P3113

[5154]- 680

B.E. (Computer)

EMBEDDED SECURITY

(2012 Pattern) (Semester - I) (Elective - II) (End Sem.)

Time :2½ Hours]

[Max. Marks :70

[Total No. of Pages : 2

SEAT No. :

Instructions to the candidates:

- 1) Attempt Q.1 or Q.2, Q.3 or Q.4, Q.5 or Q.6, Q.7 or Q.8, Q.9 or Q.10.
- 2) Figures to the right indicate full marks.
- 3) Draw neat diagram wherever necessary.
- 4) Assume suitable data, if necessary.
- *Q1)* a) Explain in detail CVSS (Common Voluntary Scoring System) with its advantages and limitations? [6]
 - b) What is the difference between Embedded Security and Embedded system security? [4]

OR

- *Q2)* a) Explain in brief BYOD with its advantages, disadvantages and security considerations? [6]
 - b) What is TrustZone? Why do we need a Trusted Execution Environment? [4]
- **Q3)** a) Explain in detail next generation EPID? [4]
 - b) Explain in detail Ring-3 root kit attack and its components and limitations. [6]

OR

Q4) a) Explain the building blocks of the security and the management engine?[4]

- b) Explain in detail memory protection control for threat analysis and mitigation in security and management engine? [6]
- *Q5)* a) Explain in detail : Intel Boot Guard and clearly state the difference between measured boot and verified boot? [8]
 - b) Explain how Software can use a Trusted Platform Module to authenticate hardware devices? [8]

Q6)	a)	Explain in detail Architecture for Embedded IPT (Intel Platform Trus Technology)? [8]
	b)	Explain the different types of boot attacks? [8]
Q7)	a)	Explain in brief Digital Rights Management (DRM) with suitable block diagram? [6]
	b)	Explain DAL Architecture with neat diagram? [6]
	c)	Write a short note on : Intel Wireless display (WiDi)? [5]
		OR
Q8)	a)	Explain in detail End-to-End Content Protection? [6]
	b)	Explain in detail the Closed-Door Model? [6]
	c)	Explain in detail HDCP (High bandwidth digital content protection)? [5]
Q9)	a)	Explain the key properties of IoT that create several issues for security and raises additional requirements for security? [6]
	b)	Explain the Building Blocks for Embedded Security? [6]
	c)	Write a note on Protected Input and Output? [5]
		OR
Q10) a)	Explain the High Security Requirements for IoT? [6]
	b)	Explain how embedded security is provided for IoT (Internet of Things) [6]
	c)	Explain in short : Anonymous Authentication and Secure Session Establishment? [5