Reg. No. :

Question Paper Code : 17586

M.E./M.Tech. DEGREE EXAMINATION, NOVEMBER/DECEMBER 2016.

Second Semester

Biometrics and Cyber Security

IF 7202 — CLOUD COMPUTING

(Common to M.E. Computer Science and Engineering/M.E. Mobile and Pervasive Computing/M.E. Multimedia Technology/M.E. Software Engineering and M.Tech. Information Technology)

(Regulations 2013)

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

PART A —
$$(10 \times 2 = 20 \text{ marks})$$

- 1. Give the NIST definition of cloud.
- 2. Define the role of cloud carrier.
- 3. Write the steps for live VM migration?
- 4. List the side effects of server virtualization.
- 5. What is event driven resource provisioning?
- 6. List out the stack of six layers of cloud services.
- 7. What is the use of Cloud Watch in Amazon EC2?

8. What is SQLAzure?

- 9. What is password assurance testing?
- 10. What is cloud forensics?

PART B — $(5 \times 13 = 65 \text{ marks})$

11. (a) Explain GPU programming model in detail.

Or

- (b) Explain the NIST cloud computing reference architecture.
- 12. (a) Discuss about the different levels of virtualization implementation.

Or

- (b) List and describe the different tool support for virtualization.
- 13. (a) Discuss on market-oriented cloud architecture.

Or

- (b) Explain the six open challenges in cloud architecture development.
- 14. (a) Explain about Twister programming paradigm for repeated MapReduce executions.

Or

- (b) Explain the architecture and components of Aneka platform.
- 15. (a) Write notes on
 - (i) Secure Software Development Life Cycle
 - (ii) Risk Assessment.

Or

(b) Explain the cloud security architecture in detail.

PART C
$$-(1 \times 15 = 15 \text{ marks})$$

16. (a) Compare and contrast the different file systems used in cloud environments – HDFS, GFS and Amazon S3.

Or

(b) Narrate on how to set up a private cloud for an academic university using any one of the cloud environments.

(8)

(5)