



**BHARATI VIDYAPEETH'S**

**INSTITUTE OF COMPUTER APPLICATIONS & MANAGEMENT (BVICAM)**  
(Affiliated to Guru Gobind Singh Indraprastha University, Approved by AICTE, New Delhi)  
A-4, Paschim Vihar, Rohtak Road, New Delhi-110063, Visit us at: <http://www.bvicam.in/>

**Class test I Question Paper 2019**

**MCA-II Semester**

**Course Code: MCA 110**

**Course Name: Software Engineering**

**Time: 01 Hour**

**Maximum Marks: 20**

**Note: Attempt any four questions.**

- 1 Define Module Coupling and explain different types of coupling. What problems are likely to arise if a module has a high coupling? 5 marks
- 2 Consider a project with the following parameters. 5 marks  
Number of user inputs = 50  
Number of user outputs = 40  
Number of user inquiries = 35  
Number of files = 06  
Number of external interfaces = 04

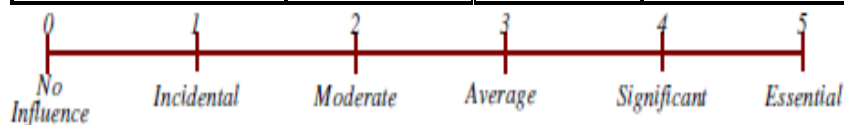
Assume weighting factors are average. In addition to above, system requires

- i. Significant data communication
- ii. Performance is very critical
- iii. Designed code may be moderately reusable
- iv. System is not designed for multiple installations in different organizations.

**Other complexity adjustment factors are treated as average.**

**Compute the function points for the project.**

Software Components	Weighting Factors		
	Simple(Low)	Average	Complex(High)
user inputs	3	4	6
user outputs	4	5	7
user inquiries	3	4	6
Internal logical files	7	10	15
external interfaces	5	7	10



- 3 List five desirable characteristics of a good SRS document. 5 marks  
Discuss the relative advantages of formal requirement specifications. List the important issues, which an SRS must

address.

- 4 Consider a Social Networking Website. The aim of the site is to let people network socially over the Internet. A user can register with the site. On doing so, he is connected with all other registered users of this site. To begin networking, he must search for names through a general search. The system will display the public record of the user under the name. He can select a particular user and invite him to become a friend. On acceptance of the request, the latter's record will be visible in the Friends List of the user and vice versa. The user can send and receive messages that can be of two types: public and private. A public message, when sent, will be visible to all the registered users browsing the public message list, whereas a private message will be visible only to the recipient. A registered user can upload his photographs and delete previously uploaded photographs. For the persons who do not have any knowledge of this site, an email can be sent, providing information of this site. User can also delete an already added friend from his friend list. He is also allowed to send group messages to a group of friends. Consider only client side functional requirements and answer the following-
- a) Prepare a Use case Diagram using full UML notation for Social Networking Website.
  - b) Write Use case description for any two major use cases.
- 5 Explain risk management activities? How staff turnover problem affects software projects? 5 marks