

Roll No.

MAY 2014

Total No. of Questions – 14 **INTERMEDIATE (IPC)**
GROUP II - PAPER 7 Total No. of Printed Pages – 8
Time Allowed – 3 Hours **INFORMATION TECHNOLOGY** Maximum Marks – 100
& STRATEGIC MANAGEMENT

UAP – H

Answers to questions are to be given only in English, except in the case of candidates who have opted for Hindi Medium. If a candidate has not opted for Hindi Medium, his/her answer in Hindi will not be valued.

Answers to Sections A and B should be given in separate sets of answer books.

SECTION – A

Question No. 1 is compulsory.
Answer any five questions from the rest.

Marks – 50

Marks

1. Answer all the following questions briefly :
 - (a) What are device drivers ? Name any two devices that require drivers. 2×5
 - (b) Define "Bit" and "Byte". =10
 - (c) What is the difference between backup and recovery ?
 - (d) What are the functions of Transport Layer and Internet Layer in Transmission Control Protocol/Internet Protocol (TCP/IP) ?
 - (e) What is the difference between Integrity and Authenticity with reference to E-Commerce ?

2. (a) Describe any four benefits of database management solution for an organization. 4
- (b) Explain in brief the following features of an Operating System : 4
 - (i) Multi programming
 - (ii) Multi processing
 - (iii) Multi tasking
 - (iv) Multi threading

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(2)

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Marks

3. (a) What is a 'threat' ? Explain any three types of Network Security threat ? 4
(b) What do you mean by distributed database ? Also briefly explain the two methodologies of distribution of a database. 4
4. (a) Describe briefly any four features of Application Servers. 4
(b) List the two advantages and two disadvantages of 3 tier architecture. 4
5. (a) Explain the following with regard to Internet connection : 4
(i) SDSL connection
(ii) Satellite connection
(b) Explain step by step online transaction processing in an e-commerce environment. 4
6. A Housing Society in a newly developed Smart City has provided several advanced security systems to each house in that city. Based on the value of these advanced security systems installed in each house, the Society has divided all the houses in four categories and fixed the criteria for annual maintenance charges as under : 8

House Category	Maintenance charges as % of value of advanced security systems installed at house
A	8%
B	6%
C	4%
D	3%

In addition to above there is a service tax @ 12.36% on the amount of maintenance charges. Considering house number and value of advanced security system installed, as input, draw a flow chart to have printed output as house number, maintenance charges, service tax and the total amount to be paid by each house owner.

7. Write short notes on any four of the following : 2×4
=8
- (a) Firewall
(b) Data Mining
(c) VoIP
(d) Object Oriented Programming (OOP)
(e) Front End Communication Processors

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(3)

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(Hindi Version)

उन परीक्षार्थियों को छोड़कर जिन्होंने हिन्दी माध्यम चुना है, प्रश्नों के उत्तर केवल अंग्रेजी में ही देना है।

वह परीक्षार्थी जिसने हिन्दी माध्यम नहीं चुना है, यदि हिन्दी में उत्तर देता है,
तो उसके हिन्दी में दिये गये उत्तरों का मूल्यांकन नहीं होगा।

• भाग-अ और भाग-ब के उत्तर अलग-अलग उत्तर पुस्तिका में लिखें।

भाग – अ

प्रश्न संख्या 1 अनिवार्य है।

शेष में से किन्हीं पाँच के उत्तर दीजिए।

Marks – 50

Marks

1. निम्नलिखित सभी प्रश्नों के उत्तर संक्षिप्त में दीजिए :
(अ) डिवाइस ड्राइवर्स (Device Drivers) से आप क्या समझते हैं ? ऐसी दो डिवाइस के नाम बतायें जिन्हें ड्राइवर्स की आवश्यकता होती है। 2×5
=10
(ब) 'बिट' (Bit) और 'बाइट' (Byte) को परिभाषित कीजिए।
(स) बैकअप (Backup) एवं रिकवरी (Recovery) में अंतर समझाइए।
(द) ट्रांसपोर्ट लेयर (Transport Layer) और इन्टरनेट लेयर (Internet Layer) का सम्बन्धन नियन्त्रण प्रोटोकॉल/ इन्टरनेट प्रोटोकॉल (TCP/IP) में क्या काम होता है ?
(इ) ई-कामर्स (E-Commerce) के सन्दर्भ में इंटिग्रीटी (Integrity) और ऑथेन्टीसिटी (Authenticity) में क्या अंतर है ?
2. (अ) डेटाबेस मैनेजमेंट सोल्यूशन (Database Management Solution) के कोई चार लाभ किसी भी व्यावसायिक संस्थान के लिए वर्णित कीजिए। 4
(ब) निम्नलिखित ऑपरेटिंग सिस्टम की विशेषताओं (Features of Operating System) को संक्षेप में समझाइए : 4
(i) मल्टी-प्रोग्रामिंग (Multi programming)
(ii) मल्टी-प्रोसेसिंग (Multi processing)
(iii) मल्टी-टास्किंग (Multi tasking)
(iv) मल्टी-थ्रेडिंग (Multi threading)
3. (अ) खतरे (threat) से आप क्या समझते हैं ? किन्हीं तीन प्रकार के नेटवर्क सुरक्षा (Network Security) खतरों के बारे में वर्णन कीजिए। 4
(ब) डिस्ट्रीब्यूटेड डेटाबेस (Distributed Database) से आप क्या समझते हैं ? डेटाबेस वितरण के कौन से दो ढंग हैं, उनका संक्षेप में वर्णन कीजिए। 4

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4. (अ) एप्लीकेशन सर्वर (Application Servers) की किन्हीं चार विशेषताओं (features) का संक्षेप में वर्णन कीजिए । 4
- (ब) थ्री टियर संरचना (Three Tier Architecture) के कोई दो लाभ (advantages) और दो हानियों (disadvantages) का उल्लेख करें । 4
5. (अ) इंटरनेट कनेक्शन के अंतर्गत, निम्नलिखित का वर्णन कीजिए : 4
- (i) SDSL कनेक्शन (SDSL connection) और
- (ii) सैटेलाइट कनेक्शन (Satellite connection)
- (ब) ई-कॉमर्स में किसी ट्रांजेक्शन की ऑन-लाइन प्रोसेसिंग चरणबद्ध रूप से किस प्रकार होती है ? 4
- व्याख्या कीजिए ।
6. एक घर बनाने वाली संस्था (Housing Society) ने स्मार्ट सिटी (Smart City) के नाम से कुछ घरों का निर्माण किया । उन घरों में कुछ आधुनिक प्रकार के सुरक्षा उपकरण (Security Systems) स्थापित किये । उन सुरक्षा उपकरणों के स्थापन मूल्य के आधार पर उन घरों को चार (4) तरह की श्रेणी में वर्गीकृत कर दिया । हर एक वर्गीकृत घर के रख-रखाव पर लगने वाला वार्षिक शुल्क नीचे दी गई तालिका में दर्शाया गया है : 8

गृह श्रेणी (House Category)	आधुनिक सुरक्षा उपकरण के रख-रखाव (Maintenance Charges) का % मूल्य (Value)
A	8%
B	6%
C	4%
D	3%

ऊपर दिए गए शुल्क के साथ सर्विस टैक्स (Service Tax) @ 12.36% रख-रखाव शुल्क (Maintenance Charges) पर लगाया गया । उपरोक्त के लिए एक प्रवाह-चार्ट (Flow Chart) बनाइये जिसमें घर का नम्बर (House Number), आधुनिक सुरक्षा उपकरण का मूल्य इनपुट में (Input) । आउटपुट (Output) में घर का नम्बर, रख-रखाव शुल्क (Maintenance Charges), सर्विस टैक्स (Service tax) और कुल राशि (Total amount) जो उस घर के मालिक (House Owner) को देनी होगी, निकालकर (Calculate) अंकित (Print) कीजिए ।

7. निम्नलिखित में से किन्हीं चार पर संक्षिप्त टिप्पणियाँ लिखिए :

(अ) फायरवाल (Firewall)

(ब) डेटा माइनिंग (Data Mining)

(स) वॉयप (VoIP)

(द) आब्जेक्ट ओरिएन्टेड प्रोग्रामिंग (OOP)

(इ) फ्रॉन्ट-एंड कम्यूनिकेशन प्रोसेसर (Front End Communication Processors)

2×4
=8

(5)

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SECTION - B

Question No. 8 is compulsory.

Answer any five questions from the rest.

Marks - 50

8. (a) Mission statement of a company focuses on the question : 3
'Who we are' and 'What we do'. Explain briefly.
- (b) State the factors of human resource that influence on employees competence. 3
- (c) Assume that you are an entrepreneur who has an intense desire to get into the business. What types of information relating to macro environment would you need to determine external opportunities and threats ? 3
- (d) What does corporate strategy ensure ? Explain. 3
- (e) Briefly describe the impact of corporate culture on an organization. 3
9. (a) State with reasons which of the following statements are correct or incorrect. 2×2
=4
- (i) Stability strategy is not a 'do-nothing' strategy.
- (ii) Six sigma efforts target following main areas :
- (x) Improving customer satisfaction.
- (y) Reducing wastage
- (z) Reducing defects
- (b) What are the major stages in the strategic management process ? 3

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10. What is the rationale behind Business Process Reengineering (BPR) ? What steps would you recommend to implement BPR in an organization ? 7
11. (a) Discuss the leadership role played by the managers in pushing for good strategy execution. 4
- (b) What do you understand by functional structure ? 3
12. (a) How would you argue that modern enterprises pursue multiple objectives and not a single objective ? 4
- (b) Explain the significance of SWOT analysis. 3
13. Distinguish between the following :
- (a) Cost Leadership and Differentiation Strategies 4
- (b) Social Marketing and Service Marketing 3
14. Write short notes on the following :
- (a) Experience Curve 4
- (b) Production System 3

OR

Characteristics of Strategic Business Unit (SBU)

(7)

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भाग - ब

प्रश्न संख्या 8 अनिवार्य है।

शेष में से किन्हीं पाँच प्रश्नों के उत्तर दीजिए।

Marks : 50

8. (अ) एक कम्पनी का मिशन (कार्य) घोषवाक्य (statement) इस प्रश्न पर केंद्रित होता है : 'हम कौन हैं' और 'हम क्या करते हैं'। संक्षेप में समझाइए। 3
- (ब) मानव संसाधन के उन कारकों (factors) को बताइए जो कर्मचारियों की सामर्थ्य पर प्रभाव डालते हैं। 3
- (स) कल्पना कीजिए कि आप एक उद्यमकर्ता हैं जिसके पास यह प्रबल इच्छा है कि वह व्यवसाय करें। समग्र परिवेश (Macro environment) से सम्बन्धित किस तरह की सूचनाएँ चाहेंगे जिससे कि आप बाह्य अवसरों तथा खतरों को निर्धारित कर सकें? 3
- (द) कॉर्पोरेट रणनीति (Corporate strategy) क्या सुनिश्चित करती है? बताइए। 3
- (इ) किसी भी संस्था पर कॉर्पोरेट संस्कृति (Corporate culture) के पड़ने वाले प्रभाव का संक्षिप्त में वर्णन कीजिए। 3
9. (अ) कारण सहित बताइये कि निम्नलिखित में से कौन सा कथन सत्य या असत्य है : 2×2 =4
- (i) स्थिर व्यूहरचना 'कुछ भी न करने' से संबंध रखने वाली व्यूहरचना नहीं है।
- (ii) सिक्स सिग्मा प्रयत्न निम्नलिखित मुख्य क्षेत्रों को अपना लक्ष्य बनाता है :
- (x) ग्राहक संतुष्टि बढ़ाना
- (y) बरबादी में कमी
- (z) त्रुटियों में कमी
- (ब) रणनीतिक प्रबंधन प्रक्रिया में कौन-कौन से प्रमुख चरण हैं? 3

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10. व्यावसायिक प्रक्रिया पुनर्भियान्त्रिकी (BPR) के पीछे औचित्य क्या है ? संस्थान में बी.पी.आर. (BPR) लागू करने के लिए कौन से चरणों की सिफ़ारिश करेंगे ? 7
11. (अ) अच्छी व्यूहरचना के कार्यान्वयन को आगे बढ़ाने के लिए प्रबंधन की नेतृत्व भूमिकाओं की विवेचना कीजिए । 4
- (ब) कार्यात्मक संरचना (Functional Structure) से आप क्या समझते हैं ? 3
12. (अ) आप कैसे तर्क प्रस्तुत करेंगे कि आधुनिक उद्यम एक के बजाय अनेक उद्देश्यों का पीछा करता है ? 4
- (ब) स्वॉट (SWOT) विश्लेषण का महत्त्व बताइए । 3
13. निम्नलिखित में अन्तर कीजिए :
- (अ) लागत नेतृत्व और विभेदीकरण रणनीति 4
- (ब) सामाजिक विपणन और सेवा विपणन 3
14. निम्नलिखित पर संक्षिप्त टिप्पणियाँ लिखिए :
- (अ) अनुभव वक्र 4
- (ब) उत्पादन प्रणाली 3

अथवा

रणनीतिक व्यवसाय इकाई (SBU) की विशेषताएँ

PAPER – 7 : INFORMATION TECHNOLOGY AND STRATEGIC MANAGEMENT

SECTION – A : INFORMATION TECHNOLOGY

Question No. 1 is compulsory

*Answer any **five** questions from the rest.*

Question 1

*Answer **all** the following questions briefly:*

- (a) *What are device drivers? Name any two devices that require drivers.*
- (b) *Define "Bit" and "Byte".*
- (c) *What is the difference between backup and recovery?*
- (d) *What are the functions of Transport Layer and Internet Layer in Transmission Control Protocol/Internet Protocol (TCP/IP)?*
- (e) *What is the difference between Integrity and Authenticity with reference to E-Commerce?*

(2 x 5 = 10 Marks)

Answer

- (a) **Device Drivers:** Device drivers are small files that act as interfaces between hardware in a computer system and the Operating System (OS). Hardware requires device drivers so that the OS can “see” the devices and handle them effectively and efficiently.

The common devices that require drivers include:

- Keyboards;
 - Mice;
 - Controllers;
 - Graphics cards;
 - Audio hardware;
 - Ethernet hardware;
 - Wireless cards;
 - Ports;
 - Card readers;
 - Card slots and
 - CD/DVD drives.
- (b) **Bit:** Bit is defined as the smallest basic unit of storage in the computer memory that is an abbreviation of binary digit 0 or 1.

Byte: A byte is a basic grouping of 8 bits that the computer operates on as a single unit and is used to represent a character by the American Standard Code of Information Interchange (ASCII) and Extended BCD Interchange Code (EBCDIC) systems.

- (c) **Backup:** Backup is a utility program used to make a copy of the contents of database files and log files. The database files consist of a database root file, log file, mirror log file, and other database files called “dbspaces”.

Recovery: Recovery is a sequence of tasks performed to restore a database at some point-in-time. It is performed when either hardware such as a disk drive/controller card failure or media failure like unexpected database error while data processing occurs.

- (d) **Transport Layer:** The Transport Layer in TCP/IP provides end-to-end communication between applications and verifies correct packet arrival.

Internet Layer: The Internet Layer in TCP/IP provides packet routing for error checking and addressing and integrity.

- (e) With reference to E-commerce -

Integrity is defined as the ability to ensure that information being displayed on a web site or transmitted or received over the internet has not been altered in any way by an unauthorized party.

Authenticity is the ability to identify the identity of a person or entity with whom we are dealing in the internet.

Question 2

- (a) Describe any four benefits of database management solution for an organization.

(4 Marks)

- (b) Explain in brief the following features of an Operating System:

(i) Multi programming

(ii) Multi processing

(iii) Multi tasking

(iv) Multi threading

(4 Marks)

Answer

- (a) The benefits of DBMS solution for an organization are as follows:

(i) It reduces data redundancy and inconsistency.

(ii) It enhances data integrity and security.

(iii) It provides logical and physical data independence.

(iv) It provides application data independence.

(v) It reduces complexity of the organization's Information System environment.

- (vi) It provides faster data accessibility and improved data sharing.
 - (vii) It increases productivity of application development.
 - (viii) It provides low cost of developing and maintaining system.
 - (ix) It provides systematic storage of data in the form of table.
 - (x) It provides multiple simultaneous usages by good number of users.
 - (xi) Different privileges can be given to different users.
 - (xii) It provides backup & recovery.
- (b) (i) **Multi programming:** Multi programming is defined as an execution of two or more programs that all reside in primary storage. Since the CPU can execute only one instruction at a time, it cannot simultaneously execute instructions from two or more programs. The purpose of multiprogramming is to increase the utilization of the computer system as a whole.
- (ii) **Multi processing:** Multi processing (or parallel processing) refers to the use of two or more central processing units, linked together, to perform coordinated work simultaneously.
- (iii) **Multi tasking:** Multi tasking refers to the operating system's ability to execute two or more of a single user's tasks concurrently.
- (iv) **Multi threading:** Multi threading allows a process to keep running even if some threads within the process are stalled, working on a lengthy task, or awaiting user interaction, thus improve the performance of processing the task.

Question 3

- (a) *What is a 'threat'? Explain any three types of Network Security threat?* (4 Marks)
- (b) *What do you mean by distributed database? Also briefly explain the two methodologies of distribution of a database.* (4 Marks)

Answer

- (a) **Threat:** A threat is anything that can disrupt the operation, functioning, confidentiality, integrity, or availability of a network or system.

Network security threats can be categorized into four broad themes:

- **Unstructured threats** - These originate mostly from inexperienced individuals using easily available hacking tools from the Internet. These tools include port-scanning tools, address-sweeping tools, and many others.
- **Structured threats** - These originate from individuals who are highly motivated and technically competent and usually understand network systems design and the vulnerabilities of those systems. An individual who presents a structured threat typically targets a specific destination or group.

- **External threats** - These originate from individuals or organizations working outside an organization, which does not have authorized access to organization's computer systems or network. They usually work their way into a network from the Internet or Dialup Access servers.
 - **Internal threats** - These threats originate from individuals who have authorized access to the network. These users either have an account on a server or physical access to the network. An internal threat may come from a discontented former or current employee or contractor.
- (b) **Distributed Database:** An organization may require decentralizing its database by scattering it with computing resources to several locations so that running of applications programs and data processing are performed at more than one site. This refers to Distributed Database and its processing facilitate savings in time and costs by concurrent running of application programs at various sites. When processing is distributed, the database needs to be distributed fully or partly, depending on the organizational requirements.

There are two methodologies of distribution of a database which are given as under:

- **Replicated Database:** In this, duplicates of data are provided to the sites so that the sites can have frequent access to the same data concurrently. But this method of replication is costly in terms of system resources and also maintaining the consistency of the data elements.
- **Partitioned Database:** In this, a database is divided into parts or segments that are required and appropriate for the respective sites so that only those segments are distributed without costly replication of the entire data.

Question 4

- (a) Describe briefly any four features of Application Servers.
- (b) List the two advantages and two disadvantages of 3 tier architecture.

Answer

- (a) Features of the Application Servers are as follows:
- **Component Management:** This provides the manager with tools for handling all the components and runtime services like session management, and synchronous/asynchronous client notifications, as well as executing server business logic.
 - **Fault Tolerance:** It is an ability of an application server with no single point of failure, defining policies for recovery and fail-over recovery in case of failure of one object or group of objects.
 - **Load Balancing:** It is the capability to send the request to different servers depending on the load and availability of the server.

- **Transaction Management:** It is an ability to process one or more logical unit of work requested by the client. The server ensures that the transaction processes completely.
- **Management Console:** It refers to the single point graphical management console for remotely monitoring clients and server clusters.
- **Security:** The accessibility of data and application is restricted through user authentication at first tier of application server for security measures.

(b) Advantages of three-tier architecture are as follows:

- **Clear separation of user-interface-control and data presentation from application logic:** Through this separation, more clients are able to have access to a wide variety of server applications. The two main advantages for client-applications are quicker development through the reuse of pre-built business-logic components and a shorter test phase.
- **Dynamic load balancing:** If bottlenecks in terms of performance occur, the server process can be moved to other servers at runtime.
- **Change management:** It is easy and faster to exchange a component on the server than to furnish numerous PCs with new program versions.

Disadvantages of three-tier architecture are as follows:

- Creates an increased need for network traffic management, server load balancing, and fault tolerance.
- Current tools are relatively immature and are more complex.
- Maintenance tools are currently inadequate for maintaining server libraries. This is a potential obstacle for simplifying maintenance and promoting code reuse throughout the organization.

Question 5

(a) Explain the following with regard to Internet connection:

(i) SDSL connection

(ii) Satellite connection

(4 Marks)

(b) Explain step by step online transaction processing in an e-commerce environment.

(4 Marks)

Answer

- (a) **SDSL Connection:** Symmetric Digital Subscriber Line (SDSL) is a technology that allows more data to be sent over existing copper telephone lines. Symmetric Digital Subscriber Line (SDSL) works by sending digital pulses in the high-frequency area of telephone wires and cannot operate simultaneously with voice connections over the same wires. It requires a special SDSL modem and supports data rates up to 3 Mbps. It is called symmetric because it supports the same data rates for upstream and downstream traffic.

Satellite Connection: Internet over Satellite (IoS) allows a user to access the Internet via a satellite that orbits the earth. A satellite is placed at a static point above the earth's surface, in a fixed position. Because of the enormous distances signals must travel from the earth up to the satellite and back again, IoS is slightly slower than high-speed terrestrial connections over copper or fiber optic cables.

- (b) Following is a step by step online transaction processing in an e-commerce environment:
- (i) **Order Placed:** Customer places order through secure connection on website, or merchant manually keys in transaction.
 - (ii) **Authorization Request:** Payment Gateway receives the transaction through the secure internet connection, encrypts it, and submits an authorization to the credit card issuing bank.
 - (iii) **Authorization Response:** Credit card issuing bank either approves or declines the request and sends a response back through the payment gateway to the website.
 - (iv) **Order Fulfilled:** Once approved the merchant processes and ships the customer's order.
 - (v) **Settlement Request:** The Payment Gateway sends a settlement request to the merchant account provider each day that transactions are processed.
 - (vi) **Settlement Deposited:** The merchant account provider deposits the amount for each settlement into the merchant's bank account that usually takes 24 - 48 hours.

Question 6

A Housing Society in a newly developed Smart City has provided several advanced security systems to each house in that city. Based on the value of these advanced security systems installed in each house, the Society has divided all the houses in four categories and fixed the criteria for annual maintenance charges as under:

House Category	Maintenance charges as % of value of advanced security systems installed at house
A	8%
B	6%
C	4%
D	3%

In addition to above there is a service tax @ 12.36% on the amount of maintenance charges. Considering house number and value of advanced security system installed, as input, draw a flow chart to have printed output as house number, maintenance charges, service tax and the total amount to be paid by each house owner.

Answer

Let us define the variables first:

HNO: House Number

VAL_ASS: Value of Advanced Security Systems

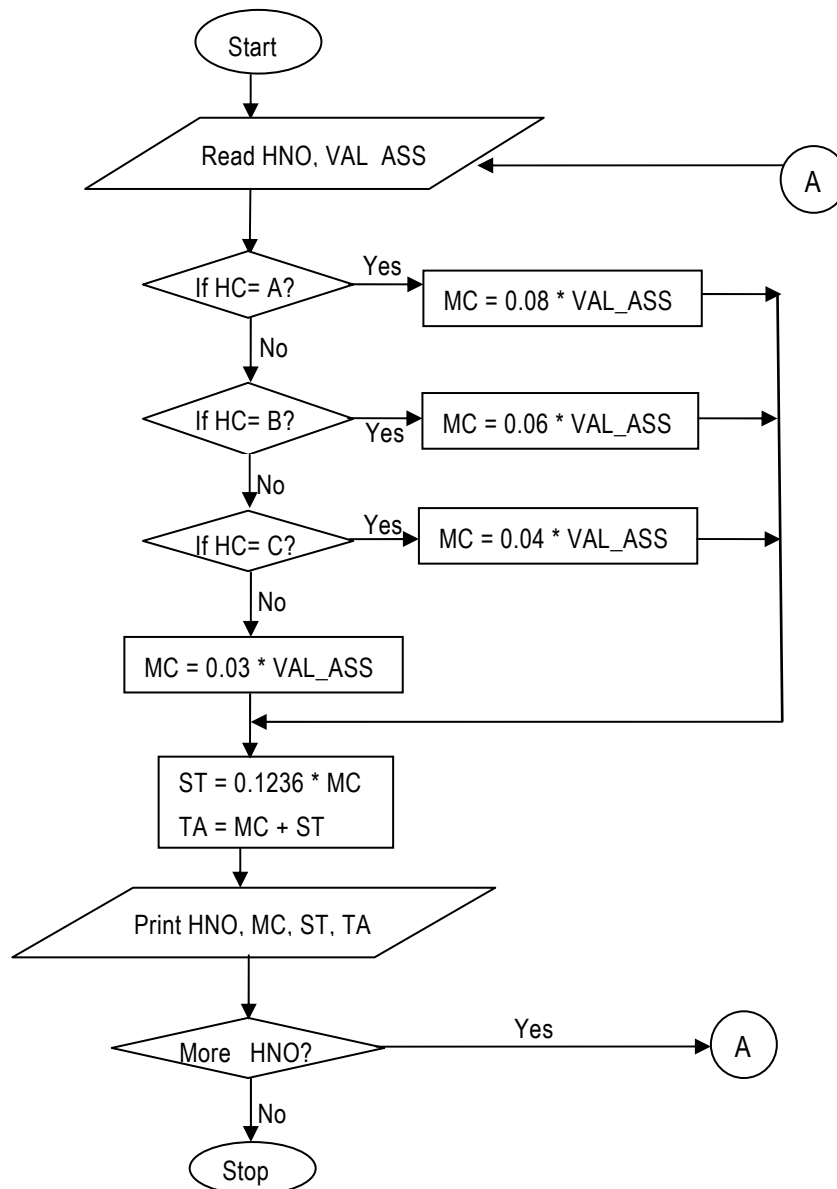
ST: Service Tax

The desired flowchart is given as follows:

HC: House Category

MC: Maintenance Charges

TA: Total Amount



Question 7

Write short notes on any four of the following:

- (a) Firewall
- (b) Data Mining
- (c) VoIP
- (d) Object Oriented Programming (OOP)
- (e) Front End Communication Processors: (2 x 4 = 8 Marks)

Answer 7

- (a) **Firewall:** Firewall is a system which controls the flow of traffic between the Internet and the firm's internal LANs and systems. They are usually packaged as turnkey hardware/software packages and are set up to enforce the specific security policies that are desired. A firewall is a proven, effective means of protecting the firm's internal resources from unwanted intrusion.
- (b) **Data Mining:** The process of recognizing patterns among data contained in a data warehouse or a data mart is called a process of Data Mining. Data mining tools are software that allows users to perform detailed mathematical and statistical calculations on detailed data warehouse data to detect trends, identify patterns and analyze data. Data Mining is responsible for finding the patterns by identifying the underlying rules and features in the data and picking out relevant information. Examples of Data mining Software's are SPSS, SAS, Think Analytics and G-Stat etc.
- (c) **VoIP:** Voice over Internet Protocol (VoIP) commonly refers to the communication protocols, technologies, methodologies, and transmission techniques involved in the delivery of voice communications and multimedia sessions over Internet Protocol (IP) networks, such as the Internet. Other terms commonly associated with VoIP are IP telephony, Internet telephony, Voice over BroadBand (VoBB), broadband telephony, and broadband phone. This allows delivery of voice communications over IP networks, for example, phone calls.
- (d) **OOP:** In Object-Oriented Programming (OOP), objects are combined and small amount of code is written instead of writing a program line by line. The advantages of OOP are its graphical interface; ease of use; faster program development; enhanced programmer productivity and more reliable programs that contain fewer errors. The disadvantages of OOP are its steep initial development costs; more extensive start-up time and power PCs and workstations requirement. Some common object-oriented languages are small talk, C++, Visual Basic and Java.

- (e) **Front End Communication Processors:** These are programmable devices which control the functions of communication system. They support the operations of a mainframe computer by performing functions, which it would otherwise be required to perform itself. These functions include code conversions, editing and verification of data, terminal recognition and control of transmission lines. The mainframe computer is then able to devote its time to data processing rather than data transmission.

SECTION – B

Question No. 8 is compulsory

Answer any **five** questions from the rest

Question 8

- (a) Mission statement of a company focuses on the question: 'Who we are' and 'What we do'. Explain briefly. (3 Marks)
- (b) State the factors of human resource that influence on employees competence. (3 Marks)
- (c) Assume that you are an entrepreneur who has an intense desire to get into the business. What types of information relating to macro environment would you need to determine external opportunities and threats? (3 Marks)
- (d) What does corporate strategy ensure? Explain. (3 Marks)
- (e) Briefly describe the impact of corporate culture on an organization. (3 Marks)

Answer

- (a) A company's mission statement is typically focused on its present business scope — "who we are and what we do"; mission statements broadly describe an organizations present capabilities, customer focus activities and business makeup. An organisation's mission states what customers it serves, what need it satisfies, and what type of product it offers. It is an expression of the growth ambition of the organisation. It helps organisation to set its own special identity, business emphasis and path for development. Mission amplifies what brings the firm to this business or why it is there, what existence it seeks and what purpose it seeks to achieve as a business firm.
- In other words, the mission serves as a justification for the firm's very presence and existence; it legitimizes the firm's presence.
- (b) Human resource management has been accepted as a strategic partner in the formulation of organization's strategies and in the implementation of such strategies through human resource planning, employment, training, appraisal and reward systems. The following points should be kept in mind as they can have a strong influence on employee competence:
- Recruitment and selection:* The workforce will be more competent if a firm can successfully identify, attract, and select highly competent applicants.
 - Training:* The workforce will be more competent if employees are well trained to perform their jobs properly.
 - Appraisal of performance:* The performance appraisal is to identify any performance deficiencies experienced by employees due to lack of competence. Such

deficiencies, once identified, can often be solved through counselling, coaching or training.

- iv. *Compensation:* A firm can usually increase the competency of its workforce by offering pay, benefits and rewards that are not only attractive than those of their competitors but also recognizes merit.
- (c) Macro environment mainly consists of economic, technological, political, legal and socio-cultural elements. For an entrepreneur it is important to identify those factors that are likely to affect the new business. Each of the elements can have a bearing on the opportunities and the threats.

Particularly, he should scan the relevant changes that have happened in recent past that can provide competitive edge. For example, a technological innovation in the production process can be opportunity. Incentives such as cheaper land, tax free periods can be other form of opportunities. Entrepreneur has to identify such opportunities that can be capitalized to enter markets or provide an edge over the competitors. Entrepreneur has to also take care as these opportunities can also act as threats when competitors are able to exploit them.

- (d) Corporate strategy in the first place ensures the growth of the firm and ensures the correct alignment of the firm with its environment. It serves as the design for filling the strategic planning gap. It also helps build the relevant competitive advantages. It works out the right fit between the firm and its external environment. Basically the purpose of corporate strategy is to harness the opportunities available in the environment, countering the threats embedded therein.

Corporate strategy brings methodical responses to the environment. Strategy is the opposite of adhoc responses to the changes in the environment in competition, consumer tastes, technology and other variables. It amounts to long-term, well thought-out and prepared responses to the various environment forces.

- (e) Corporate culture refers to values, beliefs, business principles, traditions, ways of operating, and internal work environment. An organization's culture is either an important contributor or an obstacle to successful strategy execution. The beliefs, vision, objectives, business approaches and practices underpinning a company's strategy may be compatible with its culture or not. When they are, the culture becomes a valuable ally in strategy implementation and execution. When the culture is in conflict with some aspect of the company's direction, performance targets or strategy, the culture becomes a stumbling block that impedes successful strategy implementation and execution.

A culture grounded in values, practices, and behavioural norms that match what is needed for good strategy execution helps energize people throughout the company to do their jobs in a strategy-supportive manner, adding significantly to the power and effectiveness of strategy execution.

Question 9

- (a) State with reasons which of the following statements are correct or Incorrect.
- (i) Stability strategy is not a 'do-nothing' strategy.
 - (ii) Six sigma efforts target following main areas:
 - (x) Improving customer satisfaction.
 - (y) Reducing wastage
 - (z) Reducing defects (2 x 2 = 4 Marks)
- (b) What are the major stages in the strategic management process? (3 Marks)

Answer

- (a) (i) **Correct:** Stability strategies are implemented by approaches wherein few functional changes are made in the products or markets. It is not a 'do nothing' strategy. It involves keeping track of new developments to ensure that the strategy continues to make sense. This strategy is typical for mature business organizations. Some small organizations will also frequently use stability as a strategic focus to maintain comfortable market or profit position.
- (ii) **Correct:** Primarily Six Sigma means maintenance of the desired quality in processes and end products. It is a highly disciplined process that helps in developing and delivering near-perfect products and services. Improvements in these areas usually represent dramatic cost savings to businesses, as well as opportunities to retain customers, capture new markets, and build a reputation for top performing products and services.
- (b) The major stages in the strategic management process are:
- (i) Develop vision and mission statements
 - (ii) Perform internal and external audit
 - (iii) Establish long-term objectives
 - (iv) Generate, evaluate, and select strategies
 - (v) Implement strategies considering management issues
 - (vi) Implement strategies marketing, finance, accounting, R&D, MIS issues
 - (vii) Measure and evaluate performance

Question 10

What is the rationale behind Business Process Reengineering (BPR)? What steps would you recommend to implement BPR in an organization? (7 Marks)

Answer

Business Process Reengineering (BPR) is an approach to unusual improvement in operating effectiveness through the redesigning of critical business processes and supporting business systems. It is revolutionary redesign of key business processes that involves examination of the basic process itself.

It looks at the minute details of the process, such as why the work is done, who does it, where is it done and when it is done. BPR refers to the analysis and redesign of workflows and processes both within the organization and between the organization and the external entities like suppliers, distributors, and service providers. The orientation of redesigning efforts is basically radical. In other words, it is a total deconstruction and rethinking of business process in its entirety.

BPR involves the following steps:

- i. **Determining objectives and framework:** Objectives are the desired end results of the redesign process which the management and organization attempts to achieve. This will provide the required focus, direction, and motivation for the redesign process.
- ii. **Identify customers and determine their needs:** The designers have to understand customers – their profile, their steps in acquiring, using and disposing a product. The purpose is to redesign business process that clearly provides added value to the customer.
- iii. **Study the existing process:** The existing processes will provide an important base for the redesigners. The purpose is to gain an understanding of the 'what', and 'why' of the targeted process. However, some companies go through the reengineering process with clean perspective without laying emphasis on the past processes.
- iv. **Formulate a redesign process plan:** Formulation of redesign plan is the real crux of the reengineering efforts. Customer focused redesign concepts are identified and formulated. Alternative processes are considered and the optimum is selected.
- v. **Implement the redesign:** It is easier to formulate new process than to implement them. It is the joint responsibility of the designers and management to operationalise the new processes.

Question 11

- (a) *Discuss the leadership role played by the managers in pushing for good strategy execution.* (4 Marks)
- (b) *What do you understand by functional structure?* (3 Marks)

Answer

- (a) A strategy manager has many different leadership roles to play: visionary, chief entrepreneur and strategist, chief administrator, culture builder, resource acquirer and allocator, capabilities builder, process integrator, crisis solver, spokesperson, negotiator,

motivator, arbitrator, policy maker, policy enforcer, and head cheerleader. Managers have five leadership roles to play in pushing for good strategy execution:

1. Staying on top of what is happening, closely monitoring progress, working through issues and obstacles.
 2. Promoting a culture that mobilizes and energizes organizational members to execute strategy and perform at a high level.
 3. Keeping the organization responsive to changing conditions, alert for new opportunities and remain ahead of rivals in developing competitively valuable competencies and capabilities.
 4. Ethical leadership and insisting that the organization conduct its affairs like a model corporate citizen.
 5. Pushing corrective actions to improve strategy execution and overall strategic performance.
- (b) Functional structure is widely used because of its simplicity and low cost. A functional structure groups tasks and activities by business function.

The functional structure consists of a chief executive officer or a managing director and limited corporate staff with functional line managers in dominant functions such as production, accounting, marketing, R&D, engineering, and human resources. Disadvantages of a functional structure are that it forces accountability to the top, minimizes career development opportunities, etc.

Question 12

- (a) *How would you argue that modern enterprises pursue multiple objectives and not a single objective?* (4 Marks)
- (b) *Explain the significance of SWOT analysis.* (3 Marks)

Answer

- (a) Objectives are organizations performance targets – the results and outcomes it wants to achieve. They function as yardstick for tracking an organizations performance and progress.

Today, organizations are capable of achieving multiple objectives and they focus on different objectives rather than a single objective. In general, we may identify a set of business objectives being pursued by the business. These may relate to profitability, productive efficiency, growth, technological dynamism, stability, self-reliance, survival, competitive strength, customer service, financial solvency, product quality, diversification, employee satisfaction and welfare, and so on. Organizations need to balance these objectives in an appropriate manner.

- (b) An important component of strategic thinking requires the generation of a series of strategic alternatives, or choices of future strategies to pursue, given the company's

internal strengths and weaknesses and its external opportunities and threats. The comparison of strengths, weaknesses, opportunities, and threats is normally referred to as SWOT analysis. SWOT analysis helps managers to craft business model that will allow a company to gain a competitive advantage. Key reasons for SWOT analyses are:

- ◆ It provides a logical framework for systematic identification of issues having bearing on the business situation, generation of alternative strategies and the choice of a strategy.
- ◆ It presents a comparative account of both external and internal environment in a structured form where it is possible to compare external opportunities and threats with internal strengths and weaknesses.
- ◆ It guides the strategist in strategy identification. It guides the strategist to think of overall position of the organization that helps to identify the major purpose of the strategy under focus.

Question 13

Distinguish between the following:

- (a) *Cost Leadership and Differentiation Strategies* (4 Marks)
- (b) *Social Marketing and Service Marketing* (3 Marks)

Answer

- (a) According to Porter, strategies allow organizations to gain competitive advantage from three different bases: cost leadership, differentiation, and focus. Cost leadership emphasizes producing standardized products at a very low per-unit cost for consumers who are price-sensitive. Differentiation is a strategy aimed at producing products and services considered unique industry wide and directed at consumers who are relatively price-insensitive.

A primary reason for pursuing forward, backward, and horizontal integration strategies is to gain cost leadership benefits. But cost leadership generally must be pursued in conjunction with differentiation. Different strategies offer different degrees of differentiation. A differentiation strategy should be pursued only after a careful study of buyers' needs and preferences to determine the feasibility of incorporating one or more differentiating features into a unique product. A successful differentiation strategy allows a firm to charge a higher price for its product and to gain customer loyalty.

- (b) Social Marketing and Service Marketing are marketing strategies primarily with different orientations. Social Marketing refers to the design, implementation, and control of programs seeking to increase the acceptability of a social ideas, cause, or practice among a target group. For instance, the publicity campaign for prohibition of smoking or encouraging girl child, etc.

On the other hand, service marketing is applying the concepts, tools, and techniques, of marketing to services. Service is any activity or benefit that one party can offer to another

that is essentially intangible and non-perishing. These may be from business to consumer and from business to business.

Question 14

Write short notes on the following:

- (a) *Experience Curve* (4 Marks)
(b) *Production System* (3 Marks)

OR

Characteristics of Strategic Business Unit (SBU) (3 Marks)

Answer

- (a) Experience curve is similar to learning curve which explains the efficiency gained by workers through repetitive productive work. Experience curve is based on the commonly observed phenomenon that unit costs decline as a firm accumulates experience in terms of a cumulative volume of production.

The implication is that larger firms in an industry would tend to have lower unit costs as compared to those of smaller organizations, thereby gaining a competitive cost advantage. Experience curve results from a variety of factors such as learning effects, economies of scale, product redesign and technological improvements in production.

- (b) **Production System** is concerned with the capacity, location, layout, product or service design, work systems, degree of automation, extent of vertical integration, and such factors. Strategies related to production system are significant as they deal with vital issues affecting the capability of the organisation to achieve its objectives.

Strategy implementation would have to take into account the production system factors as they involve decisions which are long-term in nature and influence not only the operations capability of an organisation but also its ability to implement strategies and achieve objectives.

or

Strategic Business Unit (SBU) is a unit of the company that has a separate mission and objectives and which can be planned independently from other businesses of the organisation. The three most important characteristics of SBU are:

- ◆ It is a single business or a collection of related businesses which offer scope for independent planning and which might feasibly stand alone from the rest of the organization.
- ◆ Has its own set of competitors.
- ◆ Has a manager who has responsibility for strategic planning and profit performance. He has control of profit-influencing factors.