

**Faculty of Science & Technology**  
**Third Semester B.Tech. (Information Technology) (C.B.C.S.) Examination**  
**EMERGING TRENDS IN INFORMATION TECHNOLOGY**

Time : Three Hours]

[Maximum Marks : 70

**INSTRUCTIONS TO CANDIDATES**

- (1) All questions carry marks as indicated.
  - (2) Solve Question No. **1 OR** Question No. **2**.
  - (3) Solve Question No. **3 OR** Question No. **4**.
  - (4) Solve Question No. **5 OR** Question No. **6**.
  - (5) Solve Question No. **7 OR** Question No. **8**.
  - (6) Solve Question No. **9 OR** Question No. **10**.
  - (7) Due credit will be given to neatness and adequate dimensions.
  - (8) Assume suitable data wherever necessary.
  - (9) Illustrate your answers wherever necessary with the help of neat sketches.
1. (a) Enlist the types of topologies in detail. 7
  - (b) Write a short note on the modes of data transmission. 7
- OR**
2. (a) Explain the role of Information Technology in the emerging aspects. 7
  - (b) Write a short note on the components of Information Technology. 7
3. (a) Describe Internet payment system. 7
  - (b) Explain the E-commerce Architecture in detail with proper diagram. 7
- OR**
4. (a) Enlist the key points on Internet Service provider. 7
  - (b) Explain the role of firewall and its functionality. 7
5. (a) Explain in detail :- 7
  - (i) Smart cards                      (ii) Credit cards                      (iii) E cash & E check
  - (b) Explain different types of ATM cards. Also explain ECS. 7

**OR**

6. (a) Explain in detail :- 8
- (i) Viruses
- (ii) Anti-viruses
- (b) Differentiate between Inter & Intra banking. 6
7. (a) Briefly explain the SSL ,SSL protocols with proper diagram. 8
- (b) Write a note on security issues on E-mail. 6
- OR**
8. (a) Explain in brief Electronic payment system. 7
- (b) State the security key points related to E-banking. 7
9. (a) Describe E-Governance strategies. 7
- (b) Explain E-Governance. State the types of E-Governance. 7
- OR**
10. Write short notes on :- 14
- (i) Query redresses system.
- (ii) Technique dissemination
- (iii) Future trade Marketing

B.Tech. (Information Technology) Third Semester (C.B.C.S.)  
**Emerging Trends in Information Technology**

P. Pages : 2

Time : Three Hours



**PSM/KW/23/2584**

Max. Marks : 70

- Notes :
1. All questions carry marks as indicated.
  2. Solve Question 1 OR Questions No. 2.
  3. Solve Question 3 OR Questions No. 4.
  4. Solve Question 5 OR Questions No. 6.
  5. Solve Question 7 OR Questions No. 8.
  6. Solve Question 9 OR Questions No. 10.
  7. Due credit will be given to neatness and adequate dimensions.
  8. Assume suitable data whenever necessary.
  9. Illustrate your answers whenever necessary with the help of neat sketches.

1. a) Explain the following **any three**. 9
- i) Internet.
  - ii) Information technology.
  - iii) Need of information storage & processing.
  - iv) Protocols used in internet.
- b) List the different types of modes of data transmission and explain any two. 5

**OR**

2. a) What is topology? Explain different types of topologies with neat diagram. 7
- b) Discuss the following. 7
- i) Computer Ethics
  - ii) Type of networks
3. a) What do you mean by e-commerce? Discuss the advantages & disadvantages of e-commerce. 7
- b) Brief the following: 7
- i) SET protocol.
  - ii) Internet payment systems.

**OR**

4. a) What do you mean by E-cash and E-check? Discuss them. 7

**PSM/KW/23/2584**

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- b) What is e-commerce architecture? Draw & explain the different types of e-commerce architectures. 7
5. a) What do you mean by e-mail? Discuss the security issues related e-mail service. 7
- b) Define ISP. Explain the function of ISP & list the types of ISP connections used by the users of internet. 7

**OR**

6. a) What do you mean by firewall? Explain its need and role of firewall when we use the internet. 7
- b) State the difference between virus and antivirus. List the virus and antivirus commonly found. Explain any one type of virus. 7
7. a) Distinguish between InterBanking and IntraBanking. State the advantages of IntraBanking. 7
- b) Elaborate the SSL and digital signature used in e-banking as security concern. 7

**OR**

8. Write short note on: 14
- i) ATM
- ii) Smart card
- iii) ECS
9. a) What do you mean by E-Governance? Explain the different types of E-governance. 7
- b) Discuss the challenges & strategies used for implementation of e-governance. 7

**OR**

10. a) Brief the types of agriculture information needed soil, water & market. How it helps in good crop yield. 7
- b) Explain the future trade marketing & Information Kiosk. 7

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**Emerging Trends in Information Technology**

P. Pages : 1

Time : Three Hours



**MSP/KS/23/2544**

Max. Marks : 70

- Notes :
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  2. Solve Question 1 OR Questions No. 2.
  3. Solve Question 3 OR Questions No. 4.
  4. Solve Question 5 OR Questions No. 6.
  5. Solve Question 7 OR Questions No. 8.
  6. Solve Question 9 OR Questions No. 10.
  7. Due credit will be given to neatness and adequate dimensions.
  8. Assume suitable data whenever necessary.
  9. Illustrate your answers whenever necessary with the help of neat sketches.

1. a) What is Information? Explain the different types of information. 7  
b) Define the Network and explain the terms LAN, MAN and WAN. 7  
**OR**
2. a) What do you mean by data? Explain the need of information storage and processing. 7  
b) Explain the different types of network topologies. 7
3. a) Explain in brief E-commerce as business need. 7  
b) Explain SET protocol for credit card payment. 7  
**OR**
4. a) Explain advantages and disadvantages of E-commerce. 7  
b) Explain Internet payment system. 7
5. a) Brief about Internet Service Provider, ISP. 7  
b) What is firewall? Explain the role of Firewall. 7  
**OR**
6. a) Explain in brief internet virus and antivirus. 7  
b) Explain security issues in E-Mail & Internet. 7
7. a) Differentiate between the Inter Banking and Intra Banking. 7  
b) Explain the process of electronic payment. 7  
**OR**
8. a) Explain how digital signature is important in E-Banking security. 7  
b) Explain ATM system. 7
9. a) Explain strategies and tactics for implementation of E-governance. 7  
b) Explain in brief types of agriculture information. 7  
**OR**
10. a) Explain E-governance models (G2B, G2C, C2G, G2G). 7  
b) Explain the challenges in E-governance. 7

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**Emerging Trends in Information Technology**

P. Pages : 2

Time : Three Hours



**SPM/KW/22/2544**

Max. Marks : 70

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  4. Solve Question 5 OR Questions No. 6.
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  6. Solve Question 9 OR Questions No. 10.
  7. Assume suitable data whenever necessary.
  8. Illustrate your answers whenever necessary with the help of neat sketches.

1. a) What is IT? What are the needs of Information Storage and processing? 7
- b) What is the role of IT? Explain the term Data over Internet. 7

**OR**

2. a) What are the Computer Ethics? Explain various Internet Applications. 7
- b) Explain modes of Data Transmission. What are the various types of Network Topologies? 7
3. a) What is E-Commerce? Explain its types. 6
- b) Differentiate between 2-Tier and 3-Tier Architecture of E-Commerce. 4
- c) Explain in brief E-commerce as Business needs commerce. 4

**OR**

4. a) Explain Internet Payment System with its characteristics. 6
- b) What are the 4C payment methods? Explain. 4
- c) Explain SET protocol for credit card payment. 4
5. a) Write short notes on E-mail and Internet. 7
- b) What is social Networking Site? Explain the terms Search Engine and Surfing Web Pages. 7

**OR**

6. a) Explain the following in brief **any three**. 14
  - i) Firewall.
  - ii) Internet Virus
  - iii) Anti-virus
  - iv) Securing Internet Connection.

7. a) Explain Internet Banking, Intra Banking and Electronic Banking in brief. 7  
b) What is Payment Gateway? Explain how Payment Gateway works in detail. 7

**OR**

8. a) Write short notes on SSL and Digital Signature. 7  
b) Explain Electronic Clearing System. What are the variants of ECS? How are they different from each other? 7
9. a) Describe E-Governance. Highlight various strategies and tactics for implementing of E-Governance. 7  
b) Enlist & discuss the Types of Agriculture. What is future Trade Marketing. 7

**OR**

10. Write short notes on. 14  
i) Information Kiosk.  
ii) Crop Management.  
iii) Query Redresses System.

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