



## EDGE Experts Exam (Version 3): Sample Questions

To provide clarity on the types of questions being asked in the EDGE v3 Experts Exam and their format, following are some examples.

### I. General Information on EDGE

---

1. EDGE is:
  - a. A green building standard
  - b. A software application
  - c. A certification program
  - d. All of the above
2. EDGE does not provide:
  - a. Projected operational savings
  - b. Projected baseline construction costs
  - c. Projected incremental costs
  - d. Projected carbon emission reductions
3. Which of the following is a minimum requirement for EDGE Zero Carbon certificate
  - a. Achieve EDGE Standard certificate with 1 year of 75% Occupancy
  - b. Achieve EDGE Standard certificate with 1 year of 50% Occupancy
  - c. Achieve EDGE Advance certificate with 1 year of 75% Occupancy
  - d. Achieve EDGE Advance certificate with 1 year of 50% Occupancy
4. EDGE calculates energy use on a(n) \_\_\_\_\_ basis:
  - a. Hourly
  - b. Daily
  - c. Monthly
  - d. Annual



## II. The EDGE Standard

---

5. Which of the following can be certified using EDGE?
  - a. Sports Stadiums
  - b. Data Centers
  - c. Airports
  - d. All of the Above
  
6. What is likely to be the most significant end-use to achieve energy savings in a hospital located in a hot and humid climate?
  - a. Space Heating
  - b. Space Cooling
  - c. Water Heating
  - d. Lighting
  
7. An air-conditioned hotel building has been designed with a 150mm air-filled cavity in the external walls. Replacing the air-filled cavity with polystyrene insulation would:
  - a. Reduce monthly utility costs
  - b. Reduce embodied energy of construction
  - c. Increase solar reflectance
  - d. Improve the external shading coefficient
  
8. A roof is composed of the following layers of materials: (1) a concrete slab with an R-value of  $1 \text{ m}^2\cdot\text{K}/\text{W}$ , (2) insulation with an R-value of  $3 \text{ m}^2\cdot\text{K}/\text{W}$ , and (3) a rubberized layer with an R-value of  $1 \text{ m}^2\cdot\text{K}/\text{W}$ . The U-value in  $\text{W}/\text{m}^2\cdot\text{K}$  of this roof assembly is:
  - a. 0.2
  - b. 0.4
  - c. 0.5
  - d. 5.0
  
9. Installing low-E glass in a building will impact:
  - a. Lighting energy use
  - b. Heating energy use
  - c. Hot water energy use
  - d. Other energy use



### III. Local Market Conditions

---

10. The Cooling System assignment of the EDGE Base Case is based on:
- EN ISO 13790
  - ANSI 2008
  - ASHRAE 90.1-2016
  - Standard local building practices
11. If a measure is marked with an asterisk (\*) in the EDGE App, it means:
- It is an important measure for that building typology for efficiency
  - It is an important measure for that building typology for carbon savings
  - The relevant values must be input only if an upgrade has been made for that measure
  - The relevant values must be input regardless of whether an improvement has been made
12. If a building contains two cooling systems with the same capacity but with COP values of 3 and 5 respectively, the COP value entered in the EDGE App should be:
- 3
  - 4
  - 5
  - 8

### IV. EDGE Software

---

13. A development includes 20,000m<sup>2</sup> of apartments and 12,000m<sup>2</sup> of offices, located above 800m<sup>2</sup> of shopping area. Which EDGE typology / typologies should be used for modeling?
- Apartments
  - Apartments and Offices
  - Offices and Retail
  - Apartments, Offices and Retail
14. A building development includes 8,000m<sup>2</sup> of office space and 1,500m<sup>2</sup> of retail space. How should this project be set up in EDGE?
- Create two separate projects for each typology.
  - Submit the entire project as a mixed use typology
  - Create two separate subprojects for each typology.
  - Create one project under the office typology as that represents the majority of the area.



15. The EDGE Software, used in EDGE Assessments throughout the design and construction stages, is available to:
- Developer clients for a subscription fee
  - Free of charge to professional design teams only, who are registered as EDGE operators
  - EDGE Experts who have achieved accreditation, for an annual fee
  - Free of charge to anyone after registering on the EDGE App
16. Which of the following is true about virtual energy:
- Virtual energy helps a project achieve EDGE Advanced.
  - Virtual energy reduces the carbon emissions and savings of a project.
  - Virtual energy is the energy achieved through the passive design of a building.
  - Virtual energy is the energy required to provide occupant comfort when no heating or cooling is provided

## V. Roles and Responsibilities

---

17. Which of the following measures must an EDGE Auditor conduct a test on during the on-site audit?
- EEM07 – Green Roofs
  - EEM32 – Power Factor Correction
  - WEM01 – Water Efficient Showerheads
  - WEM13 – Water-efficient Landscape Irrigation
18. To become an EDGE Auditor, a candidate must:
- Become an EDGE Expert
  - Train with local or global Certifiers
  - Maintain their credentials
  - All of the above
19. The fees for the Auditor of a project applying for EDGE certification are paid by:
- The World Green Building Council
  - The developer
  - The building inspector
  - The design team



20. Which of the following statement is correct for an EDGE Auditor?
- a. The EDGE Auditor may be part of the Certification team.
  - b. The EDGE Auditor can provide training to EDGE Clients that they are not auditing.
  - c. The EDGE Auditor does not audit Zero Carbon projects.
  - d. The EDGE Auditor issues EDGE Certificates for buildings.
21. The EDGE Auditor must confirm a project's:
- a. Floor Area
  - b. Space Heating Fuel
  - c. Neither (a) or (b)
  - d. Both (a) and (b)
22. If a project team does not have the required measure compliance documents specified in the EDGE User Guide, the project team:
- a. Must try a different measure to achieve EDGE certification
  - b. Can contact the Certifier to request permission to use alternate documents
  - c. Must contact IFC's EDGE Team for an alternate solution
  - d. Must contact the Auditor to request an alternate solution

## VI. EDGE Certification Process

---

23. The earliest a project can be registered is when:
- a. The project is in the concept phase
  - b. The project is in the design phase
  - c. The project is in the construction phase
  - d. The certificate of occupancy has been issued
24. An EDGE Certificate is issued to the Client when:
- a. The Design stage EDGE assessment meets all EDGE targets.
  - b. The Construction stage EDGE Assessment meets all EDGE targets.
  - c. The EDGE Certifier is satisfied that the audited Construction stage assessment is correct.
  - d. The EDGE Auditor is satisfied that the Design stage assessment is correct.

Answer Key

1. d	7. a	13. b	19. b
2. b	8. a	14. c	20. c
3. c	9. b	15. d	21. d
4. d	10. c	16. d	22. d
5. d	11. d	17. c	23. a
6. b	12. b	18. d	24. c