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**Reg.No**

**Sona College of Technology(Autonomous), Salem -5.**

**SET -2Department of CSE**

**Continuous Internal Evaluation Test – I**

**U15CS701R – Security in Computing**

**Common to All sections (IV Year / VII Semester)**

|  |  |  |  |  |  |  |  |  |  |
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| **Date :** | | | **16.08.2021** | |  | **Marks : 50** | | **Levels of**  **B.T** | **Course Outcomes** |
| **Time slot :** | | | **02.15 To 03.45 pm** | | **Duration : 1 ½ hours** | |
| **PART – A Answer All Questions (6 x 2 = 12 Marks)** | | | | | | | |  |  |
| 1. | What are the three kinds of harm a company might experience from theft of computer equipment? | | | | | | | LOTS | 1 |
| 2. | What is access control list? | | | | | | | LOTS | 1 |
| 3. | How does the availability affect the end user and service provider? | | | | | | | HOTS | 1 |
| 4. | Why do cryptologists recommend changing the encryption key from time to time? | | | | | | | HOTS | 1 |
| 5. | What is program patching? | | | | | | | LOTS | 2 |
| 6. | List the different types of malware. | | | | | | | LOTS | 2 |
| **PART – B Answer All Questions (2 x 5 = 10 Marks)** | | | | | | | |  |  |
| 7. | How are public key certificates used in user authentication? Explain. | | | | | | | LOTS | 1 |
| 8. | How does the incomplete mediation affect the security of the program? Explain. | | | | | | | LOTS | 2 |
| **PART – C Answer AllQuestions (2 x 14 = 28 Marks)** | | | | | | | |  |  |
| 9. | (a) | (i) | | Explain at least three kinds of harm a company could experience from electronicespionage or unauthorized viewing of confidential company materials. How do you control it? | | | 7 | HOTS | 1 |
|  |  | (ii) | | Describe two examples of vulnerabilities in web servers for which webdevelopers have instituted controls. Tell why you think these controls are effective, somewhat effective, or ineffective. | | | 7 | HOTS | 1 |
|  |  |  | | **(OR)** | | |  |  |  |
|  | (b) | (i) | | ABC university is running a semi-automated examination processing system for conducting the student assessment activities such as conducting cycle tests, end semester exams, etc. All the questions for the assessment related activities are prepared by the teachers and are typed in the examination processing system only. The people who are running the system will take the question paper print outs and distribute them to the students during the assessment process. The teachers are strictly instructed to prepare the questions papers only in the place where the system is running. Identify the weak limits, vulnerabilities, threats imposed and attacks injected on to this system. | | | 7 | HOTS | 1 |
|  |  | (ii) | | ABC university is running a semi-automated examination processing system for conducting the student assessment activities such as conducting cycle tests, end semester exams, etc. All the questions for the assessment related activities are prepared by the teachers and are typed in the examination processing system only. The people who are running the system will take the question paper print outs and distribute them to the students during the assessment process. The teachers are strictly instructed to prepare the questions papers only in the place where the system is running. For the above mentioned semi-automated system define some policies to make this more secure. | | | 7 | HOTS | 1 |
|  | | | | | | |  |  |  |
| 10. | (a) | (i) | | How do you exchange keys between two users? Explain the procedure with a neat diagram. | | | 7 | LOTS | 1 |
|  |  | (ii) | | Why is it very difficult to identify all the program faults and fix them completely? Explain. | | | 7 | HOTS | 2 |
|  |  |  | | (OR) | | |  |  |  |
|  | (b) | (i) | | Explain the cryptographic hash functions. How do they preserve the integrity of the user data? | | | 7 | LOTS | 1 |
|  |  | (ii) | | How does the modularity of the program help the security and affect the security of the program? Explain. | | | 7 | HOTS | 2 |
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| **Bloom’s** | **LOTS** | **HOTS** | **Total** |
| **Percentage** | 50 | 50 | 100 |