Post Graduate Diploma in Management (Hospital & Health Management)

PGDM – 2023-25 Batch

2nd Year – 3rd Semester End Examination

Subject & Code	:	**Digital Health Standards and Health Information Exchange-HIT 701**	**Reg. No.**	:	
Semester & Batch	:	**III, 2023-25**	**Date**	:	**07-10-2024**
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.

Part A: Q.1 to Q.10 all questions are compulsory (10 X 2 Marks = 20 Marks)
One liner, MCQs, True/False

1. Which organization maintains and updates the ICD standard?

2. Name the two primary components of the HL7 V2 messaging standard.

3. What is the primary purpose of SNOMED-CT in healthcare IT systems?

4. Explain what an "extension code" in ICD-11 is used for.

5. What is the primary benefit of the CDA (Clinical Document Architecture) standard?

6. In which scenarios would a healthcare facility choose to implement LOINC codes?

7. What does USCDI-v4 stand for, and what is its purpose?

True/False Questions:

8. FHIR is built on RESTful APIs for seamless data exchange.

9. DICOM is used primarily for laboratory reports.

10. e-Prescriptions use SCRIPT standards for data exchange.

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

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11. Discuss how HL7 V3 differs from HL7 V2 in terms of structure and data exchange capabilities.

12. Explain the role of the IHE (Integrating the Healthcare Enterprise) framework in achieving healthcare interoperability.

13. What challenges arise when implementing the FHIR standard in resource-limited healthcare settings?

14. Describe how ICD-11 provides a more flexible coding structure compared to ICD-10.

15. How do privacy and security standards like HIPAA and GDPR ensure the protection of patient data in health information systems?

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

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16. **Case Study:**
   A multi-specialty hospital is planning to implement an EHR system. The hospital is concerned about ensuring interoperability between its departments, external labs, and referral centers, and maintaining high data security standards for patient records. The hospital's IT team is considering adopting HL7, FHIR, and DICOM standards.

   Questions:

   a) What are the key factors the hospital should consider when implementing these standards to ensure seamless data exchange and secure communication?

   b) How would HL7, FHIR, and DICOM each contribute to the hospital's IT ecosystem?

   c) Discuss potential challenges and solutions in integrating these standards across different healthcare systems.

17. Critically analyze the role of coding and messaging standards (like LOINC, SNOMED-CT, and HL7) in reducing medical errors and improving patient safety.

18. Develop a comprehensive plan for adopting FHIR in a hospital's health information exchange. Discuss the prerequisites, steps, and expected outcomes of FHIR implementation.

19. Compare the use of different healthcare IT standards in international settings (USA, UK, and India). How do variations in these standards affect global healthcare interoperability?