve had to be kept and maintained as a source of fuel wood for the sugar cane industry.

1) Ecocentric
2) Egocentric
3) Anthropocentnc
4) Economic

5. People who subscribe to an egocentric environmental ethic ...

a) view the environment from the perspective of how it serves their own interests.
b) are willing to conserve the environment, provided it serves their interests.
c) believe that the environment should be protected for the benefit ofhumanity.
d) approve economic development despite the impact it has on theenvironment.

A. a, b and d
B. b and c
C. a and c
D. b, c and d

6. To which principle of environmental education does the following statement apply?

Environmental education should entail education about the entire environment, the environment should not be viewed as a set of unrelated dimensions.

A. Assign appropriate value to all forms of knowledge.
B. Affirm the nature of partnerships in dealing with environmental problems.
C. Ensure that an integrated approach is adopted.
D. View the environment holistically.

7. To which principle of environmental education does the following statement apply?

It is necessary to apply this principle because people need to be sensitive to the environment and its cases and always changing circumstances. It should not ever be easy for them to disregard environmental issues. If people are sensitised about environmental issues, they will always act responsibly towards the environment.

A. Environmental education is a life-long process.
B. A cross-disciplinary approach should be used *in* environmental education

C. Environmental education should focus on preventing *and solving* environmental problems.
D. Environmental education should focus on setting an example through suitable role-models.

8. To which principle of environmental education does the following statement apply?

Special teaching methods will have to be brought into environmental education and the facilitator will need to have a sound background of these teaching techniques.

a) Environmental education should be promoted to meet everyone's basic needs.
b) Environmental education should work in a democratic style.
c) Environmental education should adopt a learner-centred approach.
d) Various learning environments should be used in conjunction with differentiation in learning facilitation options.

Choose ONE of the options below.

A. a and c
B. c and d
C. b, c and d
D. All of the above

9. Which principle of environmental education suggests that indigenous knowledge systems should be acknowledged?

A. Appropriate value must be assigned to all knowledge systems.
B. A democratic style of working must be sought.
C. Environmental education must be geared to the future.
D. Environmental education must be geared to skills by developing individuals' powers of critical thinking.

10. Which aspect described in the following excerpt is tied to a goal of environmental education?

People are aware of the water wastage in their communities and how it occurs, but they continue to contribute towards the problem and do not accept responsibility to try to curb the wastage of water. They do not even report broken and leaking taps to the authorities.

A. Lack of awareness
B. Lack of knowledge
C. Lack of skills
D. Lack of a pro-environmental attitude

11. Which goals of environmental education as reflected in the following excerpt should project leaders' focus in order to be successful in sensitising local gardeners to the need to pay attention to the type of plants that grow in their gardens?

Generally, a lack of interest in and resentment towards the promotion of indigenous plants was encountered. It was realised that a more comprehensive strategy of involving and educating the community is required.

a) Creating a pro-environmental attitude
b) Encouraging cooperative action
c) Increasing knowledge
d) Raising awareness

Choose ONE of the options below.

A. a, b and d
B. b, c and d
C. a, b and c
D. All of the above

12. Which of the following types of education is most beneficial in addressing environmental education?

A. Education about the environment
B. Education for the environment
C. Education in the environment
D. Education through the environment

13. The aim of environmental education is to...

a) enable people to make informed decisions about the environment.
b) help people develop a positive attitude towards the environment.
c) sensitise people to environmental issues and risks.
d) enhance environmental literacy.

Choose ONE of the options below.

A. a, b and c
B. a, b and d
C. d
D. All the above

14. Education for sustainable living promotes the values of...

A. ecological sustainability and human development
B. ecological sustainability and socially Just living.
C. education geared towards the environment.
D. existing social structures and pro-environmental education

15. Which of the following options gives all indicators of sustainable development?

A. ecological, political, and social
B. ecological, spiritual, and economic
C. ecological, social, and spiritual
D. political, social, and economic

16. Which of the following indicators of living sustainably falls within the category of ecological indicators?

A. Consumption and the generation of waste are minimised.
B. Communities work together and share their talents, skills and resources.
C. Cultural vitality is sustained through artistic and cultural activities.
D. There is a sense of a socially Just flow of resources, goods and services.

17. ____is mainly responsible for the challenge described below.

The growth of megacities has also rocketed from just nine in 1985 to 46 across the world today, making plans to survive climate change in cities a major priority.

A. population growth
B. poverty
C. urbanisation
D. health hazards

18. Mention the environmental issue which led to the situation described in the following statement:

It is estimated that more than five million hectares of land and 80 000 sheep are affected and, that normal rainfall will be needed for several years.

A. deforestation
B. poverty
C. drought
D. loss of biodiversity

19. Which environmental issue could have contributed to the scenario mentioned below?

Last week, we learnt that the Antarctic ice melting accelerated threefold in the last five years

A. global warming
B. deforestation
C. desertifl cation
D. littering

20. Which one of the following greenhouse gases is the greatest offender in contributing to global warming?

A. Methane
B. Halocarbons
C. Nitrous oxide
D. Carbon dioxide

21. Which environmental issue is described in the following scenario?

This is probably the greatest threat to the variety of life on this planet today. It is identified as a main threat to 85% of all species described in the IUCN's Red List (those species officially classified as "threatened" and "endangered").

A. Encroachment of alien vegetation
B. Habitat degradation and loss
C. Indiscriminate burning of natural habitats
D. Illegal trade in wildlife

22. The effects of soil erosion go beyond the loss of fertile land. It has led to increased pollution and sedimentation in streams and rivers, clogging these waterways and causing declines in fish and other species. And degraded lands are also often less able to hold onto water, which can lead to ...

A. habitat destruction
B. flooding
C. air pollution
D. desertification

23. Which might be a <u>consequence</u> of the following scenario?

A. habitat destruction
B. flooding
C. air pollution

D. desertification

24. Which international document outlines the principles and goals of environmental education?

A. Belgrade Declaration
B. Brandt Commission Report
C. Tbilisi Declaration
D. Agenda 21

25. Sustainable development (SD) is considered the way to promulgate ...

A. Just and practicable economic, environmental, and social policies
B. social welfare, economic development policies and conservation of the environment
C. the redistnbut1on of wealth, the nationalisation of industries and politically stable policies
D. equitable social justice and human development policies

26. To address and resolve environmental issues, we need to...

a) facilitate learning opportunities by following and applying the principles and objectives of environmental education.
b) lobby government to address the issue.
c) provide classroom-based instruction through formal school-based education.
d) educate society as a whole

Choose ONE of the options below.

A. options a and d
B. options a, b and d
C. options b, c and d
D. options a, b, c and d

27. Which factors play a role in ensuring that business and industry act within the confines of environmentally acceptable practices?

a) Legislation
b) Market pressure
c) Pressure from environmental activists and the public
d) Taxation

Choose ONE of the options below.

A. options a, b, c and d
B. options a and c
C. options b and c
D. options a and d

28. Which of these principles of environmental learning relate directly to the learner characteristic "praxis-oriented"?

a) Be experimentally attuned.
b) Geared to skills.
c) Exemplary
d) Life-long

Choose ONE of the options below.

A. a and b
B. a, band d
C. a, c and d
D. All of the above

29. Which of the following types of education is most beneficial in addressing environmental education?

a) Education about the environment
b) Education for the environment
c) Education in the environment
d) Education through the environment

30. The aim of environmental education is to...

a) enable people to make informed decisions about the environment.
b) help people develop a positive attitude towards the environment
c) sensitise people to environmental issues and risks.
d) enhance environmental literacy.

Choose from a combination below.

A. a, b and c
B. a, b and d
C. d
D. All of the above

31. Education for sustainable living promotes the values of...

A. ecological sustainability and human development
B. ecological sustainability and socially Just living.
C. education geared towards the environment.
D. existing social structures and pro-environmental education

32. Read the following passage and identify the indicator of sustainable development to which reference is made.

Lake Fundudzi is an exceptional example of a natural resource considered sacred by the local people and thus carefully preserved Local customs, traditions and taboos have contributed for centuries to the preservation of the area. It will require careful negotiation to open the area up to tourism

33. Which of the following option apply to the above passage?
    a. Cultural
    b. Economic
    c. Spiritual
    d. Environmental or ecological

34. Which of the following indicators of living sustainably falls within the category of ecological indicators?

    A. Consumption and the generation of waste are minimised.
    B. Communities work together and share their talents, skills and resources.
    C. Cultural vitality is sustained through artistic and cultural activities.
    D. There is a sense of a socially flow of resources, goods and services.

35. During the materials development phase of a workshop that will be held to assist a local community in Nalusanga in initiating a sustainable bookkeeping project, community members were asked to share their experience in bookkeeping. If these insights had been left out during the development of the materials, it could have resulted in ...

    a) the value and validity of the materials on bookkeeping being compromised.
    b) a lack of commitment to the project by the community
    c) the community not taking ownership of the project.
    d) a lack of recognition of indigenous practices

    Choose from a combination below.

A. b, c and d
B. a, band d
C. a, b and c
D. All of the above

36. In a research project concerning the impact of invasive alien vegetation, a complete audit was undertaken of the presence of these plants in the region. This audit was necessary to establish a...

A. situation analysis
B. needs analysis.
C. environmental impact assessment
D. participatory rural appraisal

37. _is mainly responsible for the challenge described below.

The growth of megacities has also rocketed from just nine in 1985 to 46 across the world today, making plans to survive climate change in cities a major priority.

a. population growth
b. poverty
c. urbanisation
d. health hazards

38. When we speak of an environmental worldview, we are actually reflecting on ...

A. how people think the world works
B. what people think their role in the world should be
C. what people believe is appropriate behaviour towards the environment
D. what the environment can provide to meet people's needs

Choose from a combination below.

a. options a, b and c
b. options a, b and d
c. options b, c and d

d. options a, b, c and d

39. Which factors play a role in ensuring that business and industry act within the confines of environmentally acceptable practices?

a. Legislation
b. Market pressure
c. Pressure from environmental activists and the general public
d. Taxation

Choose from a combination below.

A. options a, b, c and d
B. options a and c
C. options b and c
D. options a and d

40. Killer diseases among Southern African region include ...

A. tuberculosis, cholera, and dengue fever
B. HIV/AIDS, tuberculosis, and malaria
C. cholera, bird flu and HIV/AIDS
D. All the above

41. What is the difference between environmental training and environmental education?

A. Environmental training focuses on developing skills, while environmental education is used to advance knowledge.
B. Environmental training teaches competencies and personal development, while environmental education teaches information about the environment.
C. Environmental training advances ability, while environmental education teaches competencies.
D. Environmental training is about personal development while environmental education improves people's attitude towards the environment.

42. The concept "environment" refers to.

a. one's surroundings.
b. the biological elements in one's vicinity.
c. man-made or built elements that impact on one.
d. the biophysical conditions

Choose from a combination below.

A. Option A and D

B. Options A, B and D
C. Options A, C and D
D. All of the above options

43. Which environmental issue is dominant in the scenario depicted below?

The geomantic tortoise, which is prevalent in the Western Cape, is threatened by the shrinkage of its natural habitat, the spread of alien vegetation, veld fires and the illegal trade of these tortoises as nets.

A. Encroachment of alien vegetation

B. Habitat degradation and loss

C. Burning of natural habitats

D. Illegal wildlife trade

44. Which environmental issue might be a consequence of the following scenario?

In South Africa, it is not uncommon to see veld fires burning randomly. It is acknowledged that the veld is regenerated by burning, but only at specific times of the year. Burning takes away the organic matter that improves the sod quality and tends to seal the soil surface, thus contributing to excessive run-off.

A. Habitat destruction

B. Soil erosion

C. Air pollution

D. Soil pollution

45. In South Africa, all policies regarding the environment and the way the environment should be treated have to be in line with the...

A. Constitution
B. National Environmental Management Act (NEMA)
C. White Paper on Environmental Education
D. Millennium development goals

46. Read the following excerpt to identify objectives of environmental education that are lacking.

The residents of a small town in a currently disadvantaged region in one of the East

Block countries in Europe discard their sweet wrappers and other containers on the sidewalk.

Tip: bins are available on most street corners for the dumping of household waste and garden refuse.

A. Inadequate awareness
B. Inadequate knowledge
C. Insufficient skills
D. Absence of a pro-environmental attitude

Choose from a combination below.

A. Options A and B
B. Options C and D
C. Options A and C
D. Options A and D

47. Read the following description of a project, which aims to sensitise local gardeners about gardening practices. Which objectives of environmental education is the facilitator focusing on?
Today I will be introducing you to gardening with indigenous plants, plants which require less water to grow well and which are suited to our local conditions. Because less water is used to care for these plants, you will be contributing to conserving water for more essential uses. However, not only are these plants less difficult to maintain, but they are also easy to propagate, and I will show you how to do this. When you know how to make cuttings and harvest seed, you will be able to start a community nursery of these plants to share the young seedlings and cuttings with other local gardeners thereby promoting the cultivation of indigenous plants.

a) Creating a pro-environmental attitude
b) Encouraging cooperative action-taking
c) Increasing knowledge
d) Raising awareness

Choose from a combination below.

A. Options A, B and D
B. Options B, C and D
C. Options A, B, C and D
D. Only options B and D

48. To address and resolve environmental issues, we need to.

a) Facilitate learning opportunities by following and applying the principles and objectives of environmental education.
b) Lobby government to address the issue.

c) Provide classroom-based instruction through formal school-based education.
d) Educate society as a whole.

Choose ONE of the options below.

A. Options A and D
B. Options A, B and D
C. Options B, C and D
D. Options A, B, C and D

49. The statement "Households make use of grey water collection facilities".

Indicates involvement in...

A. the conservation and preservation of natural resources

B. recycling
C. environmental industry
D. environmental assessment studies

50. By using solar power, people contribute towards addressing the following environmental issue.

A. Overpopulation

B. Urbanisation
C. Pollution
D. Famine

SECTION B: Answer the following questions in an **EXAMINATION ANSWER BOOK.**

QUESTION 1 [20]

Define the following concepts.

1.1 Environmental footprint
1.2 Loss of Biodiversity
1.3 Holistic environment
1.4 Alien species
1.5 Urbanisation
1.6 Global warming
1.7 Finite resources
1.8 Ecosystem
1.9 Deforestation
1.10 Desertification

QUESTION 2 [20]

Identify an environmental problem experienced in your community or workplace.

2. 1 Explain the nature or context of this problem (4)

2. 2 Mention the human activities that contribute to this problem (4)

2. 3 Indicate the consequences of these activities for the environment (4)

2. 4 Indicate the consequences of these activities for people (4)

2. 5 Explain the contribution that could be made by environmental education to solve this problem (4)

QUESTION 4 [10]

4.1 Mention and explain **FIVE** examples of 'green ideas' that could contribute towards sustainable living