

# PRESIDENCY UNIVERSITY, BENGALURU

## SCHOOL OF MANAGEMENT

SET A

## MID TERM EXAMINATION

Odd Semester: 2018-19

Date: 26 October 2018

Course Code: MGT102

Time: 2 Hours

Course Name: Management Information Systems

Max Marks: 40

Branch & Sem: MBA & I Sem

Weightage: 20%

## Instructions:

(i) Avoid false numbering

(ii) Elucidate your answers with suitable illustrations where needed

(iii) Be specific and precise in your answer.

## Part A

Answer all the Questions. Each question carries three marks.

(4x3=12)

- 1. Name the three Business Values of ICT
- 2. Name 6 (Six) of the 7 (Seven) core capabilities of IT.
- 3. Name the 6 (Six) Functions of CBIS (Computer Based Information system).
- 4. Name the 6 (Six) Components of CBIS (Computer Based Information system).

## Part B

Answer all the Questions. Each question carries four marks.

(3x4=12)

- 5. What are the 4 Types of Information Systems?
- 6. Name the Four key abilities of ICT?
- 7. Draw the Component Diagram of DBMS Software.

Answer all the Questions. Each question carries eight marks.

(2x8=16)

**Special Instructions**: Part C Questions are thought provoking questions of Value Chain Concept and Database Design. Your answer must be based on the analysis of the specified situation. You May Use Pencil while Drawing the Diagrams.

- 8. Draw the Value Chain Diagram of Royal Mart Retail Super-Store of Bangalore.
- 9. The ABC consultancy is a well-known placement service provider. ABC assists national and multinational companies to fill their vacancies by finding matching 'talents and skill-requirements' against the vacancies of various organizations. Assume that you have been hired by ABC Consulting Limited, Bangalore to design database architecture for ABC, Bangalore.

After several round of discussion with your boss and other senior managers, you came to know that ABC has many clients and a strong database of many senior and middle level executives.

Your job is to identify the 'Entities', their 'Attributes' and 'Key Field(s)' of each 'Record' of the proposed database.

\*\*\* Good Luck \*\*\*



# PRESIDENCY UNIVERSITY, BENGALURU

## SCHOOL OF MANAGEMENT

SET B

### MID TERM EXAMINATION

Odd Semester: 2018-19

Date: 26 October 2018

Course Code: MGT102

Time: 2 Hours

Course Name: Management Information Systems

Max Marks: 40

Branch & Sem: MBA I Semester

Weightage: 20%

## Instructions:

(i) All the questions are compulsory. Answer all the questions.

(ii) Part C: Part C Questions are thought provoking questions. Your answer must be based on the analysis of the specified situation. You May Use Pencil while Drawing the Diagrams.

## Part A

Answer all the Questions. Each question carries three marks.

(4x3=12)

- 1. Name the three major tasks of Management.
- 2. What are the Six Functions of Computer Based Information system?
- Name the three Business Values of ICT.
- 4. Name any 6 of the 7 core capabilities of IT.

## Part B

Answer all the Questions. Each question carries four marks.

(3x4=12)

- 5. What are the four key components of BMIS (Business Management Information System)?
- 6. Draw the Component Diagram of DBMS Software.
- 7. What are the 4 Types of Information Systems?

#### Part C

Answer the Question. Question carries eight marks.

(2x8=16)

8. Draw the Value Chain Diagram of 'Buy-n-Save' Retail Super-Store of Bengaluru.

9. The Rainbow consultancy is a well-known placement service provider. Rainbow assists national and MNC companies to fill their vacancies by finding matching 'talents and skill-requirements' against the vacancies of various organizations. Assume that you have been hired by Rainbow Consulting Limited, Bengaluru to design a database architecture for Rainbow, Bengaluru.

After several round of discussion with your boss and other senior managers, you came to know that Rainbow has many clients and a strong database of many senior and middle level executives.

Your job is to identify the 'Entities', their 'Attributes' and 'Key Field(s)' of each 'Record' of the proposed database.



# PRESIDENCY UNIVERSITY, BENGALURU

Sec H & I

## SCHOOL OF MANAGEMENT

Set A

## MID TERM EXAMINATION

Odd Semester: 2018-19

Date: 19<sup>th</sup> November 2018

Course Code: MGT102

Time: 2 Hours

Course Name: Management Information Systems

Max Marks: 40

Branch & SEM: MBA Semester I

Weightage: 20%

## Instructions:

(i) Avoid false numbering

(ii) Elucidate your answers with suitable illustrations where needed

## Part A

Answer all the questions. Each question carries three marks.

(4x3=12)

- 1. Name the components of Business Information Management System.
- 2. What are the core capabilities of Information Technology infrastructure from the point of a business enterprise?
- 3. What are the three major challenges of business with reference to Information Systems?
- 4. Name the different types of Information Systems?

## Part B

Answer all the questions. Each question carries four marks

(3x4=12)

- 5. List out and discuss the functions of computer based information system?
- 6. Distinguish between Data Warehouse and Data Mining?
- 7. Describe the Components of DBMS software with a suitable diagram.

**Special Instructions**: Part C Questions are thought provoking questions and are of Application type. Your answer must be based on the analysis of the specified situation. You Must Use Pencil while Drawing the Diagrams.

- 8. What is a Value Chain? Draw a Value Chain diagram for a Hotel Management System.
- 9. Elucidate on the hierarchies of database and design the database architecture for Placement cell of XYZ Business School, Bangalore? Here, your job is to Construct the database architecture and Identify the 'Entities', their 'Attributes' and 'Key Field(s)' of each 'Record' of the proposed database.

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# PRESIDENCY UNIVERSITY, BENGALURU

Sec H & I

## SCHOOL OF MANAGEMENT

Set B

## MID TERM EXAMINATION

Odd Semester: 2018-19

Date: 19th November 2018

Course Code: MGT102

Time: 2 Hours

Course Name: Management Information Systems

Max Marks: 40

Branch & SEM: MBA Semester I

Weightage: 20%

## Instructions:

(i) Avoid false numbering

(ii) Elucidate your answers with suitable illustrations where needed

## Part A

Answer all the questions. Each question carries three marks

(4x3=12)

- 1. Mention the core capabilities of IT Infrastructure from the point a business enterprise?
- 2. List the components of Business Information Management System.
- 3. What are the three major challenges of Business with reference to Information Systems?
- 4. Distinguish between Data Warehouse and Data Mining?

#### Part B

Answer **all** the questions. **Each** question carries **four** marks

(3x4=12)

- 5. List out and discuss the functions of Computer based Information System?
- 6. Explain the different types of Information Systems?
- 7. Describe the Components of DBMS software with a suitable diagram.

Answer all the questions. Each question carries eight marks

(2x8=16)

**Special Instructions**: Part C Questions are thought provoking questions and are of Application type. Your answer must be based on the analysis of the specified situation. You Must Use Pencil while Drawing the Diagrams.

- 8. What is a Value Chain? Draw a Value Chain diagram for a large retail superstore?
- 9. Elucidate on the hierarchies of database and design the database architecture of e-commerce giant Amazon.com? Here, your job is to Construct the database architecture and identify the 'Entities', their 'Attributes' and 'Key Field(s)' of each 'Record' of the proposed database.



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# PRESIDENCY UNIVERSITY BENGALURU

# **SCHOOL OF MANAGEMENT**

**SET A** 

**END TERM FINAL EXAMINATION** 

Odd Semester: 2018-19

Date: 02 January 2019

Course Code: MGT 102

Time: 3 Hours

Course Name: Management Information Systems

Max Marks: 80

Programme & Sem: MBA & I Sem

Weightage: 40%

## Instructions:

(i) Avoid false numbering

(ii) Elucidate your answers with suitable illustrations where needed

## Part A

Answer all the Questions. Each question carries four marks.

(5Qx4M=20)

Special Instructions: Be specific and precise in your answer.

- 1. Name the 4 (Four) Inherent Characteristics of Software Systems.
- 2. Name the 4 (Four) Major Managerial Issues of Information System Development.
- 3. Draw the Waterfall Model of Systems Development?
- 4. Name any 4 (Four) of the Five Key Issues of Networking?
- 5. Name any Four of the Seven Network Devices?

#### Part B

Answer both the Questions.

(10+20=30)

Special Instructions: Use Pencil and Draw the Diagrams.

6. Read the following paragraphs and conduct data decomposition as mentioned below:

Khaitan Electronics Limited (KEL) is a distributor of South India for a group of ten Consumer Electronic Goods Manufacturing companies (e.g. Sony, Hitachi, Phillips, etc). You are a management consultant working for Mr. Sudeep Kamat, CEO of KEL, to automate the Order Receiving, Procurement and Delivery systems of KEL. Preliminary study suggests that a relational database system to be installed. The details of KEL's procurement and delivery systems are as follows:

Retailers of electronic goods (TV, DVD, Music Systems, etc.) often send "Requisition(s)-for-Item" mentioning the name of the Manufacturer, Model No. and quantities required.

Each retailer may send Zero, One or Many requisitions. Each requisition contains request(s) for one or many electronic items from the same or from different manufacturers. KEL maintains records of each item it has in stock, name of its manufacturer, model number and the quantity in stock.

Once KEL receives an order, it immediately verifies its stock. If the requested item is out of stock or the quantity requested is higher than the quantity in stock, KEL immediately places "Purchase-Order(s)-for-Items", for fresh stocks, to the respective manufacturers.

If ordered, items and quantities are available; KEL raises "Invoice"/ "Bill-of-Purchase" and prepares dispatch notes to ship the items and to collect the "Payments". KEL sells Items on credit and maintains records of "Accounts-Receivables" for each invoice.

A retailer may place order for one or many items at a time. KEL accepts payment for one invoice, several invoices or part-of an invoice.

Notes: Invoice = Bill of Purchase – a commercial term. Sellers of goods and services often raise invoices against any purchase made by their customers and customers make their payments against the invoices. It is called receipts, when anyone pays in cash.

A. Use <u>BNF method</u> of data decomposition to uncover the data structure (composition) of "Purchase-Order-for- Items". (5 Marks)

Use <u>Data-Structure method</u> of data decomposition to reveal the data structure (composition) of "Invoice". (5 Marks)

- 7. Assume that you have been hired by ABC Retail Super-store in Bangalore to design its database. After brainstorming with the ABC store managers, you come up with the following specifications:
- The store is identified its name, branch code and the address. Each store has multiple departments, identified by their names.
- Each department may have many employees but only one of them is the department manager.

- Employees are identified by their names. We also need to record their salaries. Each
  employee may work in only one department. Managers are employees as well,
  although each of them also gets to manage one department.
- The store sells various items identified by item ID's. Each item is carried by exactly one department, while each department may carry many items. For each item, we also need to keep a short description, listed Price and its quantity in stock.
- The store deals with a number of suppliers identified by their names. We need to record their addresses. Each supplier supplies an item at a particular price. A supplier may supply many items, and the same items could be supplied by other suppliers (probably at different prices).
- The store receives orders from customers which is identified by order ID's. Each order has a date, a shipping address, and may include different quantities of multiple items.

You have to do the followings to develop the database for ABC retail store:

a. Identify the Entity Set (All Entities) of ABC Store

(4 Marks)

b. Draw the EA (Entity Attribute Diagram) of any three Entities.

(6 Marks)

Draw an Entity Attribute Relationship Diagram (EARD) diagram of ABC store's operation. Underline the key attributes and include arrowheads indicating the multiplicity of relationships. (10 Marks)

#### Part C

Answer all the sections of Questions No.8.

(5+5+10+10=30)

**Special Instructions**: Part C Questions are thought provoking questions of System Development. Your answer must be based on the analysis of the specified situation. You May Use Pencil while Drawing the Diagrams.

- 8. Assume that you have been appointed as Manager of an upcoming Five Star luxury Hotel 'Hamara Hotel' of Yalahanka (HHY) district and you have been asked to develop a Hotel Management Information System (HMIS) for HHY. Please identify the followings:
  - a) Identify the Key Business Processes of Hotel Management Systems.

(5 Marks)

b) Draw the Value Chain Diagram of HHY.

(5 Marks)

- c) Figure out the 'Control Points' and Metrics that you need to monitor to access the performance of the business operations of HHY. (10 Marks)
- d) Which Systems Development Method You will Follow to develop the Key Hotel Management Information System (HMIS) and Why? (10 Marks)





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# PRESIDENCY UNIVERSITY BENGALURU

## **SCHOOL OF MANAGEMENT**

SET B

END TERM FINAL EXAMINATION

Odd Semester: 2018-19

Date: 02 January 2019

Course Code: MGT 102

Time: 3 Hours

Course Name: Management Information Systems

Max Marks: 80

Programme & Sem: MBA & I Sem

Weightage: 40%

## Instructions:

(i) Avoid false numbering

(ii) Elucidate your answers with suitable illustrations where needed

#### Part A

Answer **all** the Questions. **Each** question carries **four** marks.

(5Qx4M=20)

Special Instructions: Be specific and precise in your answer.

- 1. Define a 'Data Model'. What are the 3 levels of Data Modeling?
- 2. What are the most common problems of system development and maintenance?
- 3. Distinguish between Waterfall Model and Prototyping Model of Systems Development?
- 4. Name any four of the five Key Issues of Networking?
- 5. Define Networking. Name the types of connecting medium.

## Part B

Answer **both** the Questions.

(20+10=30)

**Special Instructions**: Use Pencil and Draw the Diagrams.

- 6. A new university, 'New Heights University' (NHU), is being set up in the city of Bengaluru. As the systems administrator of NHU, you are supposed to design its database. After the discussions with the top management of NHU, you come up with the following requirements of the University:
- The University has many Schools. Each School is identified by the School-Id, School Name, Dean, Director, and the Programs offered.
- Each school offers multiple UG and PG Programs, multiple courses, identified by their names.
- Each School may have many teaching and non-teaching employees but only one of them is the Director.

- Employees are identified by their names. We also need to record their salaries. Each employee may work in only one School.
- The school offers various courses identified by Course ID's. Each course is offered by exactly one school, while each school may offer many courses. For every course offered, we also need to keep a short description, credits and its prerequisites.
- The placement department of the university deals with placements for students and interacts with companies for jobs. We need to record the company addresses, jobs offered and salary packages.
- The University also maintains the records of student's attendance, marks, credits earned. Hostel records also needs to be maintained for Hostel students.

You have to do the followings to develop the database for NHU:

a. Identify the Entity Set (All Entities) of NHU.

(4 Marks)

b. Draw the EA (Entity Attribute Diagram) of any three Entities.

(6 Marks)

- c. Draw an Entity Attribute Relationship Diagram (ERD) diagram of NHU's operations. Underline the key attributes and include arrowheads indicating the multiplicity of relationships. (10 Marks)
  - 7. Read the following paragraphs and conduct data decomposition as mentioned below:
  - 'Buy-n-Save Super Market' (BSM) is a Business-to-Business (B2B) Wholesale Super Market which sells products of many reputed MNC and Local manufacturers to the local retailers. You are assigned the job of automating the Order Receiving, Procurement and Delivery systems of BSM. Preliminary study suggests that a relational database system to be installed. The details of BSM's procurement and delivery systems are as follows:
  - Retailers send "Requisition-for-Items" mentioning the name of the item, item-no,
     Manufacturer and quantities required.
  - BSM maintains records of each item it has in stock, name of its manufacturer, item number and the quantity in stock.
  - Once BSM receives an order, it immediately verifies its stock. If the requested item is out of stock or the quantity requested is higher than the quantity in stock, BSM immediately places "Purchase-Order-for-Items", for fresh stocks, to the respective manufacturers.
  - If ordered, items and quantities are available; BSM raises "Invoice"/ "Bill-of-Purchase" and prepares dispatch notes to ship the items and to collect the "Payments". BSM sells Items on credit and maintains records of "Accounts-Receivables" for each invoice.
  - A retailer may place order for one or many items at a time. BSM accepts payment for one invoice, several invoices or part-of an invoice.

## **Questions:**

- Use <u>Production method</u> of data decomposition to design the data structure of "Requisition-for-Items". (5 Marks)
- b. Use <u>Data-Structure method</u> of data decomposition to design the data structure of "Purchase-Order-for-Items". (5 Marks)

## Part C

Answer all the sections of Questions No.8.

(5+5+10+10=30)

**Special Instructions**: Part C Questions are thought provoking questions of System Development. Your answer must be based on the analysis of the specified situation. You May Use Pencil while Drawing the Diagrams.

- 8. A brand new Hospital, 'Well-cure Hospital' (WH), is starting in Bengaluru. The Hospital wants to automate its operations from Day 1. If you have been appointed as Manager of the upcoming Hospital, and you have been asked to develop a Hospital Management Information System for WH. Please identify the followings:
- a. Identify the Key Business Processes of Hospital Management Systems.

(5 Marks)

b. Draw the Value Chain Diagram of WH.

- (5 Marks)
- c. Figure out the 'Control Points' and Metrics that you need to monitor to access the performance of the business operations of WH. (10 Marks)
- d. Which Systems Development Method will you follow to develop the Key Hospital Management Information System and Why? (10 Marks)

