

Name:

Enrolment No:



UNIVERSITY OF PETROLEUM AND ENERGY STUDIES

End Semester Examination, May 2019

Course: Healthcare applications and HL7 I

Program: BTech – CSE (OS&OS)

Course Code: CSEG447

Semester: VIII

Time 03 hrs.

Max. Marks: 100

Instructions:

- 1) All Questions are Mandatory.**
- 2) 30 MCQ Questions of 2 marks each. Total 60 Marks.**
- 3) 4 Descriptive Questions of 10 Marks each. Internal choice between 2 questions.**

- Q1. Which is not the Component of Healthcare 2 Marks
- a) SNOWMED
 - b) Lab test Results
 - c) Medications
 - d) Hospital billing system.
- Q2. Which of the given statements are not true? 2 Marks
- a) Standards stimulate competition and drive costs down .
 - b) Standardized products cannot be easily replaced or upgraded.
 - c) Communication standards allow products from multiple vendors to easily exchange medical information.
 - d) Health care models are built around Reference Information Model.
- Q3. Find the correct statement 2 Marks
- a) HL7 cannot be used in administration of patients
 - b) HL7 cannot be used in care planning
 - c) HL7 may be used in generating the reports
 - d) HL7 can be used in financial management
- Q4. There are _____ types of healthcare providers 2 Marks
- a) 3
 - b) 4
 - c) 5
 - d) 2
- Q5. Providers should organization 2 Marks
- a) only be a non-profitable
 - b) only be a profitable
 - c) both a and b
 - d) None of the above
- Q6. Acute care healthcare model covers 2 Marks
- a) wellness centres , centres for excellence
 - b) surgery centres

- c) Only a
- d) All of the given

Q7. Registration, ward management, billing and pharmacy are the functionalities provided by 2 Marks

- a) Ancillary services
- b) Hospital administration
- c) Both a and b
- d) None of given

Q8. Patient care services provide which of the following services 2 Marks

- a) Nursing care
- b) Billing
- c) Ward Management
- d) WordPress

Q9. The platform has all the HIS modules with HL7 interfaces 2 Marks

- a) Care 2X
- b) Osiri X
- c) OpenVistA
- d) All of these

Q10. OSS application used in medical areas including viz. autism, prostate cancer 2 Marks

- a) Drishti
- b) Xebra
- c) 3Dslicer
- d) b and c

Q11. Imaging and visualizations services are provided by 2 Marks

- a) Drishti
- b) Xebra
- c) both a and b
- d) Drishti and Open Vista A

Q12. Retail clinics are integral component of 2 Marks

- a) Wellness/prevention
- b) Acute care
- c) Chronic care
- d) Wellness, prevention and acute care

Q13. Tasks to be performed by HL7 2 Marks

- a) Ability to establish HL7 TCP/IP MLP connectivity
- b) Ability to parse and/or serialize any standard version of HL7 to XML,
- c) Ability to parse and/or serialize any standard version of XML to HL7
- d) All of the above

Q14. E H R stands for 2 Marks

- a) Electronic health record
- b) Electrical Health record
- c) Emergency health record
- d) Enhanced Health record

- Q15. Which of the following lie parallel to Technical committee in HL7 structure 2 Marks
- a) Only SIG
 - b) Architectural Review Board
 - c) Both a and b
 - d) None of given
- Q16. Discharge summary is the component of 2 Marks
- a) Medical Record
 - b) Patient Record
 - c) Planning
 - d) All of the above
- Q17. Find odd one out 2 Marks
- a) HL7-1 is a protocol
 - b) HL7 is a profitable organization
 - c) HL& works on OSI model
 - d) CDA is version of HL7
- Q18. CDSS stands for 2 Marks
- a) Clinical Decision support system
 - b) Clinical device service system
 - c) Clinical decision support service
 - d) Clinical delivery support system
- Q19. Drishti is 2 Marks
- a) Used by the CSIRO for volumetric visualization of various computer tomography datasets
 - b) Used for analysis of immiscible flow in massive 3D systems
 - c) Only a
 - d) both a and b
- Q20. Identify the odd one out 2 Marks
- a) Open Vista
 - b) Drishti and Osiri X
 - c) Open Vista and Drishti
 - d) Xebra and Care 2X
- Q21. The vendor, OXID eSales, are at the center of the ecosystem. 2 Marks
- a) Vendor driven Ecosystem
 - b) Community driven Ecosystem
 - c) Open Source driven Ecosystem
 - d) None of the above
- Q22. Examples of tertiary care providers are 2 Marks
- a) Cardiac centre
 - b) Cancer care
 - c) Both given
 - d) None of given
- Q23. Major type of health insurance are 2 Marks

- a) Managed care plans and fee for service plans
- b) HMO's care plan and PPO's care plan
- c) PPN and High premium plans
- d) All a,b,c

Q24. Which of the following is most incorrect 2 Marks

- a) GNU Med is python application
- b) pen MRS is Web based Open Medical Record System application
- c) Free Med is Based on Linux, Apache, MySQL and PHP (LAMP or LAMPS!)
- d) All of the above are correct

Q25. Tool supports modelling and visualization of infectious disease spread is 2 Marks

- a) STEM
- b) PACS
- c) Meditech
- d) All of above

Q26. EPI info and Spatio-temporal Epidemiological Modeller are 2 Marks

- a) BSD License tools
- b) Copy left-light license tools
- c) GNU General Public tools
- d) Public Health Management tools

Q27. Healthcare Payers are do not include 2 Marks

- a) Organizations or entities
- b) Patient
- c) Financing or reimbursing the cost of health services
- b) All of given

Q28. Health Insurance Premium could be paid by the retail plans for 2 Marks

- a) Employers
- b) Public funded organization
- c) Individuals
- d) All of given

Q29. Which of the following can be categorized into Patient Healthcare Data 2 Marks

- a) Family history and Admission history
- b) Ambulatory records and Physicians
- c) Patient symptoms and treatment record
- d) All of given

Q30. Find odd one out from : patient care, clinical services, hospital administration , ancillary services

2 Marks

- a) Patient care
- b) Clinical services
- c) Hospital administration
- d) Ancillary services

Q31. Compare and explain the significance of various Healthcare information standards. Elaborate the approach followed to design them. 10 Marks

OR

“HL7 message follows a standard structure”. Comment and Elaborate.

10 Marks

Q32. Explain the structure of Organizational Model of HL7

10 Marks

OR

Are image and visualization tools are available as open source in market”. Support your answer with example.

10 Marks

Q33.) Explain the significance of fields and Attributes in HL7 message structure

10 Marks

Q34. HL7 defines some constraints for HL7 message structure data field. Discuss them

10 Marks