EPSO Data Management and Knowledge Competition

MCQ Compendium — 30 Practice Questions

Instructions for Candidates

This compendium contains **30 multiple-choice questions** designed to prepare you for the **Field-Related Multiple Choice Questionnaire** in the **EPSO Expert Competition for Data Management and Knowledge (AD7)**.

Test Format:

- **Duration:** 60 minutes (20' + 20' +20')
- **Questions:** 30 (10+10+10)
- **Pass Mark:** 50% (≥ 5/10 correct answers)
- **Language:** English

Best Practice:

1. Allocate approximately **2 minutes per question**
2. Read questions carefully to identify the **best answer** from four options
3. Consult official EPSO pre-published material for additional study resources
4. Review answers against the **Answer Key** provided at the end

Questions (1–10)

Question 1: Data Governance Framework

In the context of EU data governance, which of the following best describes the primary purpose of a Data Governance Framework?

A. To ensure all employee data is encrypted with military-grade security protocols
B. To establish clear roles, responsibilities, and decision-making processes for managing data as an organizational asset
C. To replace the need for technical data management systems
D. To eliminate all data storage requirements through cloud migration

Correct Answer:

Question 2: Master Data Management (MDM)

What is the core objective of Master Data Management (MDM) in the context of large organizations like the EU institutions?

A. To ensure that every department maintains its own independent database
B. To create a single, authoritative source of truth for critical business data across the organization
C. To minimize data storage capacity and reduce IT infrastructure costs
D. To ensure all data is made publicly available without restrictions

Correct Answer:

Question 3: Data Quality Metrics

Which of the following is NOT a standard metric for assessing data quality?

A. Completeness (percentage of non-empty fields)
B. Accuracy (correctness of data against authoritative sources)
C. Organizational hierarchy (reporting structure of departments)
D. Consistency (uniformity of data formats across systems)

Correct Answer:

Question 4: Data Protection Regulation (GDPR)

Under GDPR, what is the primary responsibility of a Data Controller?

A. To collect personal data without informing the data subject
B. To determine the purposes and means of processing personal data and ensure lawful processing
C. To delete all personal data within 24 hours of collection
D. To share personal data with all government agencies without consent

Correct Answer:

Question 5: Data Classification

Which classification level would be most appropriate for sensitive internal documents containing strategic institutional information?

A. Public
B. Internal Use Only
C. Confidential
D. Unrestricted

Correct Answer:

Question 6: Data Lifecycle Management

What are the typical stages of a data lifecycle in organizational information management?

A. Collection, Processing, Analysis, Archival, Deletion
B. Creation, Storage, Use, Sharing, Destruction

C. Reception, Integration, Retention, Auditing, Expunging
D. All of the above

Correct Answer:

Question 7: Data Interoperability

In the context of EU institutions, what does data interoperability primarily enable?

A. The ability of different data systems to exchange and use information seamlessly across organizations
B. The complete elimination of separate databases
C. The encryption of all inter-departmental communications
D. The restriction of data access to only one department

Correct Answer:

Question 8: Metadata Management

Which statement best defines metadata in the context of data management?

A. Data that describes the characteristics, structure, and context of other data
B. Personal information collected about employees
C. Encrypted data stored in secure servers
D. Raw numerical values before processing

Correct Answer:

Question 9: Data Repository Architecture

What is a primary advantage of implementing a centralized data repository (data warehouse) in large organizations?

A. It reduces the need for any other data storage solutions
B. It enables single-version truth, improved analytics, and reduces data redundancy
C. It automatically improves data quality without additional management
D. It eliminates the requirement for data governance policies

Correct Answer:

Question 10: Knowledge Management Systems

Which of the following best describes the role of Knowledge Management Systems (KMS) in organizational operations?

A. To replace all employee training programs
B. To capture, organize, and share institutional knowledge to improve decision-making and operational efficiency
C. To eliminate the need for written documentation
D. To control employee access to all organizational information uniformly

Correct Answer:

Questions (11–20)

Question 11: Data Ethics and Responsible Use

In the context of data ethics, what is the primary concern when implementing AI-driven decision-making systems in public institutions?

A. To maximize processing speed regardless of outcomes
B. To ensure algorithmic fairness, transparency, and accountability to prevent bias and discrimination
C. To minimize costs without regard for ethical considerations
D. To ensure only powerful users can access the system

Correct Answer:

Question 12: Data Security and Access Control

Which access control model is considered most restrictive and secure in high-security environments?

A. Open Access Control (no restrictions)
B. Role-Based Access Control (RBAC)
C. Principle of Least Privilege with Multi-Factor Authentication
D. Public Access with Optional Password Protection

Correct Answer:

Question 13: Data Integration

What is a key challenge in integrating data from multiple legacy systems within large organizations?

A. There are no challenges; integration is always straightforward
B. Legacy systems typically use incompatible data formats, schemas, and communication protocols
C. Modern systems cannot connect to older systems under any circumstances
D. Data integration only requires copying files between folders

Correct Answer:

Question 14: Data Analytics and Insights

Which approach best represents the progression of data maturity in analytical capabilities?

A. Descriptive Analytics → Predictive Analytics → Diagnostic Analytics → Prescriptive Analytics
B. Raw Data → Structured Data → Analyzed Data → Insights
C. Descriptive → Diagnostic → Predictive → Prescriptive
D. All data flows directly to automated decisions

Correct Answer:

Question 15: Records Management

According to EU institutional standards, what is the primary purpose of records management in data governance?

A. To store all documents indefinitely without organization
B. To systematically control the creation, maintenance, use, and disposition of records according to legal and operational requirements
C. To prevent any employee access to historical documents
D. To replace digital systems with paper-based filing

Correct Answer:

Question 16: Data Standardization

Why is data standardization essential in large, multi-language organizational contexts like EU institutions?

A. It is not necessary; variation in formats is beneficial
B. To ensure consistency, comparability, and interoperability across departments and language communities
C. To prevent departments from communicating with each other
D. To eliminate the need for data validation

Correct Answer:

Question 17: Data Retention Policies

What is a critical element of an effective data retention policy?

A. To retain all data indefinitely without review
B. To delete all data immediately after creation
C. To establish clear rules regarding how long data is kept, when it is archived, and when it is securely deleted based on legal and operational requirements
D. To allow each department to decide independently without coordination

Correct Answer:

Question 18: Information Architecture

In the context of EU institutional knowledge management, what does Information Architecture primarily address?

A. The physical design of office buildings
B. The logical organization, structure, and accessibility of information resources to support user needs and institutional objectives
C. The elimination of all information systems
D. The restriction of information flow to management levels only

Correct Answer:

Question 19: Data Validation and Quality Assurance

Which of the following represents a best practice in data validation?

A. Accepting all data entries without review to speed up processes
B. Implementing automated validation rules, consistency checks, and periodic audits to detect and correct errors
C. Validating data only during crisis situations
D. Eliminating the need for quality checks through manual data entry

Correct Answer:

Question 20: Open Data and Transparency

In alignment with EU transparency initiatives, which statement best reflects the principles of open data governance?

A. All institutional data must be kept secret from the public
B. Open data increases costs and provides no organizational benefits
C. Making non-sensitive data publicly accessible promotes transparency, enables reuse, and supports evidence-based policy-making while respecting privacy regulations
D. Open data initiatives eliminate the need for data security measures

Correct Answer:

Questions (21–30)

Question 21: Data Governance

Which of the following best describes a data governance framework?

A. A set of rules, processes, and structures for managing data assets
B. A set of SQL scripts for automating ETL jobs
C. A cloud-based backup system
D. A dashboard for monitoring data errors

Correct Answer:

Question 22: MDM

Master Data Management (MDM) focuses on:

A. Transactional log analysis
B. Ensuring a single, authoritative source for key data entities
C. Managing real-time streaming data
D. Cloud server monitoring

Correct Answer:

Question 23: Relational Database

A "Candidate Key" in a relational database table is defined as:

A. key that is used to join two tables together.
B. Any attribute that can be used to identify a row.
C. An attribute or set of attributes that uniquely identifies a row and is a minimal super-key.
D. A key that is automatically generated by the database system.

Correct Answer:

Question 24: SQL commands

The SQL command used to permanently save any transaction into the database is:

A. COMMIT
B. SAVE TRANSACTION
C. PERSIST
D. END TRANSACTION

Correct Answer:

Question 25: Data Normalization

The primary purpose of data normalization is to:
A. Improve query performance for read-only reports.
B. Eliminate data redundancy and ensure data integrity.
C. Increase data storage capacity.
D. Simplify the ETL (Extract, Transform, Load) process.

Correct Answer:

Question 26: Knowledge Retention Strategies

Knowledge retention strategies generally include:

A. Minimizing cross-team communication
B. Eliminating training resources
C. Replacing repositories with email chains
D. Job rotation, documentation, and mentoring

Correct Answer:

Question 27: Completion of Database Transaction Property

In a database transaction, the property that ensures all operations within the transaction are completed successfully or none of them are, is called:

A. Consistency
B. Isolation
C. Durability
D. Atomicity

Correct Answer:

Question 28: SCD

What is a "slowly changing dimension" (SCD) in a data warehouse context?

A. A dimension that is updated very infrequently.
B. A dimension where attributes change slowly over time, requiring specific strategies to track history.
C. A dimension table with a very large number of rows.
D. A dimension that is not used in any active reports.

Correct Answer:

Question 29: Data Lake vs Data Warehouse

A data lake differs from a data warehouse because it:

A. Stores only structured data

B. Stores raw, unprocessed data in diverse formats

C. Always guarantees high data quality

D. Requires relational modelling

Correct Answer:

Question 30: GDPR

Which of the following is a core principle of the General Data Protection Regulation (GDPR)

A. Data must always be stored within the European Union.
B. Data can be processed for any purpose once consent is given.
C. Data subjects have the "right to be forgotten".
D. Data must be stored indefinitely for auditing purposes.

Correct Answer:

Answer Key

Question	Answer	Topic Area
1	B	Data Governance
2	B	Master Data Management
3	C	Data Quality
4	B	GDPR & Data Protection
5	C	Data Classification
6	D	Data Lifecycle
7	A	Data Interoperability
8	A	Metadata
9	B	Data Architecture
10	B	Knowledge Management
11	B	Data Ethics
12	C	Data Security
13	B	Data Integration
14	C	Data Analytics
15	B	Records Management
16	B	Data Standardization
17	C	Data Retention
18	B	Information Architecture
19	B	Data Validation

20	C	Open Data
21	A	
22	B	
23	C	
24	A	
25	B	
26	D	
27	D	
28	B	
29	B	
30	C	

Scoring Guidance

Passing Score: 10/20 (50%)

Score Range	Performance Level	Interpretation
18–20	Excellent	Very strong grasp of all core concepts
15–17	Good	Solid understanding; minor gaps to address
12–14	Satisfactory	Acceptable knowledge; targeted review recommended
10–11	Passing	Minimum competency; comprehensive study needed
<10	Below Passing	Significant preparation required before test