

B.Tech. Degree VII Semester Examination, November 2006

IT 705 (C) CRYPTOGRAPHY AND DATA SECURITY

(Prior to 2002 Admissions)

Time: 3 Hours

Maximum Marks: 100

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|-----------|----|---|------|
| I | a) | Define cryptography and cryptanalysis. | (5) |
| | b) | Explain the terms: | |
| | | (i) Interception (ii) Fabrication | |
| | | (iii) Non repudiation | (15) |
| OR | | | |
| II | | With the help of neat diagram, explain the Hagline cryptograph. | (20) |
| III | | Explain the DES algorithm. List the merits and demerits of it. | (20) |
| OR | | | |
| IV | | Explain IDEA. Compare it with DES. Which algorithm is more secure? Why? | (20) |
| V | | Explain the different approaches to attacking the RSA algorithm. | (20) |
| OR | | | |
| VI | | Describe the various public key systems using elliptical curves. | (20) |
| VII | | Explain the message authentication with digital signatures. | (20) |
| OR | | | |
| VIII | a) | Explain the different knowledge techniques. | (10) |
| | b) | How can we achieve message integrity with hash codes. | (10) |
| IX | | Explain the various approaches to public key management. | (20) |
| OR | | | |
| X | a) | What do you mean by network security? How it is achieved? | (10) |
| | b) | Explain the key distribution for symmetric algorithms. | (10) |

