ASHRAE High-Performance Building Design Professional (HBDP)

Exam Content Outline

|  |  |  |
| --- | --- | --- |
| **Content Domain** | **Weighting** | **# Items** |
| Domain 1: General Information | 11% 18% | 11 18 |
| Domain 2: Energy Analysis | 22% | 22 |
| Domain 3: Indoor and Site Environment | 16% 17% | 16 17 |
| Domain 4: Controls and Monitoring | 15% 14% | 15 14 |
| Domain 5: Benchmarking with Performance Metrics | 13% 7% | 13 7 |
| Domain 6: Water Conservation | 11% 8% | 11 8 |
| Domain 7: Commissioning | 12% 7% | 12 7 |
| Domain 8: Energy and Materials Use and Management | 0% 7% | 0 7 |
| **TOTAL** | 100% | 100 |

**Black Font** = Weightings beginning June 1, 2025; Red Font = Weightings on current exam

**Weighting of Subdomains**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Domain 1: General Information | | *Complexity Level and Number of Items* | | | |
| **Subdomain** | **Description** | **Recall** | **Application** | **Analysis** | **Total** |
| 1.1 | High-Performance Building Design Concepts | 2 3 | 1 3 | 0 | 3 6 |
| 1.2 | HVAC&R Processes | 2 3 | 1 2 | 0 | 3 5 |
| 1.3 | Sustainable Processes | 0 | 2 4 | 1 2 | 3 6 |
| 1.4 | Systems | 0 | 2 1 | 0 | 2 1 |
|  | ***Totals*** | **4 6** | **6 10** | **1 2** | **11 18** |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Domain 2: Energy Analysis | | *Complexity Level and Number of Items* | | | |
| **Subdomain** | **Description** | **Recall** | **Application** | **Analysis** | **Total** |
| 2.1 | Envelope/Massing/Orientation Optimization | 0 | 2 | 2 | 4 |
| 2.2 | Initial Assessment | 1 2 | 2 | 2 | 5 6 |
| 2.3 | Ventilation | 1 2 | 2 | 2 4 | 5 8 |
| 2.4 | Energy Compliance Modeling | 2 | 2 | 0 | 4 |
| 2.5 | Carbon Emissions Compliance (NEW) | 2 0 | 2 0 | 0 | 4 0 |
|  | ***Totals*** | **6** | **10 8** | **6 8** | **22** |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Domain 3: Indoor and Site Environment | | *Complexity Level and Number of Items* | | | |
| **Subdomain** | **Description** | **Recall** | **Application** | **Analysis** | **Total** |
| 3.1 | Thermal Comfort | 1 | 2 4 | 1 2 | 4 7 |
| 3.2 | Air Quality | 2 3 | 1 2 | 1 | 4 6 |
| 3.3 | Lighting | 2 | 1 | 1 | 4 |
| 3.4 | Sound and Vibration (NEW) | 2 0 | 1 0 | 1 0 | 4 0 |
|  | ***Totals*** | **7 6** | **5 7** | **4** | **16 17** |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Domain 4: Controls and Monitoring | | *Complexity Level and Number of Items* | | | |
| **Subdomain** | **Description** | **Recall** | **Application** | **Analysis** | **Total** |
| 4.1 | Control Hardware | 4 2 | 3 1 | 0 | 7 3 |
| 4.2 | Control Strategies | 2 3 | 5 6 | 1 2 | 8 11 |
|  | ***Totals*** | **6 5** | **8 7** | **1 2** | **15 14** |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Domain 5: Benchmarking with Performance Metrics | | *Complexity Level and Number of Items* | | | |
| **Subdomain** | **Description** | **Recall** | **Application** | **Analysis** | **Total** |
| 5.1 | Project Performance Measurement | 1 0 | 3 1 | 0 | 4 1 |
| 5.2 | Energy Performance Verification | 1 | 3 2 | 1 | 5 4 |
| 5.3 | Environmental Performance Measurement | 0 | 2 1 | 2 1 | 4 2 |
|  | ***Totals*** | **2 1** | **8 4** | **3 2** | **13 7** |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Domain 6: Water Conservation | | *Complexity Level and Number of Items* | | | |
| **Subdomain** | **Description** | **Recall** | **Application** | **Analysis** | **Total** |
| 6.1 | Storm Water Management | 2 1 | 3 2 | 0 | 5 3 |
| 6.2 | Domestic Potable Water Management | 2 1 | 3 2 | 1 | 6 4 |
| 6.3 | Process / Wastewater Management | 1 | 0 | 0 | 1 |
|  | ***Totals*** | **4 3** | **6 4** | **1** | **11 8** |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Domain 7: Commissioning | | *Complexity Level and Number of Items* | | | |
| **Subdomain** | **Description** | **Recall** | **Application** | **Analysis** | **Total** |
| 7.1 | Documentation | 3 2 | 3 1 | 0 | 6 3 |
| 7.2 | Commissioning Process | 1 | 3 2 | 2 1 | 6 4 |
|  | ***Totals*** | **4 3** | **6 3** | **2 1** | **12 7** |