Total No. of Questions-4]

Seat	
No.	

## [4966]-4006

## M.C.A. (Commerce Faculty) (IV Sem.) EXAMINATION, 2016 407 : CYBER LAW AND INFORMATION SECURITY (2013 PATTERN)

## Time : Three Hours

Maximum Marks : 50

N.B. :- (i) Neat diagrams must be drawn whenever necessary.
(ii) Figures to the right indicate full marks.

**1.** Define and explain in brief of the following (any *seven*) :  $[7 \times 2 = 14]$ 

- (a) Duties of subscriber
- (b) Digital signature certificate
- (c) Cryptanalysis
- (d) Firewall
- (e) Need of security
- (f) Industrial design
- (g) Stegnography
- (h) Copyright Act.
- **2.** Discuss the following (any *three*) :  $[3\times4=12]$ 
  - (a) Explain TLS handshake protocol.
  - (b) What is the role of controller of certifying authorities.
  - (c) Explain polyalphabetic substitution cipher technique of encryption with example.
  - (d) Explain the mode of operation of IP security.

- **3.** Discuss the following (any *three*) : [3×4=12]
  - (a) Explain procedure for filling of patent with suitable example.
  - (b) Write a short note on symmetric cipher model.
  - (c) Explain web server architecture.
  - (d) Explain rotor machine in classical encryption technique.
- **4.** Discuss the following (any *three*) : [3×4=12]
  - (a) What are the various terms about electronic governance listed under the IT Act.
  - (b) Explain RSA algorithm in detail with example.
  - (c) Explain Rail-Fence technique with example.
  - (d) Discuss Hill Cipher technique of encryption with example.