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## M.Sc. (Informatics) - IV Semester - 2019 IT-41- Network Application Development

Time: 03 Hrs.

Max. Marks: 75

(Write your Roll No. on the top immediately on receipt of this question paper)

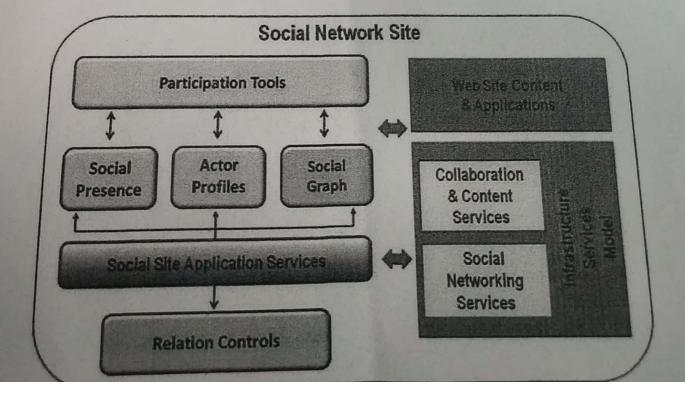
Note: Answer five questions in all. All questions carry equal marks.

- Q1 a Describe the functioning of your institute's website? Explain the concept with the help of any network service used by this website.
  - b What is PHP? Why we call it a scripting language? What is the difference between HTML and PHP? Write a function in PHP to find the length of a string.
- Q2 Discuss the following in brief:
  - i. Webserver
  - ii. Mail Server
  - iii. Email

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- iv. Voice over IP (VOIP)
- v. Simple Network Management Protocol
- What is a network application? What is server side scripting? What are the similarities and differences between \$\_GET and \$\_POST. Write the use cases of \$\_POST and \$\_GET ?. Design a web page to show employee profile of an organization. The profile should contain all the necessary details about employee (e.g. Employee Name, Employee Code, Photo, Working department etc.)
  - What is Network security? Explain digital signature.

    What is firewall? Explain its functions. Why do we need firewall to protect our network?



The above diagram shows the block diagram of a social network site, describe each block in terms of the functions and workflows. Propose a technical solution of the above social network.

- You have been the part of the new Campus Network implementation. Draw the topology of this new network. What all services it is expected to provide? How you access the wireless network?
  - b What is a network operating system? How it is different from desktop operating system? Give examples of well-known network operating systems. Discuss any network operating system.