

<b>R-4520</b>
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<b>Sub. Code</b>
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<b>9MS2C1</b>
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**M.Voc. DEGREE EXAMINATION, APRIL 2021**

**Second Semester**

**Software Development**

**PRINCIPLES OF COMPUTER NETWORKS  
SECURITY**

**(CBCS – 2019 onwards)**

Time : 3 Hours

Maximum : 75 Marks

**Part A**

(10 × 2 = 20)

Answer **all** questions.

1. Describe the uses of Computer Network for Social issues.
2. Define IEEE 802.11
3. Highlight the characteristics of Datagram Network.
4. What is PPP?
5. Write a note on Fragmentation.
6. State the difference between distance vector and Link state routing.
7. What are the services provided by Transport Layer Protocol?
8. Define DNS.
9. What are the types of Viruses.
10. What is IP Security.

**Part B****(5 × 5 = 25)**

Answer **all** questions, choosing either (a) or (b).

11. (a) Outline the steps involved in building a Computer Network

Or

- (b) Briefly explain about Transmission Media.

12. (a) Discuss the approaches used for Error detection in networking.

Or

- (b) Write a detailed note on Petri Network.

13. (a) Discuss about design issues in Network Layer.

Or

- (b) Elaborate on Multicast Routing Protocol.

14. (a) Explain the states involved in TCP.

Or

- (b) Write a detailed note on UDP.

15. (a) Draw the IPV<sub>6</sub> Packet Headed Format.

Or

- (b) Explain about RSA Public key cryptography.

**Part C** $(3 \times 10 = 30)$ 

Answer any **three** questions.

16. Describe in detail about OSI Reference Model.
  17. Briefly discuss about Sliding Window Protocol.
  18. Describe in detail about Link State Routing.
  19. Discuss about the elements of Transport protocol in detail.
  20. Explain the architecture of SSL.
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**R-4521**

**Sub. Code**

**9MS2C2**

**M.Voc. DEGREE EXAMINATION, APRIL 2021**

**Second Semester**

**Software Development**

**FUNDAMENTALS OF OPERATING SYSTEM**

**(CBCS – 2019 onwards)**

Time : 3 Hours

Maximum : 75 Marks

**Part A**

(10 × 2 = 20)

Answer **all** the questions.

1. Mention the objectives of an operating system.
2. What is a real time system?
3. Compare job and process.
4. List out the advantages of multithreading models.
5. What do you mean by multiple processor scheduling?
6. Define monitors.
7. Sketch the diagram of deadlock system model.
8. What is mutual exclusion in deadlock?
9. What is demand paging?
10. State the effect of Thrashing in an operating system.

**Part B**

(5 × 5 = 25)

Answer **all** questions, choosing either (a) or (b).

11. (a) Describe the evolution of the operating system.

Or

- (b) Explain the need of storage hierarchy.

12. (a) Write a note on inter process communication.

Or

- (b) Write the difference between user thread and a kernel thread.

13. (a) Explain about classical synchronization.

Or

- (b) Explain the concept of semaphores in detail.

14. (a) Illustrate the methods for handling deadlocks.

Or

- (b) What are the four necessary and sufficient conditions behind the deadlock?

15. (a) Explain any page replacement algorithm with suitable example.

Or

- (b) Discuss the need of virtual memory.

**Part C**

(3 × 10 = 30)

Answer any **three** questions.

16. Discuss the essential properties of the following types of systems.
    - (a) Time sharing systems
    - (b) Batch systems
    - (c) Distributed systems
  17. Discuss about CPU scheduling algorithm with suitable example.
  18. Explain about two task solutions.
  19. Explain in detail about deadlock avoidance.
  20. Draw the diagram of the segmentation memory management scheme and explain.
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**R5382**

**Sub. Code**

**9MS4G1**

**M.Voc. DEGREE EXAMINATION, APRIL – 2021**

**Fourth Semester**

**Software Development**

**PRINCIPLES OF DIGITAL MARKETING**

**(CBCS – 2019 onwards)**

Time : 3 Hours

Maximum : 75 Marks

**Part A**

(10 × 2 = 20)

Answer **all** the questions.

1. What is meant by strategic thinking?
2. How can advertising change your behaviour?
3. What is ROI and how it is calculated?
4. How web design used in digital marketing?
5. In what way email marketing is effective?
6. What is meant by social media dashboard?
7. What is an example of affiliate marketing?
8. Define Digital PR.
9. What is mobile marketing?
10. What does collaborative consumption mean?

**Part B**

(5 × 5 = 25)

Answer **all** the questions, choosing either (a) or (b).

11. (a) How is digital marketing different from traditional marketing? Explain.

Or

- (b) Explain the importance of digital marketing.

12. (a) How is data used effective way in digital marketing? Briefly explain.

Or

- (b) Write a note on Website intelligence.

13. (a) How Social media and online consumers support to digital marketing? Explain.

Or

- (b) Briefly explain the vital component of e-Email marketing.

14. (a) Write the benefits of online public relations.

Or

- (b) Explain how the business can promote through online channels.

15. (a) How do you determine market size? Explain.

Or

- (b) Discuss about holistic marketing and its uses.



**Part C**

(3 × 10 = 30)

Answer any **three** questions.

16. Explain in detail about different strategies of digital marketing.
  17. Describe the ways of successful digital marketing.
  18. Describe the different forms of social media in Email marketing.
  19. Write a note on following:
    - (a) Nature of online PR
    - (b) Characteristics of online PR.
  20. Describe about Savvy consumer control and its applications.
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**R5383**

**Sub. Code**

**9MS4G2**

**M.Voc. DEGREE EXAMINATION, APRIL – 2021**

**Fourth Semester**

**Software Development**

**FUNDAMENTALS OF INDUSTRY 4.0**

**(CBCS – 2019 onwards)**

Time : 3 Hours

Maximum : 75 Marks

**Part A**

(10 × 2 = 20)

Answer **all the** questions.

1. What is industry 4.0?
2. What is digitalization?
3. Define IoT.
4. Write down some smart devices.
5. Define Mobile computing.
6. What are Cyber-Physical Systems?
7. What is cloud computing?
8. What is Iaas?
9. How industry 4.0 will affect MNCs?
10. When will the industry 4.0 reach the market?

**Part B**

(5 × 5 = 25)

Answer **all the** questions, choosing either (a) or (b).

11. (a) Write about various industrial revolutions.

Or

- (b) Discuss about the forces and challenges for industry 4.0.

12. (a) Explain about Industrial internet of things.

Or

- (b) Write a note on : Smart logistics.

13. (a) Write down the benefits of robotic process automation(RPA).

Or

- (b) Explain the applications of cyber security.

14. (a) Briefly explain the need of cloud computing in industry 4.0.

Or

- (b) Discuss : Harnessing knowledge management.

15. (a) What are opportunities in industry 4.0? Explain.

Or

- (b) Shortly explain the business issues in industry 4.0.

**Part C**

(3 × 10 = 30)

Answer any **three** questions.

16. Compare the industry 4.0 factory and today's factory.
17. How can Industry 4.0 help your company achieve value innovation? Explain it.

18. Explain in detail about the technologies used in industry 4.0.
19. What are the three models in cloud computing? Explain in detail.
20. Describe the strategies for competing in an industry 4.0.

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