Q.P. Code :25294

[Time: Three Hours]   [Marks:80]

Please check whether you have got the right question paper.

N.B: 1.   Question.No.1 is compulsory.
         2.   Attempt any three questions out of remaining five questions.
         3.   Figures to the right indicate full marks.
         4.   Assume any suitable data if necessary, stating your assumption.
         5.   Use black ink.

Q.1	a) What is Subnetting? Explain with an example.	05
	b) Explain in detail message Non – repudiation.	05
	c) Explain the Client Server Model of PACS.	05
	d) List the different domains of IHE?	05

Q.2   a)   Explain the following threats: 10
         i)   Virus
         ii)   Worm
         iii)   Trojan horse
      b)   Explain typical IHE workflow Model with suitable diagram.   10

Q.3   a)   If Network Address: 165.100.0.0.   10
         Number of subnets: 1000
         Number of usable hosts:60
         Calculate :
         i)   What is the 15th subnet range?
         ii)   What is the subnet number for the 6th subnet?
         iii)   What is the subnet broadcast address for the 5th subnet?
         iv)   What are the assignable addresses for the 9th subnet?
      b)   Explain OSI Model in detail.   10

Q.4   a)   Explain the RSA algorithm with a suitable example.   10
      b)   Explain the following networking components: 10
         i)   Hub
         ii)   Bridge
         iii)   Router

Q.5   a)   Draw a labeled diagram and explain the generic PACS workflow.   10
      b)   What is RAID? Explain the different types of RAID.   10

Q.6   a)   Briefly explain the following PACS architectures: 10
         i)   Stand – alone PACS Model
         ii) Client – server PACS Model
      b)   With a labeled explain the Hospital Information System (HIS)   10

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