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



**End Semester Examination – Nov / Dec – 2019**

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| **Code :** | **17CA3021** | **Duration :** | **3hrs** |
| **Sub. Name :** | **E-MAIL 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. | Discuss in detail the role of the different components involved in an E-mail communication system. | CO1 | 10 |
| b. | Discuss in detail the various types and functions of Mobile phones. | CO1 | 10 |
| **(OR)** | | | | |
| 2. | a. | Discuss in detail some of the security issues relevant to an Email and an E-mail infrastructure. State the security services provided over the conventional Email system. | CO1 | 10 |
| b. | Discuss in detail the proliferation of Mobile and Wireless Devices. | CO1 | 10 |
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| 3. | a. | Explain how the recipients destination is resolved in an Email system. | CO2 | 5 |
| b. | Explain services provided by PGP and the algorithms used in achieving those services. | CO2 | 10 |
| c. | Summarize the key exchange mechanisms in an encrypted Email system. | CO2 | 5 |
| **(OR)** | | | | |
| 4. | a. | Describe briefly the different functions of S/MIME. | CO2 | 5 |
| b. | Explain the Session key, its generation and the algorithms used in PGP. | CO2 | 5 |
| c. | Explain the basic network security concepts used in a secure Email system. | CO1 | 10 |
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| 5. | a. | Discuss in detail the various types of confidentiality attacks in Mobile phones. | CO3 | 10 |
| b. | Explain with examples GSM Network service codes. | CO3 | 10 |
| **(OR)** | | | | |
| 6. | a. | Discuss in detail – Caller line identification and Call management in Mobile phones. | CO3 | 05 |
| b. | Discuss in detail – IMEI Number and AT Command set. | CO3 | 05 |
| c. | Discuss in detail the SMS security issues – Availability issues. | CO3 | 10 |
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| 7. | a. | Discuss in detail the various evidences that can be collected from mobile phones. | CO4 | 10 |
| b. | With a neat diagram, explain the file structure system present in SIM Card. | CO4 | 10 |
| **(OR)** | | | | |
| 8. | a. | Discuss in detail the various Forensic procedures that needs to be followed in crimes involving Mobile phones. | CO4 | 10 |
| b. | Discuss in detail the examination of SIM card, memory of the phone and findings report from mobile phone forensic investigation. | CO4 | 10 |
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|  | | **Compulsory**: |  |  |
| 9. | a. | Explain the following with appropriate illustrations:   1. Sender Policy Framework (SPF) 2. DomainKeys Identified Mail (DKIM). | CO6 | 7  7 |
| b. | Write a note on the structure of an Email message. | CO6 | 6 |