Reg.No. \_\_\_\_\_\_\_\_\_\_\_\_



**UNIVERSITY**

(Karunya Institute of Technology & Sciences)

(Declared as Deemed-to-be University under Sec.3 of the UGC Act, 1956)

**End Semester Examination – April/May – 2017**

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| **Code :** | **14CS3064** | **Duration :** | **3hrs** |
| **Sub. Name :** | **NETWORK SECURITY** | **Max. marks :** | **100** |

**ANSWER ALL QUESTIONS (5 x 20 = 100 Marks)**

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| Q. No. | Sub Div. | Questions | Course  Outcome | Marks |
| 1. | a. | Demonstrate Rivest Shamir and Adleman publickey cryptography. | CO1 | 10 |
| b. | Evaluate Diffie-Hellman by solving the given problem.  Given, p=23, q=5, Let XA = 6 & XB = 15. Find if KA = KB | CO1 | 10 |
| (OR) | | | | |
| 2. |  | Appraise Kerberos version 5 with clear indication of its advancements in relation to Kerberos version 4. | CO2 | 20 |
| 3. |  | Enumerate the organization of pretty good privacy (PGP) in email security. | CO3 | 20 |
| (OR) | | | | |
| 4. |  | Describe Internet Security Association and Key Management along with Oakley Internet Key exchange Protocol for secure key management in Internet Protocol Security | CO1,CO3 | 20 |
| 5. | a. | Illustrate the three major threats of web security of Cross-Site Scripting (XSS), Cross-Site Request Forgery (CSRF) and Code Injection | CO2 | 15 |
|  | b. | Explain Transport Layer Security protocol’s Handshake protocol and also detail its advantages. | CO3 | 5 |
| (OR) | | | | |
| 6. | a. | Paraphrase the basic concepts of Simple Network Management Protocols with protocol context and proxy configuration. | CO3 | 10 |
|  | b. | Explain the Simple Network Management Protocol version 3 message formt with clear understanding of the user security model (USM). | CO1,CO3 | 10 |
| 7. | a. | Elucidate the real time “Bro” intrusion detection system. | CO3 | 10 |
|  | b. | Compare and contrast firewall with intrusion detection system. | CO3 | 5 |
|  | c. | Generalize the signature analysis of intrusion detection techniques. | CO1,CO3 | 5 |
| (OR) | | | | |
| 8. | a. | Enumerate firewall. | CO3 | 2 |
|  | b. | Summarize screened host firewall, single-homed bastion configuration with explanation of it different types. | CO3 | 18 |
|  | | **Compulsory:** |  |  |
| 9. |  | Elucidate virus and worms with examples and counter measures. | CO2 | 20 |

ALL THE BEST