

Total No. of Questions : 10]

SEAT No. :

P3560

[Total No. of Pages : 2

[4959] - 1160

**B.E. (Computer Engineering) (Semester - I) (End Sem.)**

**Embedded Security**

**(2012Pattern) (Elective - II)**

*Time : 2 1/2 Hours]*

*[Max. Marks : 70*

*Instructions to the candidates:*

- 1) *Answer 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) *Neat diagrams must be drawn wherever necessary.*
- 3) *Assume suitable data if necessary.*

**Q1)** a) Explain any two data breach incident case studies. [6]

b) Define Boot Integrity. [2]

c) Define data breach with an example. [2]

OR

**Q2)** a) Explain CVSS with it's advantages and limitations. [5]

b) Comment on : open source software best practice as a counter measures to Heartbleed attack. [5]

**Q3)** a) What is rootkits and explain their types? [4]

b) Explain in detail EPID signature generation & verification algorithm. [6]

OR

**Q4)** a) Explain working of SIGMA protocol in detail. [6]

b) Explain in brief Intel X86 protection rings with neat diagram. [4]

**P.T.O.**

- Q5)** a) Explain in detail Architecture for Embedded IPT (Intel Platform Trust Technology). [8]  
b) Explain Rooting/Jailbreaking attacks with its type. [8]

OR

- Q6)** a) Explain in detail flow of field programmable fuse task. [8]  
b) Explain in brief BIOS and UEFI and attacks on BIOS. [8]

- Q7)** a) Explain in detail Digital Rights Management (DRM). [8]  
b) Write a short note on: [8]  
i) Intel Wireless Display.  
ii) DAL Security Considerations.

OR

- Q8)** a) Explain in detail HDCP (high bandwidth digital content protection). [8]  
b) Write a short note on PAVP (protected audio and video path). [8]

- Q9)** a) Explain how embedded security is provided for IOT (Internet of Things). [9]  
b) Write a short note on: [9]  
Anonymous Authentication and Secure Session Establishment.

OR

- Q10)** a) Explain in detail IOT reference architecture. [9]  
b) Write a short note on: [9]  
i) Protected Input and Output.  
ii) Software guard extension.

