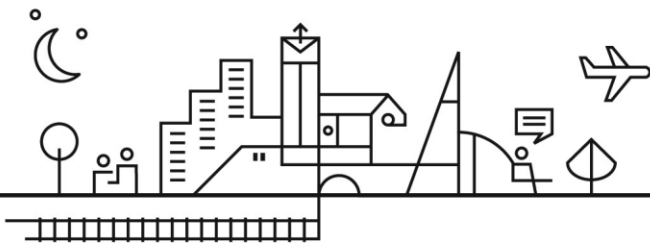


# IEMA Associate Exam Practice Questions *Environment*



## Introduction

This document is provided by IEMA to give guidance on the type of questions that will be in the multiple choice exam for the Associate (Environment). The practice questions cover the range of learning outcomes in the Associate membership standard under the *environment* version.

The exam is an 'open-book' exam which means that you can refer to text books, notes, internet sources to help answer questions.

In the exam there will be 30 questions in total. Each question has four answer options, one of which is correct. Questions are worth one mark each. You will have one hour to complete the exam and will need to correctly answer 70% (21) questions to pass the exam.

This practice paper contains 30 questions; you should allow approximately 2 minutes per question maximum or 60 minutes in total to complete this paper. You need to correctly answer 70% (21) questions to pass this practice paper. The answers along with related learning outcomes can be found at the back of the document.

## IEMA Associate Exam – Practice Questions – Environment

1. A manufacturing organisation decides to develop a sustainable development strategy based around the five capitals model. Identify the capital under which the organisation's health and safety strategy would sit.
  - a. Social capital
  - b. Natural capital
  - c. Human capital
  - d. Manufactured capital
  
2. Select the key mega-trend(s) that are affected by the use of fossil fuels for generating energy
  - a. Resource scarcity
  - b. Climate change
  - c. Biodiversity loss
  - d. All of the above
  
3. Which of the following is an example of manufactured capital?
  - a. Wind energy from air currents
  - b. Wind turbines
  - c. Income from wind generated electricity
  - d. Training of staff to install wind turbines
  
4. A button manufacturing factory based in Uganda provides an onsite nursery and funding for primary school for children of all its employees (primarily female). Which of the Sustainable Development Goals does this initiative contribute too?
  - a. SDG4 Quality Education
  - b. SDG5 Gender Equality
  - c. SDG8 Good Jobs and Economic Growth
  - d. All of the above
  
5. Which of the following planetary boundaries has crossed the boundary limit according to the 2015 update report by the Stockholm Resilience Centre?
  - a. Biogeochemical flows
  - b. Stratospheric ozone depletion
  - c. Freshwater use
  - d. Ocean acidification
  
6. Which of the following business/governance principles does an organisation's corporate sustainability report demonstrate?
  - a. Accountability
  - b. Inclusivity
  - c. Equalities
  - d. Cultural context

- 7.** Which of the following statements applies to ethical decision making in business?
- What is considered ethical does not change over time
  - Ethics are an important part of the triple bottom line
  - Ethical values are the same in all countries
  - There is no legal basis for ethical decision making
- 8.** The UK government publishes annual national greenhouse gas emission statistics on its website, including an explanation of the methodology used. Which governance principle does this provide an example of?
- Transparency
  - Compliance
  - Inclusivity
  - Stewardship
- 9.** Thomas, a 22-year old worker applied for a position of team leader in his company. His application was rejected and he was not invited for interview even though he has the necessary skills and knowledge. When he raised the issue with the HR department he was told that they were looking for someone a little older. Which business principle is the company failing to adhere?
- Integrity
  - Equality
  - Transparency
  - Accountability
- 10.** Which one of the following cycles does not consist of an atmospheric component?
- Phosphorous cycle
  - Nitrogen cycle
  - Carbon cycle
  - Water cycle
- 11.** Which of the following groups of organisms in a forest ecosystem are likely to have the greatest biomass?
- Hawk
  - Herbivorous insect
  - Carnivorous insect
  - Fox
- 12.** The plant turmeric is used in many cultures as a natural antiseptic. What ecosystem service is being provided by the turmeric?
- Cultural
  - Supporting
  - Regulating
  - Provisioning

- 13.** A lorry containing milk crashes on the motorway, spilling its contents which pass through the drain into a nearby river killing hundreds of fish. Which of the following is the pathway in this pollution incident?
- The milk lorry
  - The drain
  - The fish
  - All of the above
- 14.** The imposition of a charge on the use (by shoppers) of single use carrier bags is an example of which of the following type of governmental policy instrument?
- Information and fiscal
  - Voluntary and fiscal
  - Legal and fiscal
  - Legal, voluntary and fiscal
- 15.** Initial global climate agreements such as the United National Framework Convention on Climate Change and resulting Kyoto Protocol provide an example of which of the following policy principles?
- Best available technique
  - Producer responsibility
  - Hierarchy approach
  - Precautionary principle
- 16.** The banning of ozone depleting substances such as CFCs is covered under which international agreement?
- Paris Agreement
  - Kyoto Protocol
  - CITIES
  - Montreal Protocol
- 17.** Law that is derived from customs and landmark judgments from previous cases is called:
- Criminal
  - Civil
  - Common
  - Statute
- 18.** Which of the following scenarios provides the best example of life cycle thinking?
- Paying for the restoration of a nature reserve located near a factory site
  - Designing a fridge to reduce energy usage during usage and also enabling the maximum components to be re-manufactured once it reaches its end of life
  - Using the latest technology to manufacture cement in accordance with sector guidance
  - Only using wood from certified sustainably managed forests within the production of all furniture

- 19.** The development of a documented process to assess the environmental performance of suppliers prior to appointment, would be covered by which part of an ISO 14001:2015 environmental management system?
- Context of the organisation
  - Performance evaluation
  - Operation
  - Support
- 20.** Which of the following activities would count as an audit?
- Monitoring of electricity through regular checking of electricity meters
  - A formal check that the company is complying with their waste management procedures
  - Identifying the environmental impacts of a proposed development, assessing alternatives and proposing mitigation measures
  - Review of the site to identify potential areas of environmental improvement
- 21.** A pen manufacturer wants to calculate the quantity of greenhouse gases it generates per pen it produces. Which of the following tools is most appropriate for this?
- Carbon foot printing
  - Environmental Impact Assessment
  - Environmental Management System
  - Initial Environmental Review
- 22.** Which of the following would be considered an environmental impact as per the definition within ISO 14001?
- Use of electricity
  - Generation of waste cardboard
  - Air conditioning unit leak
  - Eutrophication
- 23.** A 24-hour construction site diesel generator is causing noise nuisance, local air quality degradation and climate impacts. Which of the following measures will reduce these impacts the most?
- Providing face masks and ear defenders for site staff
  - Installing sound barriers around the generator
  - Changing to an alternative cleaner fuel powered generator with battery storage that runs silently when fully charged
  - Adding additives to the diesel that reduce emissions of local air pollutants and greenhouse gases
- 24.** Measuring the weight of waste wood offcuts generated per wooden pallet manufactured is an example of which type of data?
- Qualitative and absolute
  - Qualitative and normalised
  - Quantitative and absolute
  - Quantitative and normalised

- 25.** Identify the SMART objective from the list below.
- Ensure that all departments complete a risk assessment
  - Ensure that staff are more environmentally aware
  - Develop a plan to improve community engagement
  - Ensure that all staff attend a sustainability briefing by quarter 4 this year
- 26.** Which of the following communication mechanisms would be most appropriate for informing the public about the company's annual sustainability performance?
- Annual company conference
  - Printed report copies at site reception
  - Company website
  - Company induction sessions
- 27.** Identify the most effective form of collaboration that a developer could undertake to reduce the impacts of the construction of a housing estate on the local community?
- Consultation
  - Information provision
  - Partnership
  - All options are equally effective
- 28.** A local authority decides to develop housing on land that was formerly occupied by a steel works. Identify the correct time frame of the risk assessment process.
- Current and future activities
  - Past and current activities
  - Past, current and future activities
  - Past and future activities
- 29.** Select the key reason for a large supermarket chain to adopt a formalised system of supply chain management in relation to climate change adaptation.
- Reduce the risk of prosecution
  - Ensure security of supply
  - Expand the product range
  - Identify cost savings
- 30.** Identify the key element(s) for managing change within an organisation.
- Sustained communication to those affected by the change
  - Appointing a change agent
  - Adopting a process approach to change
  - All of the above

## Answers and Learning Outcomes

1. A manufacturing organisation decides to develop a sustainable development strategy based around the five capitals model. Identify the capital under which the organisation's health and safety strategy would sit.
  - a. Social capital
  - b. Natural capital
  - c. Human capital**
  - d. Manufactured capital

Learning outcome 1: Fundamentals of Sustainability

2. Select the key mega-trend(s) that are affected by the use of fossil fuels for generating energy
  - a. Resource scarcity
  - b. Climate change
  - c. Biodiversity loss
  - d. All of the above**

Learning outcome 1: Fundamentals of Sustainability

3. Which of the following is an example of manufactured capital?
  - a. Wind energy from air currents
  - b. Wind turbines**
  - c. Income from wind generated electricity
  - d. Training of staff to install wind turbines

Learning outcome 1: Fundamentals of Sustainability

4. A button manufacturing factory based in Uganda provides an onsite nursery and funding for primary school for children of all its employees (primarily female). Which of the Sustainable Development Goals does this initiative contribute too?
  - a. SDG4 Quality Education
  - b. SDG5 Gender Equality
  - c. SDG8 Good Jobs and Economic Growth
  - d. All of the above**

Learning outcome 1: Fundamentals of Sustainability

5. Which of the following planetary boundaries has crossed the boundary limit according to the 2015 update report by the Stockholm Resilience Centre?
  - a. Biogeochemical flows**
  - b. Stratospheric ozone depletion
  - c. Freshwater use
  - d. Ocean acidification

Learning outcome 1: Fundamentals of Sustainability



6. Which of the following business/governance principles does an organisation's corporate sustainability report demonstrate?

- a. **Accountability**
- b. Inclusivity
- c. Equalities
- d. Cultural context

Learning outcome 2: Fundamental Business and Governance Principles and Issues

7. Which of the following statements applies to ethical decision making in business?

- a. What is considered ethical does not change over time
- b. **Ethics are an important part of the triple bottom line**
- c. Ethical values are the same in all countries
- d. There is no legal basis for ethical decision making

Learning outcome 2: Fundamental Business and Governance Principles and Issues

8. The UK government publishes annual national greenhouse gas emission statistics on its website, including an explanation of the methodology used. Which governance principle does this provide an example of?

- a. **Transparency**
- b. Compliance
- c. Inclusivity
- d. Stewardship

Learning outcome 2: Fundamental Business and Governance Principles and Issues

9. Thomas, a 22-year old worker applied for a position of team leader in his company. His application was rejected and he was not invited for interview even though he has the necessary skills and knowledge. When he raised the issue with the HR department he was told that they were looking for someone a little older. Which business principle is the company failing to adhere to?

- a. Integrity
- b. **Equality**
- c. Transparency
- d. Accountability

Learning outcome 2: Fundamental Business and Governance Principles and Issues

10. Which one of the following cycles does not consist of an atmospheric component?

- a. **Phosphorous cycle**
- b. Nitrogen cycle
- c. Carbon cycle
- d. Water cycle

Learning outcome 3: Fundamental Environmental Issues and Principles

11. Which of the following groups of organisms in a forest ecosystem are likely to have the greatest biomass?
- a. Hawk
  - b. Herbivorous insect**
  - c. Carnivorous insect
  - d. Fox

Learning outcome 3: Fundamental Environmental Issues and Principles

12. The plant turmeric is used in many cultures as a natural antiseptic. What ecosystem service is being provided by the turmeric?
- a. Cultural
  - b. Supporting
  - c. Regulating
  - d. Provisioning**

Learning outcome 3: Fundamental Environmental Issues and Principles

13. A lorry containing milk crashes on the motorway, spilling its contents which pass through the drain into a nearby river killing hundreds of fish. Which of the following is the pathway in this pollution incident?
- a. The milk lorry
  - b. The drain**
  - c. The fish
  - d. All of the above

Learning outcome 3: Fundamental Environmental Issues and Principles

14. The imposition of a charge on the use (by shoppers) of single use carrier bags is an example of which of the following type of governmental policy instrument?
- a. Information and fiscal
  - b. Voluntary and fiscal
  - c. Legal and fiscal**
  - d. Legal, voluntary and fiscal

Learning outcome 4: Policy, Regulation and Legislation

15. Initial global climate agreements such as the United National Framework Convention on Climate Change and resulting Kyoto Protocol provide an example of which of the following policy principles?
- a. Best available technique
  - b. Producer responsibility
  - c. Hierarchy approach
  - d. Precautionary principle**

Learning outcome 4: Policy, Regulation and Legislation

16. The banning of ozone depleting substances such as CFCs is covered under which international agreement?

- a. Paris Agreement
- b. Kyoto Protocol
- c. CITIES
- d. **Montreal Protocol**

Learning outcome 4: Policy, Regulation and Legislation

17. Law that is derived from customs and landmark judgments from previous cases is called:

- a. Criminal
- b. Civil
- c. **Common**
- d. Statute

Learning outcome 4: Policy, Regulation and Legislation

18. Which of the following scenarios provides the best example of life cycle thinking?

- a. Paying for the restoration of a nature reserve located near a factory site
- b. **Designing a fridge to reduce energy usage during usage and also enabling the maximum components to be re-manufactured once it reaches its end of life**
- c. Using the latest technology to manufacture cement in accordance with sector guidance
- d. Only using wood from certified sustainably managed forests within the production of all furniture

Learning outcome 4/5: Policy, Regulation and Legislation and Management and Assessment Tools

19. The development of a documented process to assess the environmental performance of suppliers prior to appointment, would be covered by which part of an ISO 14001:2015 environmental management system?

- a. Context of the organisation
- b. Performance evaluation
- c. **Operation**
- d. Support

Learning outcome 5: Management and Assessment Tools

20. Which of the following activities would count as an audit?

- a. Monitoring of electricity through regular checking of electricity meters
- b. **A formal check that the company is complying with their waste management procedures**
- c. Identifying the environmental impacts of a proposed development, assessing alternatives and proposing mitigation measures
- d. Review of the site to identify potential areas of environmental improvement

Learning outcome 5: Management and Assessment Tools

21. A pen manufacturer wants to calculate the quantity of greenhouse gases it generates per pen it produces. Which of the following tools is most appropriate for this?
- a. **Carbon foot printing**
  - b. Environmental Impact Assessment
  - c. Environmental Management System
  - d. Initial Environmental Review

Learning outcome 5: Management and Assessment Tools

22. Which of the following would be considered an environmental impact as per the definition within ISO 14001?
- a. Use of electricity
  - b. Generation of waste cardboard
  - c. Air conditioning unit leak
  - d. **Eutrophication**

Learning outcome 5: Management and Assessment Tools

23. A 24-hour construction site diesel generator is causing noise nuisance, local air quality degradation and climate impacts. Which of the following measures will reduce these impacts the most?
- a. Providing face masks and ear defenders for site staff
  - b. Installing sound barriers around the generator
  - c. **Changing to an alternative cleaner fuel powered generator with battery storage that runs silently when fully charged**
  - d. Adding additives to the diesel that reduce emissions of local air pollutants and greenhouse gases

Learning outcome 6: Innovative and Leading Practices

24. Measuring the weight of waste wood offcuts generated per wooden pallet manufactured is an example of which type of data?
- a. Qualitative and absolute
  - b. Qualitative and normalised
  - c. Quantitative and absolute
  - d. **Quantitative and normalised**

Learning outcome 7: Analytical Thinking

25. Identify the SMART objective from the list below.
- a. Ensure that all departments complete a risk assessment
  - b. Ensure that staff are more environmentally aware
  - c. Develop a plan to improve community engagement
  - d. **Ensure that all staff attend a sustainability briefing by quarter 4 this year**

Learning outcome 8: Problem Reframing and Resolution

26. Which of the following communication mechanisms would be most appropriate for informing the public about the company's annual sustainability performance?
- a. Annual company conference
  - b. Printed report copies at site reception
  - c. Company website**
  - d. Company induction sessions

Learning outcome 9: Effective Communication

27. Identify the most effective form of collaboration that a developer could undertake to reduce the impacts of the construction of a housing estate on the local community?
- a. Consultation
  - b. Information provision
  - c. Partnership**
  - d. All options are equally effective

Learning outcome 10: Relationship Development

28. A local authority decides to develop housing on land that was formerly occupied by a steel works. Identify the correct time frame of the risk assessment process.
- a. Current and future activities
  - b. Past and current activities
  - c. Past, current and future activities**
  - d. Past and future activities

Learning outcome 11: Resilience, Risk and Continual Improvement

29. Select the key reason for a large supermarket chain to adopt a formalised system of supply chain management in relation to climate change adaptation.
- a. Reduce the risk of prosecution
  - b. Ensure security of supply**
  - c. Expand the product range
  - d. Identify cost savings

Learning outcome 12: Delivering Sustainable Solutions

30. Identify the key element(s) for managing change within an organisation.
- a. Sustained communication to those affected by the change
  - b. Appointing a change agent
  - c. Adopting a process approach to change
  - d. All of the above**

Learning outcome 13: Leadership for Change