

- N.B. :- (1) Question No. 1 is compulsory.
 (2) Attempt any four questions out of remaining six questions.
 (3) Draw neat diagrams.

- Q1. (a) What is HIPPA and explain its impact on PACS security? (10)
 (b) Explain the following terms: (10)
 (i) Bridge (ii) Hub (iii) Switch (iv) Router.
- Q2. (a) List down the various network security services. Explain Message authentication and Message integrity in detail. (10)
 (b) Explain the Client-Server model in detail. (5)
 (c) Write short note on reporting paradigm in PACS. (5)
- Q3. (a) Draw and explain the integration of information transfer between RIS/HIS/PACS with a suitable diagram. (10)
 (b) What are different elements PACS (10)
- Q4. (a) Enumerate the various steps from a radiologists perspective to extract clinically useful information from the medical images. (10)
 (b) With help of flow chart compare film based radiology with filmless using PACS (10)
- Q5. (a) Explain the centralized model of PACS (Circa model 2005) (10)
 (b) Explain the concept of RAID storage system. (10)
- Q6. (a) What is Ethernet Technology? Explain its different types. (10)
 (b) Explain OSI model in detail (10)
- Q7. Write short notes on: (Any four) (20)
 f) ISDN.
 g) WAN.
 h) Internet.
 i) Applications of Teleradiology.
 j) DICOM.