

Post Graduate Diploma in Management (Hospital & Health Management)

PGDM – 2024-2026 Batch

2nd Year – 3rd Semester End Examination

Subject & Code	: Digital Health Standards and Health Information Exchange-HIT 701	Reg. No.:
Semester & Batch	: III, 2024-2026	Date : 03-11-2025
Time & Duration	: 10:30 A.M.-01:30 P.M. (3 Hrs.)	Max. Marks : 70

Instructions:

- Budget your time as per the marks given for each question and write your answer accordingly.
 - Don't write anything on the Question Paper except writing your Registration No.
 - Mobile Phones are not allowed even for computations.
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Part A: Q.1 to Q.10 all questions are compulsory (10 X 2 Marks = 20 Marks)
One liner, MCQs, True/False

1. What is the primary purpose of the WHO Family of International Classifications (WHO-FIC)?
 - A. To provide a framework for clinical drug naming
 - B. To serve as global standards for health data and statistical aggregation
 - C. To define technical specifications for medical device manufacturing
 - D. To offer guidelines for hospital administration
2. The International Classification of Health Interventions (ICHI) is structured around which three axes?
 - A. Diagnosis, Symptom, Treatment
 - B. Body System, Severity, Urgency
 - C. Target, Action, Means
 - D. Provider, Setting, Cost
3. The LOINC standard is primarily used for which of the following?
 - A. Identifying clinical drugs
 - B. Exchanging medical images
 - C. Identifying laboratory tests and clinical observations
 - D. Classifying causes of death
4. Which HL7 standard uses a "pipe-and-hat" delimited format for messages and is widely implemented?
 - A. HL7 V3
 - B. FHIR
 - C. C-CDA
 - D. HL7 V2.x

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5. What does USCDI (United States Core Data for Interoperability) establish?
 - A. A single, mandatory EHR system for all U.S. hospitals
 - B. A standardized set of health data classes and elements that must be exchangeable
 - C. A new classification system for diseases
 - D. A protocol for drug discovery
6. Which of these is a key feature of the CDISC-ODM (Operational Data Model) standard?
 - A. It is used for storing medical images
 - B. It facilitates the exchange of clinical trial data
 - C. It classifies disability and functioning
 - D. It is a messaging standard for patient admissions
7. According to international comparisons, a leading factor in a country's successful national EHR system is:
 - A. The use of the most expensive vendor software
 - B. Strong national health IT strategy and governance
 - C. Having a single, proprietary system
 - D. Avoiding the use of international standards
8. The NCPDP SCRIPT standard is critical for enabling:
 - A. Secure e-prescribing
 - B. Medical device communication
 - C. Patient demographic exchange
 - D. Lab result reporting
9. The C-CDA (Consolidated Clinical Document Architecture) is primarily used for:
 - A. Real-time API-based data queries
 - B. Exchanging clinical documents as structured snapshots
 - C. Streaming physiological sensor data
 - D. Classifying oncology diagnoses
10. In the context of EHR initiatives, what is a significant challenge noted in achieving interoperability?
 - A. Lack of patient interest
 - B. Variable implementation of standards and integrating legacy systems
 - C. Universal adoption of FHIR
 - D. Standardization of medical curricula

Part B: Q.11 to Q.15 attempt any four questions (4 X 5 Marks = 20 Marks)

Short Notes

11. Explain the significance of SNOMED CT in achieving semantic interoperability.
12. What are the core components and purpose of the International Classification of Functioning, Disability and Health (ICF)?
13. What is the primary function of the DICOM standard?

14. State the objective of the International Classification of Diseases for Oncology (ICD-O).
15. Discuss the challenges and critical success factors in implementing a nationwide health information exchange.

Part C: Q.16 to Q.19 attempt any three questions (3 X 10 Marks = 30 Marks)

Long Notes

16. Elaborate on the structure and benefits of the WHO Family of International Classifications (WHO-FIC). Explain how ICD, ICF, and ICHI, as reference classifications, serve distinct yet complementary roles in the health information system.
17. Explain the different levels of interoperability (Foundational, Structural, Semantic) and the roles played by data transfer standards (like HL7, DICOM) and terminology standards (like SNOMED CT, LOINC) in achieving them.
18. Explain in detail the evolution of health data exchange standards from HL7 V2 to FHIR.
19. Explain the role and methodology of Integrating the Healthcare Enterprise (IHE). Discuss how IHE Profiles, such as the Patient Administration Management (PAM) and Cross-Enterprise Document Sharing (XDS), simplify system integration and enhance clinical workflows.