Reg. No. : [ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ]

Question Paper Code : 50448

B.E./B.Tech. DEGREE EXAMINATIONS, APRIL/MAY 2024.

Fifth/Sixth Semester

Computer Science and Engineering

CCS 365 — SOFTWARE DEFINED NETWORKS

(Common to Computer Science and Design/Computer Science and Engineering (Artificial Intelligence and Machine Learning)/Computer Science and Engineering (Cyber Security)/Computer and Communication Engineering/Artificial Intelligence and Data Science/Computer Science and Business System/Information Technology)

(Regulations 2021)

Time : Three hours   Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1.   Write down the need for SDN?

2.   List out the operations of SDN Control plane?

3.   What do you meant by Ryu?

4.   Brief about ONOs?

5.   Summarize about traffic engineering.

6.   Write the applications of SDN?

7.   Why do you need network virtualization?

8.   Give the benefits of NFV?

9.   Short note on network service orchestration?

10. State any two use case of SDN and USV.

PART B — (5 × 13 = 65 marks)

11. (a) Elaborate SDN architecture with neat sketch.

Or

  (b) Explain in detail about the development of social network and analysis with example.

12. (a) Illustrate in detail Open flow protocol.

Or

  (b) Write a detailed on SDN Controllers and explain in detail.

13. (a) Describe briefly SDN application plane architecture.

Or

  (b) What is data center networking? Explain in detail.

14. (a) Explain NFV reference architecture.

Or

  (b) Write a note on Virtual LANs.

15. (a) What are virtualized network functions? Explain.

Or

  (b) Explain NFV management and orchestration.

PART C — (1 × 15 = 15 marks)

16. (a) Create a SDN application for the use cases like Traffic Engineering and Firewall.

Or

  (b) How will you create a simple end-to-end network service with two VNFs? Illustrate.

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