

# CA - INTER COURSE MATERIAL

**Quality Education**

**beyond your imagination...**

**DISCOVER MATERIAL ON ENTERPRISE INFORMATION  
SYSTEMS**

(COVERS PAST EXAM QUESTION PAPERS UPTO MAY – 2019)



# MASTER MINDS<sup>TM</sup>

**CA • CMA • CS • MEC • CEC**

GUNTUR | RAJAHMUNDRY | KURNOOL | VIZAG | NELLORE

HYDERABAD | VIJAYAWADA | TIRUPATHI

**Cell: 98851 25025 / 26**

Visit us @ [www.mastermindsindia.com](http://www.mastermindsindia.com)

Mail: [mastermindsinfo@ymail.com](mailto:mastermindsinfo@ymail.com)

Facebook Page: Masterminds For CA

YouTube Channel: Masterminds For CA

**DISCOVER\_2E / ENTERPRISE INFORMATION SYSTEMS**

WE HAVE INCLUDED THE PAST EXAM QUESTION PAPERS OF ALL ATTEMPTS UNDER CA INTER UPTO MAY  
2019

**1. INTRODUCTION TO COMPUTERS**

NIL

**2. COMPONENTS OF INFORMATION SYSTEMS****PART 1: DESCRIPTIVE QUESTIONS**

1. Discuss briefly the concept of "Virtual Memory" [MTP2 N18 – 2M, MTP1 M18 – 2M]
2. Discuss briefly the role of Repeater in telecommunication networks. [MTP2 M18 – 2M]

**3. CONCEPTS OF DATA AND DBMS****PART 1: DESCRIPTIVE QUESTIONS**

1. Define 'Data Analytics'. [N18 – 2M]
2. Define Business Intelligence (BI). [M18 – 2M]
3. Data Warehouse extracts data from one or more of the organization's databases and loads it into another database for storage and analysis purpose. As a Data Warehouse Manager, determine the design criteria, which should be met while designing Data Warehouse. [M18 – 6M]
4. Explain the term "Data warehouse" [MTP2 M19 – 2M]
5. Analyze the statement "The potential benefits of Business Intelligence (BI) programs include accelerating and improving decision making; optimizing internal business processes; increasing operational efficiency; driving new revenues; and gaining competitive advantages over business rivals." Determine its justification. [MTP2 M18 – 6M]

**4. INFORMATION SYSTEMS RISKS AND CONTROLS****PART 1: DESCRIPTIVE QUESTIONS**

1. A company XYZ is implementing the software by using the program Development life cycle methodology and applying control phases in parallel to the development phases to monitor the progress against plan. Being an IT developer, design the various phases and their controls for program development life cycle [M19 – 6M]
2. Explain the term cryptography. [N18 – 2M]
3. Data that is waiting to be transmitted are liable to unauthorized access called 'Asynchronous Attack'. Explain various types of Asynchronous attacks on data. [N18 – 4M]
4. An operating system allows users and their applications to share and access common computer resources and execute a variety of activities. Hence, protecting operating system access is extremely crucial. Identify various steps through which protection of operating system access can be achieved. [N18 – 8M]
5. Explain Line Error Control. [M18 – 2M]
6. Explain various types of Data Coding Errors. [M18 – 2M]
7. Discuss the concept of "Virtualization" and its application areas. [RTP – M19]
8. Recognize the activities that deal with the System Development Controls in an IT Setup. [RTP – N18]
9. Determine the controls that are classified based on the time when they act, relative to a security incident. [RTP – N18]

10. Physical security mechanisms in an organization provides protection to people, data, equipment, systems, facilities and company assets. Determine some major ways of protecting the organization's computer installation in the event of any explosion or fire. [RTP – M18]
11. You are an IS Auditor undertaking a job of auditing the Information Systems of an ABC Bank. While performing Audit checks, you intend to ensure the placement of Input validation controls placed in the Information System by detecting errors in the transaction data before the data is processed. Determine the three levels of Input Validation Controls. [MTP2 – M19]
12. You are an Information Technology Consultant to a firm who is in the process of shortlisting the resources for the controls for the environmental exposures - water damage and power spikes in that firm. Prepare a checklist for same. [MTP1 M19 – 6M]
13. Compare between Subversive Attacks and Piggybacking [MTP1 M19 – 4M]
14. Recognize all the technical exposures that include unauthorized implementation or modification of data and software. [MTP2 N18 – 6M]
15. An Internet connection exposes an organization to the harmful elements of the outside world. Discuss the various factors under User Access Management through which the protection can be achieved. [MTP1 N18 – 4M]
16. As a member of an EDP Team of an IT Department of the Company A, determine the controls that are related to the physical security of the tangible Information Systems Resources stored on tangible media? [MTP1 N18 – 6M]
17. Recognize the major reasons for the emergence of Quality assurance in many organizations nowadays? [MTP2 M18 – 4M]
18. Operating System security involves policy, procedure and controls that determine, 'who can access the operating system,' 'which resources they can access' and 'what action they can take'. As an Information Systems auditor, determine the key areas which shall be put in place by any organization. [MTP1 M18 – 6M]

## **PART 2: PRACTICAL QUESTIONS**

19. Mr. X used to purchase electronic gadgets such as laptops, mobile phones etc. on regular basis online from M-Commerce vendor ABC. He then used to return the products with complaints that the said product is defective and is not working. In fact, Mr. X used to replace the original part of the product with the duplicate defective piece. The fraud came in notice only after 2 years. Considering the above facts, comment on the weakness of control mechanism of ABC towards the commission of fraud by Mr. X. [MTP2 M18 – 4M]
20. An Internet connection exposes an organization to the harmful elements of the outside world. As an EDP (Electronic Data Processing) operator of an organization ABC, prepare a checklist for Network Access Controls that are required to be implemented in the organization. [MTP1 M18 – 4M]

## **5. INFORMATION SYSTEMS AUDITING**

### **PART 1: DESCRIPTIVE QUESTIONS**

1. Discuss the key activities, which require special attention for auditing the user access provisioning [M19 – 4M]
2. Explain briefly the objectives of Information System's Auditing. [M18 – 4M]
3. In Information Systems, identify the type of Managerial controls that are responsible for the daily running of software and hardware facilities. Prepare a detailed note on these controls. [RTP – M19]
4. As an Information Systems (IS) Auditor, you need to keep yourself up-to-date with the latest Audit tools, techniques and methodology to meet the demands of the job. Discuss about various Audit Tools that you should be aware about. [RTP – M18]
5. Discuss the advantages of continuous Audit Techniques. [RTP – M18]
6. Discuss the factors that an IS auditor need to determine while accessing the records in an access log of an Organisation [MTP2 M19 – 4M]
7. Discuss briefly the concept of "Inventory Management". [MTP1 N18 – 2M]

8. Explain the term "Audit Trail"? [MTP2 N18 – 4M]
9. The management of the company PQR wants to get audit of its Logical Access controls that are implemented in the company's infrastructure and information systems. As an IS Auditor, determine the checklist while Auditing User Access Logs. [MTP2 M18 – 6M]

## **6. BUSINESS PROCESS AUTOMATION**

### **PART 1: DESCRIPTIVE QUESTIONS**

1. A business organization is planning to increase the accuracy of information transferred and certifies the repeatability of the value added task performed by the automation of business. being a management consultant,, identify any four major benefits that the organization can achieve through the automation of a business [M19 – 4M]
2. Corporate governance is the framework of rules and practices, by which a board of directors ensures accountability, fairness and transparency in a company's relationship with all its stakeholders. List out the rules and procedures that constitute corporate governance framework. [M19 – 3M]
3. Explain 'Data Flow Diagram'. [N18 – 2M]
4. State the required characteristics of goals to be achieved by implementing Business Process Automation (BPA). [N18 – 2M]
5. "Enterprise Risk Management (ERM) does not create a risk-free environment; rather it enables management to operate more effectively in environments filled with risks". In view of this statement, explain the various benefits, which Board of Directors and Management of an entity seek to achieve by implementing the ERM process within the entity. [N18 – 6M]
6. A travel agency ABC wishes to implement an automated Grievance Management System at its workplace to manage and handle the problems with an aim of solving them. Determine the major benefits that will be drawn out of automating this Grievance related business process. [RTP – M18]
7. Recognize the parameters based on which the success of business process automation can be evaluated [MTP1 M19 – 4M]
8. An Airline Industry wishes to automate its Grievance cell so that their clients can online register their feedback, complaints and suggestions. The purpose of automation is to provide better service and satisfaction to its customers. Prepare a list of various steps that are required to be taken while automating the Grievance Cell. [MTP2 N18 – 6M]
9. Discuss "Operational Processes" and state their example. [MTP1 N18 – 2M]
10. State the benefits provided by Business Process Automation (BPA). [MTP2 N18 – 2M]
11. Define "Supporting Processes" and state their example. [MTP2 M18 – 2M]
12. Discuss "Management Processes" and state their example. [MTP1 M18 – 2M]

### **PART 2: PRACTICAL QUESTIONS**

13. An e-commerce website is offering following discounts: [M18 – 6M]
- If the purchase mode is via website, a discount of 5% is given on the bill amount.
  - If the purchase mode is via phone app, a discount of 10% is given on bill amount.
  - If purchase is done via any other mode, customer is not eligible for any discount.
- Draw a Flowchart to calculate and display the bill amount payable by the customer.
14. The GST of 50 items is to be calculated as per the following details. With Code No. and Value of Supply as input, draw a flowchart to calculate the Tax and print the Tax, Code No. of the Item and the Type of Item. (Note: The rates have been taken hypothetically) [RTP – M19]

Code No.(C_No)	Types of Items	Tax Rate
001	Perishable	15%
002	Textiles	10%
003	Luxury Items	20%
004	Machinery	12%

15. A bicycle shop in a city provides rental facility to its customers at different rates for different models as given below: [RTP – N18]

Model No.	Hire rate per day
Model No. 1	Rs. 10
Model No. 2	Rs. 9
Model No. 3	Rs. 8
Model No. 4	Rs. 7

To attract customers, the shopkeeper gives a discount of 15 percent to all those customers, who hire a bicycle for more than one-week period. Further to attract women customer, he gives additional discount of 10 percent irrespective of hire period. For every bicycle hired, a security deposit of Rs. 25 must be paid. Draw a flow chart to print out the details of each customer such as name of customer, bicycle model number, number of days a bicycle is hired for, hire charges, discount and total charges including deposits.

16. A bicycle shop in Delhi provides hired bicycles for day(s) at different rates as shown in table: [RTP – M18]

Season	Charges per day
Spring (March - May)	Rs. 8.00
Summer (June - August)	Rs. 9.50
Autumn (Sept - Nov.)	Rs. 5.00
Winter (Dec. - Feb.)	Rs. 6.00

To attract his customers, the proprietor also gives a discount on the number of days a bicycle is hired for. If the hire period is more than 10 days, a reduction of 15% is made. For every bicycle hired, a deposit of Rs. 20 must be paid.

Develop a flowchart to print out the details for each customer such as name of customer, number of days a bicycle is hired for, hire-charges and total charges including the deposit. It is also assumed that there are 25 customers and complete details for each customer such as name of customer, season and number of days the bicycle is required for is inputted through console.

17. Draw a flowchart to input 5 subject marks of a student. Calculate its total, percentage and also print the grade. Condition for grade are as follows. [MTP2 M19 – 6M]

Percentage	Grade
$\geq 80$	A
$< 80$ & $\geq 60$	B
$< 60$ & $\geq 50$	C
$< 50$	FAIL

18. The manufacturing cost of a producing an item depend on its complexity. A company manufactures three different types of item with costs based on the following calculations. [MTP1 N18 – 6M]

Item Types 1: Item cost = Parts cost \* 2.5

Item Types 2: Item cost = Parts cost \* 3.5

Item Types 3: Item cost = Parts cost \* 5.0

The company makes 1000 items per day. Considering the item type and parts cost of each item as an input, draw a flowchart to print the item cost for each item.

19. An E-commerce site has the following cash back offers. [MTP2 M18 – 6M]

i) If the purchase mode is via website, an initial discount of 10% is given on the bill amount.

ii) If the purchase mode is via phone app, an initial discount of 20% is given on the bill amount.

iii) If done via any other purchase mode, the customer is not eligible for any discount.

Every purchase eligible to discount is given 10 reward points.

- a) If the reward points are between 100 and 200 points, the customer is eligible for a further 30% discount on the bill amount after initial discount.
- b) If the reward points exceed 200 points, the customer is eligible for a further 40% discount on the bill amount after initial discount.

Taking purchase mode, bill amount and number of purchases as input; draw a flowchart to calculate and display the total reward points and total bill amount payable by the customer after all the discount calculation.

20. A company ABC Ltd. is engaged in selling consumer goods to different categories of customers. To increase its sales, different types of discounts are offered to customers. The policy of discount is as given below: [MTP1 M18 – 6M]

- i) On cooking range, a discount of 12% is allowed to dealers and 9% to retailers irrespective of the value of the order.
- ii) A discount of 12% is allowed on washing machine irrespective of the category of customer and the value of the order.
- iii) On decorative products, dealers are allowed a discount of 20% provided that the value of the order is Rs. 10,000 and above. Retailers are allowed a discount of 10% irrespective of the value of the order.

Prepare a flow chart to calculate the discount for the above policy.

## **7. BPA RISKS AND CONTROLS**

### **PART 1: DESCRIPTIVE QUESTIONS**

1. Give two examples of the Risks and Control objectives for Human Resource Process at configuration level. [N18 – 2M]
2. Define Cyber Crime [M18 – 2M]
3. Explain Risk Assessment [M18 – 2M]
4. Explain the positive aspects contained in the IT Act, 2000 and its provisions, from the perspective of e-commerce in India. [M18 – 4M]
5. Describe the term “Internal Control System”? State its limitations as well. [RTP – MAY 19]
6. During a job interview, an interviewer asked Mr. A to list out all the risks and their controls associated with Order-To-Cash (O2C) business process. Prepare an appropriate draft reply. [RTP – N18, MTP2 N18 – 4M, MTP2 M18 – 4M]
7. Describe the term “Internal Control System”? State its limitations as well. [RTP – M18]
8. The controls for a particular business process are implemented by breaking them down into smaller components. Determine the main components of controls for the Purchase to Pay Cycle. [MTP1 M19 – 6M]
9. List the Risks and Control objectives of Procure to Pay (P2P) business process at Masters level. [MTP2 N18 – 4M]
10. Discuss the phases of the Inventory Cycle for manufacturers. [MTP1 N18 – 4M]
11. Explain different stages of Human Resources (HR) Cycle. [MTP1 N18 – 4M]
12. Internal Control Systems can provide an entity with reasonable assurance about achieving the entity's operational, financial reporting and compliance objectives. State the inherent limitations of Internal Control Systems. [MTP1 M18 – 4M]

## **8. FINANCIAL AND ACCOUNTING SYSTEMS**

### **PART 1: DESCRIPTIVE QUESTIONS**

1. Customer Relationship Management (CRM) is a system which aims at improving relationship with customers. [M19 – 4M]  
Briefly explain any four key benefits of CRM module of ERP
2. Major features of an ERP system is central database. [M19 – 2M]  
Which are the options possible to different users while assigning access to it?

3. A business organization is shifting from traditional accounting system to computerized accounting system. The organization needs to store the data that is relatively permanent and not expected to change frequently in accounting system. [M19 – 2M]  
As a financial expert, suggest any two types of such data in accounting system.
4. Describe the term 'Digital Library'. [N18 – 2M, MTP1 M18 – 2M]
5. 'Web Applications' are one of the two ways of using software including Financial and Accounting Software and now-a-days, the use of web applications is increasing rapidly. You, being an IT consultant, have to list out some of the advantages and disadvantages of using web applications. [N18 – 6M]
6. Explain the significance of Front End and Back End in software. [M18 – 2M]
7. A manufacturing company is implementing an ideal ERP software, where a single database is being utilized and it contains all the data for various software modules. Identify the modules of an ideal ERP software along with their functions. [M18 – 6M]
8. You have been appointed as an Information Systems (IS) Auditor in a company JKL Ltd. and asked to perform an ERP audit. Prepare a checklist of the common concerns that should be asked during development and implementation of the system as well as ERP Audit. [RTP – M19]
9. Define Business Reporting. Determine the factors that makes Business Reporting Significant [RTP – M19]
10. Explain the term "Master Data" and its types. [RTP – N18]
11. On joining a Manufacturing company XYZ, you are briefed about the functioning of different modules like Financial Accounting Module, Sales and Distribution Module, Human Resource Module, Material Management Module, Production Planning Module etc. Prepare a brief description on the Material Management Module (MM) based on your understanding. [RTP – N18]
12. Explain the concept of "Customer Relationship Management (CRM)" and identify its key benefits also. [RTP – M18]
13. Being an IT consultant to a Government agency PQR, Identify the most common open international standard that should be used by the agency for their standardized digital business reporting. Support the recommendation by preparing a list of its important features also. [RTP – M18]
14. Describe Role Based Access Control (RBAC) in Enterprise Resource Planning (ERP) System. [MTP1 M19 – 3M , MTP1 M18 – 2M]
15. Analyze the statement "The potential benefits of Business Intelligence (BI) programs include accelerating and improving decision making; optimizing internal business processes; increasing operational efficiency; driving new revenues; and gaining competitive advantages over business rivals." Determine its justification. [MTP2 M19 – 6M]
16. As a Database Administrator, you are invited in a Conference to speak on Data Types in front of audience of aspiring CA students. You decide to segment your lecture in two - Master Data & Non-Master Data and identify different types of Master Data in Financial and Accounting systems. Determine the key points of the content of your lecture [MTP1 M19 – 6M]
17. Define Ideal ERP System. [MTP2 N18 – 2M]
18. As an accountant, you are advised to address an audience of students and speak on different types of Vouchers used in Financial and Accounting Systems. Prepare your notes. [MTP2 N18 – 6M]
19. Discuss Master Data and Non-Master Data with examples. [MTP2 N18 – 4M]
20. Describe the process of "Functional Audit". [MTP 1 N18 – 2M]
21. What is an MIS Report and who uses it? [MTP1 N18 – 4M]
22. Quality Management Module helps in management of quality in productions across processes in an organization. Analyze the process of Quality Management Module. [MTP1 N18 – 6M]
23. Describe the concept of extensible Business Reporting Language (XBRL) Tagging. [MTP2 M18 – 4M]
24. To access the data, classify the types of access that can be assigned to different users. [MTP2 M18 – 2M]

25. As an IS Auditor, determine a checklist for the audit of ERP system in an organization. Also, summarize the auditing aspects of ERP systems. [MTP1 M18 – 4M]
26. Discuss the peculiarities that must be considered while allotting a voucher number to a voucher. [MTP1 M18 – 4M]

### PART 2: PRACTICAL QUESTIONS

27. A business organization is planning to switch on to integrated software for accounting as well as tax compliance instead of separate software for accounting and tax compliance. Being a consultant to the management of this organization, you are required to advise them on various Pros and Cons of having single software for both the accounting and tax compliance. [N18 – 4M]

## 9. CORE BANKING SYSTEMS

### PART 1: DESCRIPTIVE QUESTIONS

1. General controls are pervasive controls and apply to all systems components, processes and data for a given enterprise or systems environment. [M19 – 6M]  
As an IT consultant, discuss some of the controls covered under general controls which you would like to ensure for a given enterprise
2. Information Technology (IT) risks can be reduced by implementing the right type and level of control in automated environment that is done by integrated controls into information technology.
3. Being an IT consultant, suggest various steps of IT related control to a branch manager of a bank. [M19 – 6M]
4. Define 'Proxy Server'. [N18 – 2M, MTP1 N18 – 2M]
5. Explain various key aspects in-built into the architecture of a Core Banking System. [N18 – 4M]
6. In line with the suggestions of RBI, M/s. ABC Bank is planning to obtain ISO 27001: 2013 certification for its Information Security Management System. As an IS Auditor, you are required to prepare a sample list of Risks w.r.t. Information Security for the Bank. [N18 – 6M]
7. Automation of business processes has introduced new types of risks in banking service. You being the Branch Manager of a CBS branch, list out some of the internal controls you think to be implemented in your branch. [M18 – 6M]
8. Now-a-days, Credit Cards are extensively being used for payment purpose. As a consultant to credit card section of a bank, advise the risks involved in the credit card process. [M18 – 4M]
9. Discuss the risks and their corresponding controls associated with the Treasury Process in Core Banking Systems (CBS). [RTP – M19]
10. Analyse new set of IT risks and challenges associated with the businesses and standards that the banks should consider? [RTP – N18]
11. Explain the Internal controls in banks? [RTP – N18]
12. In Core Banking Systems, discuss the possible risks and their controls around the CASA (Current and Savings Account) process. [RTP – M18]
13. Define Money Laundering. [RTP – M18, MTP2 N18 – 2M, MTP2 M18 – 2M]
14. You attended an IT workshop as a CBS. You are required to provide a basic idea to the participants about Current & Savings Accounts (CASA) and primarily discuss the risks and controls that might be relevant in CASA process. Advise about the relevant risks and their counter controls. [MTP2 M19 – 6M]
15. List the key technology components of Core Banking System (CBS). [MTP1 M19 – 2M]
16. The deployment and implementation of Core Banking Systems should be controlled at various stages to ensure that bank's automation objectives are achieved. Determine the different stages [MTP2 M19 – 6M]
17. Determine different stages at which the deployment and implementation of Core Banking Systems (CBS) should be controlled to ensure that banks automation objectives are achieved. [MTP2 N18 – 6M]



18. Explain the term "Mortgage Plan". Also, briefly discuss its different types. [MTP2 N18 – 4M]
19. Explain the parameters through which the deployment and implementation of Core Banking Systems (CBS) should be controlled at various stages to ensure that banks automation objectives are achieved. [MTP1 N18 – 4M]
20. Information security is critical to mitigate the risks of Information technology that ensures Confidentiality, Integrity and Availability of information. Determine the various sub-processes involved in the Information Security. [MTP2 M18 – 6M, MTP1 N18 – 6M]
21. There are multiple ways in which risks to a Data Centre and Network Operations can be accessed. As a consultant, prepare a sample list of Risks and Controls w.r.t Data Centre and Network Operations. [MTP2 M18 – 6M]
22. Explain the working of Automated Teller Machines (ATM) Channel Server? [MTP1 M18 – 2M]
23. A bank PQR has many branches all over India. However, the competent authority intends to bring all the branches together under one umbrella and make it centralized. For that, identify most prominently available Core Banking Software in the market. [MTP1 M18 – 4M]

### PART 2: PRACTICAL QUESTIONS

24. "Jana Seva" is a charitable organisation that was established in 2008. It opened its current account with ABC Bank on 1st February, 2008. Following transactions were made by Jan Seva in the month of July 2012: [MTP1 M18 – 6M]

Date	Amount of Cash transaction
3 <sup>rd</sup> July, 2012	Rs. 5 Lakh
9 <sup>th</sup> July, 2012	Rs. 2 Lakh
28 <sup>th</sup> July, 2012	Rs. 3 Lakh

Examining the given situation, determine the liability of the reporting authority with respect to the maintaining of the record of the transaction.

## 10. E-COMMERCE AND M-COMMERCE

### PART 1: DESCRIPTIVE QUESTIONS

1. Subsequent to demonetization, one of your elderly neighbour, who was using traditional digital methods of making payments like cards, net banking etc., asked for your help to know about the various new methods of Digital Payments. Identify and explain various new methods of Digital Payments for him. [N18 – 6M]
2. Explain various Control Objectives of E-commerce or M-commerce. [M18 – 4M]
3. Draw Workflow Diagram for e-commerce and describe various steps and corresponding activities involved in this diagram. [M18 – 8M]
4. E-business benefits individuals, businesses, government and society at large. As a business seller, analyse the benefits that you would draw from e-business. [RTP – N18]
5. As an IT consultant, advise some tips to an aspiring e-commerce vendor so that his business can be protected from intrusion. [RTP – N18]
6. A customer X intends to place an order for an electric cooker on an online portal ABC.com. With the help of the diagram, determine the general workflow of the E-Commerce transaction that will take place. [RTP – M18]
7. Describe any six commercial laws each in brief, that are applicable to any e-commerce or m-commerce transactions. [RTP – M18]
8. To an individual/user/customer, identify various benefits that (s)he can draw from E-commerce transactions. [MTP1 M19 – 4M]
9. In an e-business environment, controls are required to be put in place at each participant's level. Discuss about the participants involved in any e-business environment. [MTP1 M19 – 4M]

10. Explain the term "Mobile Wallets". [MTP2 N18 – 2M]
11. E-commerce runs through different network-connected systems that can have two types of architecture namely Two-Tier Architecture and Three - Tier Architecture. Determine the differences between both. [MTP2 N18 – 6M]
12. Define "Payment Gateway". [MTP1 N18 – 2M]
13. Explain the term "Web Portal". [MTP2 M18– 2M]
14. Digital Payment is a mechanism that has evolved with e-commerce transactions and are becoming increasingly popular. Its advantageous for the banks to implement digital payments, however the same has certain drawbacks also. Support the statement by identifying advantages as well as drawbacks of digital payments. [MTP2 M18 – 6M]

## **11. EMERGING TECHNOLOGIES**

### **PART 1: DESCRIPTIVE QUESTIONS**

1. Write any two application areas of Internet of Things [M19 – 2M]
2. Mobile computing is an important and rapidly evolving technology that allows users to transmit data from remote location to other locations in mobility condition.  
Being a communication expert, Identify the limitations in current scenario that impede or hesitate users to use this technology frequently [M19 – 8M]
3. Discuss various application areas of 'Virtualization'. [N18 – 4M]
4. Explain Internet Of Things [M18 – 2M]
5. Though Mobile computing is a versatile and strategic technology that increases information quality and accessibility, however, it has its own limitations. Analyze them. [RTP – M19]
6. Identify the risks that are associated with Bring Your Own Device (BYOD) programs. [MTP1 N18 – 4M]
7. Prepare a list of the constraints that are required to develop Grid Computing Security. [MTP1 N18 – 4M]
8. Recognize the application areas where the concept of Internet of Things has been implemented. [MTP1 M18 – 4M]
9. Mr. Y is using Google Apps through which she can access any application, service and data storage facilities on the Internet and pay as-per-usage. Analyze which computing model is providing her these facilities. Also, determine the model's key characteristics. [MTP1 M18 – 6M]
10. Discuss the application areas of Virtualization. [MTP2 M19 – 4M]
11. Discuss the characteristics of the Hybrid Cloud. [MTP2 M19 – 4M]

### **PART 2: DIFFERENCES**

12. Recognize the differences between Hardware Virtualization and Network Virtualization. [MTP2 N18 – 4M]

Copyrights Reserved  
To **MASTER MINDS**, Guntur

**THE END**