Sub:	Information Management System					Sub Code:	17IS753	Branch:	ISE		
Date:	18.09.20	Duration:	90 min's	Max Marks:	50	Sem / Sec:		VII - A		OBE	
	Descriptive answers are given below								MARKS	CO	RBT
1	How you will organize a virtual company for your Business? Illustrate a virtual company with necessary elements. Describe the basic business strategies of virtual companies and involve in case study and explain.								[10]	CO 1	L2
2	State the fundamental roles of IS in business and explain neatly with the diagram? And Explain the Information System Activities.								[10]	CO 1	L1
3	What do you need to know about IMS? What are the components in system?								[10]	CO 1	L1
4	With the help of a neat figure, explain the enterprise application architecture illustrating the major cross functional enterprise applications and their interrelationships								[10]	CO 1	L2
5	What is system? List out the different types of System and explain in brief about Cybernetic system?								[10]	CO 1	L3
6	Write a paragraph for promoting a T shirt sales using IT and Explain with a neat figure, the business competitive strategies and competitive forces that appear in the market place.								[10]	CO 1	L2
	MCQ s answers are highlighted										
7 . a	The person who ensures that systems are developed on time, within budget, and with acceptable quality is a 1. systems designer 2. **project manager** 3. systems owner 4. external system user 5. systems builder								[1]	CO 1	L3
7 . b	Which one of the following is not a business driver for an information system? 1. business process redesign 2. knowledge asset management 3. **proliferation of networks and the Internet** 4. security and privacy 5. collaboration and partnership								[1]	CO 1	L3
7.c	Management information systems (MIS) 1. create and share documents that support day-today office activities								[1]	CO 1	L1

	2. process business transactions (e.g., time cards, payments, orders, etc.) 3. capture and reproduce the knowledge of an expert problem solver 4. ==use the transaction data to produce information needed by managers to run the business== 5. none of the above			
7.d	The term used to describe those people whose jobs involve sponsoring and funding the project to develop, operate, and maintain the information system is 1. information worker 2. internal system user 3. ==systems owner== 4. external system user 5. systems builder	[1]	CO 1	L1
7.e	What are the terms in Information System Resources 1. People, hardware 2. software, data, and networks 3. Input,Output,control 4. Input,feedback,control 5. People, feedback, control a. 1 &5 b. 2 & 3 c. 2 & 4 d. ==1&2== e. 1 & 4	[2]	CO 1	L2
7.f	Competitive Forces can be 1. The rivalry of competitors ,The threat of new entrants ,The threat posed by substitute 2. People, hardware 3. software, data, and networks 4. The bargaining power of customers, suppliers 5. Input,Output,control a. 1 &5 b. 2 & 3 c. 2 & 4 d. 1&2 e. ==1 & 4==	[2]	CO 1	L2
7.g	Which Statement is wrong ? 1. Knowledge creating companies exploit two kinds of knowledge. Ie	[1]	CO 1	L1

	Explicit knowledge, Tactic knowledge 2. Extranet is involved with Partners 3. MIS is a combination of IS and IT 4. <mark>Intranet is involved with Customers</mark>			

7.h	Which Statement is wrong ?
	Alliance Strategies were Established with
	    1. new business linkages and alliances with customers, suppliers, competitors, consultants, and other companies
	    2. mergers, acquisitions, joint ventures, forming of "virtual companies"
	    3. Extranet is involved with Partners
	    4. <mark>Alliance Strategies involved with employee of a business</mark>
		[1]	CO1	L1

7.i	Which one is the Strategy of Agile company?
	    1. Customers of an agile company perceive products or services as solutions to their individual problems.
	    2. An agile company cooperates with customers, suppliers and other companies, and even with competitors.
	    3. Knowledge creating companies exploit two kinds of knowledge. Ie Explicit knowledge, Tactic knowledge
	    4. An agile company organizes using flexible organizational structures so that it thrives on change and uncertainty.
	    a. 1 &2 & 3
	    b. 2 & 3 &4
	    c. <mark>2 & 4 &1</mark>
		[2]	CO1	L2

7.j	Which Statement is wrong ?
	On integrated cross-functional enterprise systems that
	    1. cross the boundaries of new business functions
	    2. reengineer and improve vital business processes
	    3. not improves the efficiency and effectiveness of business processes
	    4. develops strategic relationships with customers, suppliers
	    a. <mark>2 & 3</mark>
	    b. 2 & 4
	    c. 1 &3
	    d. 1 & 4
		[2]	CO1	L2

7.k	Which of the following is not a technology driver for an information system?
	    1. enterprise applications
	    2. object technologies
	    3. <mark>knowledge asset management</mark>
	    4. collaborative technologies
	    5. networks and the Internet
		[1]	CO1	L1

7.l	If a university sets up a web-based information system that faculty could access to record student grades and to advise students, that would be an example of a/an
	    1. CRM
	    2. <mark>intranet</mark>
	    3. ERP
	    4. extranet
		[1]	CO1	L1

	5. none of the above			
7. m	An information system that supports the planning and assessment needs of executive management is 1. DSS 2. TPS 3. ERP 4. MIS 5. <mark>none of the above</mark>	[1]	CO 1	L1
7.n	Which of the following is a deliverable of the system implementation phase in a formal system development process? 1. <mark>technical hardware and software solution for the business problem</mark> 2. business problem statement 3. statement of the system users' business requirements 4. technical blueprint and specifications for a solution that fulfills the business requirements 5. none of the above	[1]	CO 1	L1

7.o	Decision makers who are not concerned with tactical (short-term) operational problems and decision making are
	
	1. middle managers
	2. executive managers
	3. mobile managers
	4. Supervisors
	    a. 2 & 3
	    b. 2 & 4
	    c. <mark>1&2</mark>
	    d. 1 & 4
		[2]	CO 1	L2

Scheme & Solution
Internal Assessment Test 1

Information Management System(17IS753)

**Sept.2020**

1. **VIRTUAL COMPANY [10]**

Illustrate a virtual company with necessary elements. Describe the basic business strategies of virtual companies and involve in case study and explain.
- virtual company with necessary elements [3]
- basic business strategies of virtual companies[3]
- case study[2]
- virtual company with a neat figure[2]

 A virtual company (*virtual organization or virtual corporation*) is an organization that uses IT to link people,

organizations, assets and ideas. It has also developed alliances and extranet links that form **interenterprise information systems** with suppliers, customers, subcontractors, and competitors. Thus, virtual companies create flexible and adaptable virtual workgroups and alliances keyed to exploit fast-changing business opportunities.

**FIGURE 2.11** A virtual company uses the Internet, intranets, and extranets to form virtual workgroups and support alliances with business partners.
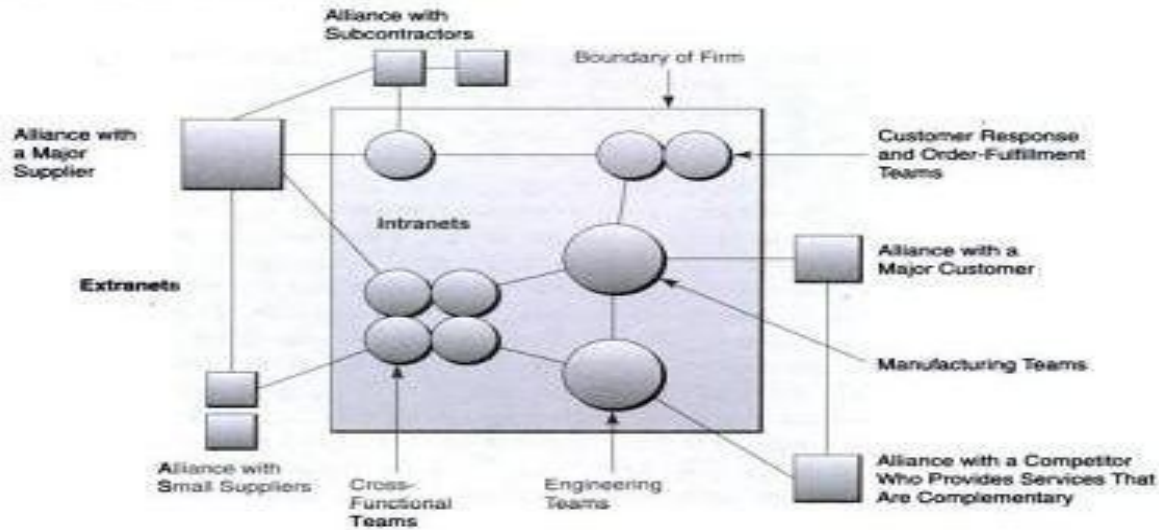
2. **FUNDAMENTAL ROLES OF IS IN BUSINESS AND   INFORMATION SYSTEM ACTIVITIES [10]**

There are three fundamental reasons for all business applications of information technology. They are found in the three vital roles that information systems can perform for a business enterprise.

- Support of its business processes and operations. [3 +1]
- Support of decision making by its employees and managers.

- Support of its strategies for competitive advantage.
  - Diagram [1]

   FIGURE 1: The 3 major roles of the business applications of IS

Information Systems
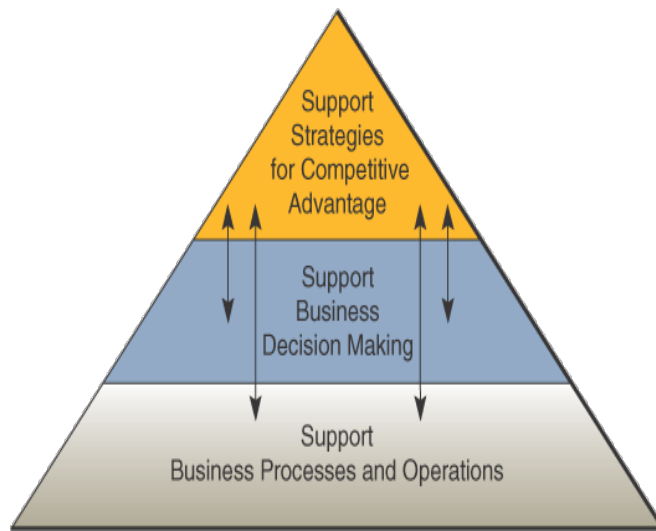
Explain the Information System Activities.

- Hardware [1]
- People [1]
- Software [1]
- Internet[1]
- Data [1]

Basic activities of IS are:

Input of Data Resources – data about business transactions and other events must be captured and prepared for processing by the **input** activity. End users take care of recording and editing of data entries into a computer system. Later it is transferred to machine-readable medium [magnetic disk] until needed for processing. Example: optical scanning of bar-coded tags on merchandise.

Processing of Data into Information – data are typically subjected to **processing** activities such as calculating, comparing, sorting, classifying, and summarizing. These activities organize, analyse, and manipulate data, thus converting them into information for end users. The quality of any data stored in an information system must also be maintained by a continual process of correcting and updating activities.

Output of Information Products – information in various forms is transmitted to end users and made available to them in the **output** activity. The goal of IS is the production of appropriate **information products** for end users like messages, reports, forms and graphic images, which may be provided by video displays, audio responses, paper products, and multimedia.

Storage of Data Resources – storage is the IS activity in which data and information are retained in an organised manner for later use. Stored data are commonly organized into a variety of data elements and databases.

Control of System Performance – an IS should produce feedback about its input, processing, output and storage activities. This feedback must be monitored and evaluated to determine if the system is meeting established performance standards.

3. **IMS AND COMPONENTS IN SYSTEM**

IMS is a combination of Information System (IS)   and Information Technologies [2]

An Information System (IS) can be any organized combination of people, hardware, software, communication
networks, and data resources that stores and retrieves, transforms and disseminates information in an organization.

Information Technologies
Information System (IS) and Information Technology (IT) are two distinct concepts. IT refers to the various hardware
components necessary for the system to operate. IS could use simple hardware components (such as files, folders)
to capture and store its data.
We will concentrate on computer-based IS and their use of the following Information Technologies:

  Computer hardware technologies, including microcomputers, midsize servers, and large mainframe systems, and their input, output and storage devices that support them.
  Computer software technologies, including operating system software, Web browsers, software productivity suites and software for business applications like customer relationship management and supply chain management.
  Telecommunication network technologies, including the telecommunications media, processors, and software needed to provide wire-based and wireless access and support for the Internet and private Internet-based networks such as intranets and extranets.
  Data resource management technologies, including DBMS software for the development, access, and maintenance of the databases of an organization.

An IS Framework for Business Professionals
Figure 1.1 illustrates a useful conceptual framework that organizes the knowledge and emphasizes that you should
concentrate on five areas of IS knowledge:

  Foundation Concepts. Fundamental behavioural, technical, business and managerial concepts about the components and roles of information systems.
  Information Technologies. Major concepts, developments and management issues in information technology – that is, hardware, software, networks, data management and many Internet-based technologies.
  Business Applications. The major uses of IS for the operations, management and competitive advantage of a business.
  Development Processes. How business professionals and information specialists plan, develop and implement IS to meet business opportunities.
  Management Challenges. The challenges of effectively and ethically managing information technology at the end user, enterprise and global levels of a business.

FIGURE 1.1 Major areas of IS knowledge needed by business professionals
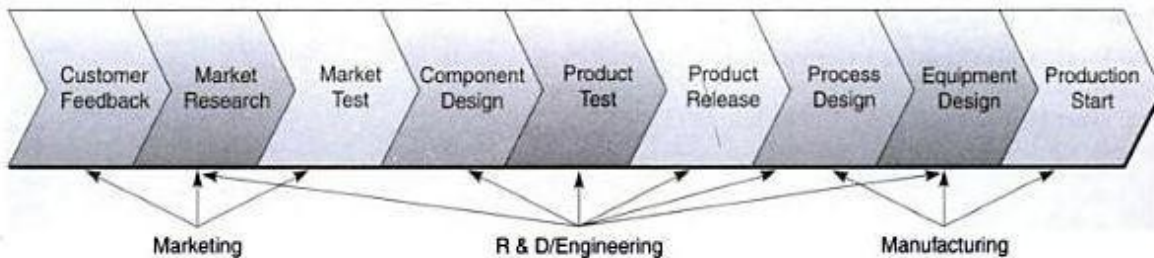
4. **CROSS FUNCTIONAL ENTERPRISE APPLICATIONS**

- enterprise application architecture

cross functional enterprise applications and their interrelationships

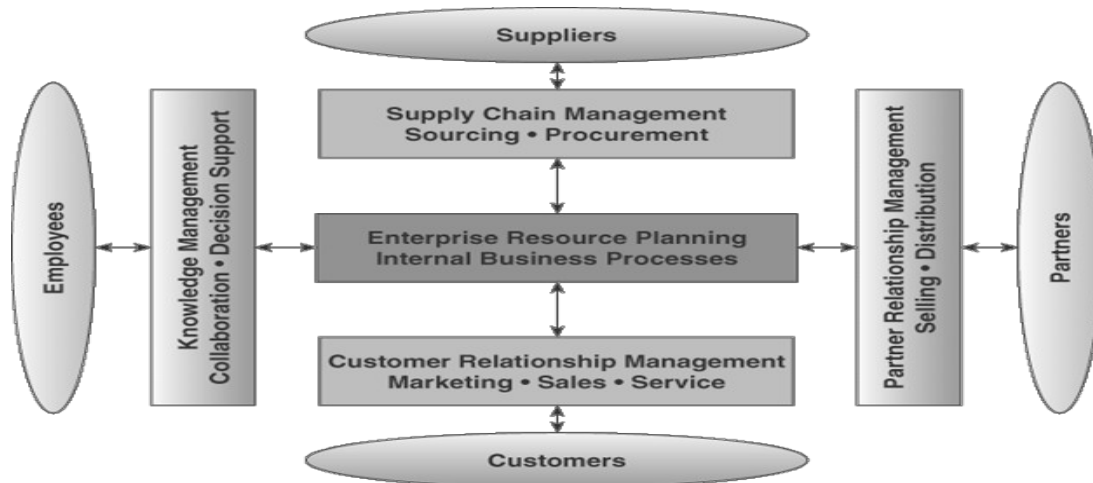- enterprise application architecture illustrating

Many companies today are using IT to develop integrated **cross-functional enterprise systems** that cross the

boundaries of traditional business functions in order to reengineer and improve vital business processes all across the enterprise. This improves the efficiency and effectiveness of business processes, and develops strategic relationships with customers, suppliers and business partners.

FIGURE 7.1 The new product development process in a manufacturing company. This is an example of a business process that must be supported by cross-functional information systems that cross the boundaries of several business functions.

Many companies first moved from functional mainframe-based **legacy systems** to integrated cross-functional **client/server** applications. This typically involved installing **enterprise resource planning, supply chain management, or customer relationship management** software from SAP America, Oracle and others. These software focuses on supporting integrated clusters of business processes involved in the operations of a business.

The fig below presents an Enterprise application Architecture ,which illustrates the interrelationships of the major cross-functional applications.
Provides a conceptual framework which helps to visualize the basic components, processes, and interfaces of major e-business applications.

- o Focuses on accomplishing fundamental business processes in concert with Customers, Suppliers, Partners, employee stakeholders.
  - o Thus, Enterprise Resource Planning

5. **CYBERNETIC SYSTEM**

- System

A system is a set of interrelated components, with a clearly defined boundary, working together to achieve a common set of objectives.

Dynamic system has three basic interacting components or functions:

- ⬚ **Input** involves capturing and assembling elements that enter the system to be processed
- ⬚ **Processing** involves transformation processes that convert input into output.
- ⬚ **Output** involves transferring elements that have been produced by a transformation process to their ultimate destination.

The system concept becomes even more useful by including two additional components: feedback and control. This is called as a *cybernetic* system, that is, self-monitoring and self-regulatory.

- ⬚ **Feedback** is data about the performance of a system.
- ⬚ **Control** involves monitoring and evaluating feedback to determine whether a system is moving toward the achievement of its goal.
- •

FIGURE 1.14

A business is an example of an organizational system where economic resources (input) are transformed by various business processes (processing) into goods and services (output). Information systems provide information (feedback) on the operations of the system to management for the direction and maintenance of the system (control) as it exchanges inputs and outputs with its environment.
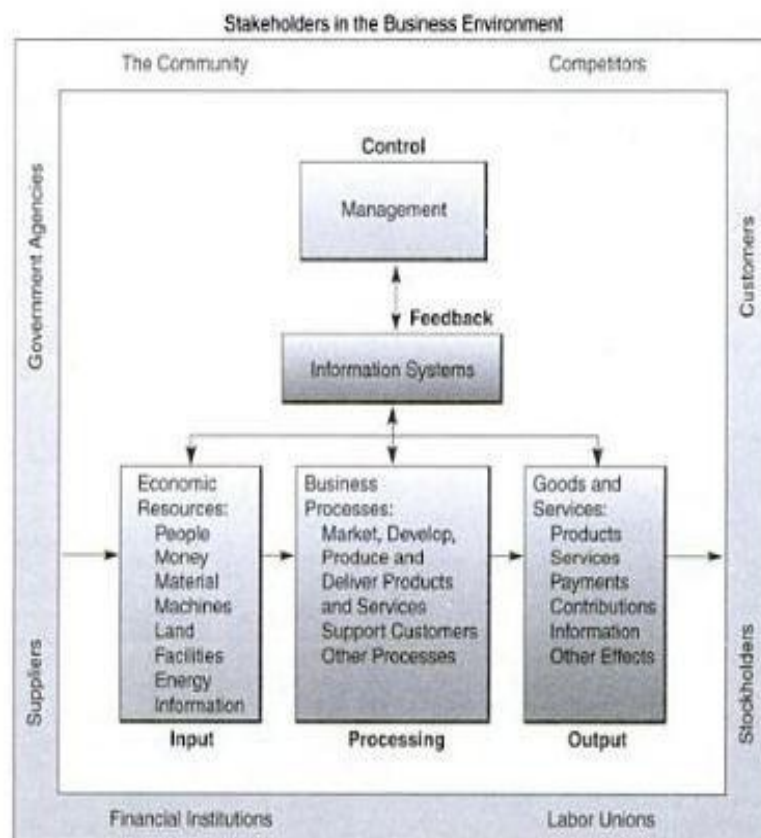
- • different types of System
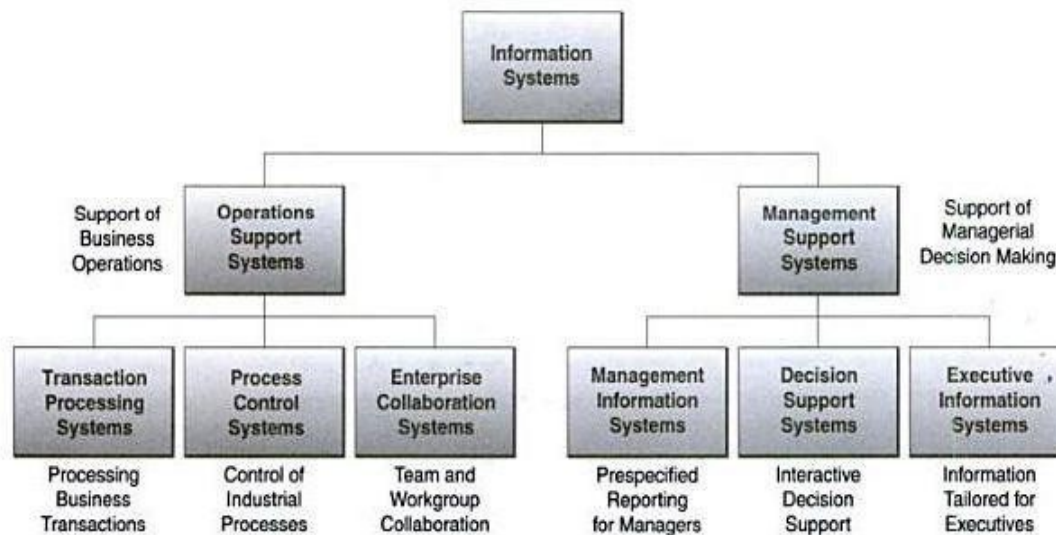
Operations Support Systems. They produce a variety of information products for internal and external use.

> The role of a business firm's operations support systems is to efficiently process business transactions, control industrial processes, support enterprise communications and collaboration, and update corporate databases.
>> o **transaction processing systems** – they process transactions in two ways namely: (i) *batch processing* – transactions data are accumulated over a period of time and processed periodically. (ii) *real time processing* – data are processed immediately after transaction occurs.
>> o **Process control systems** – monitor and control physical processes.
>> o **Enterprise collaboration systems** – enhance team and workgroup communications and productivity; include applications that are sometimes called *office automation systems.*

6. **BUSINESS COMPETITIVE STRATEGIES AND COMPETITIVE FORCES THAT APPEAR IN THE MARKET PLACE.**

- T shirt promotion discussion with IT
- competitive strategies
- competitive forces
- competitive forces with a neat figure

Figure 2.1 illustrates that businesses can counter the threats of competitive forces that they face by implementing

- **Cost Leadership Strategy.** Becoming a low-cost producer of products and services in the industry, or finding ways to help its suppliers or customers to reduce their costs or to increase the cost of their competitors.
- **Differentiation Strategy.** Developing ways to differentiate a firm's products and services from its competitors' or reduce the differentiation advantages of competitors.
- **Innovation Strategy.** Finding new ways of doing business. This may involve the development of unique products and services, or entry into unique markets or market niches.
- **Growth Strategies.** Significantly expanding a company's capacity to produce goods and services, expanding into global markets, diversifying into new products and services, or integrating into related products and services.
- **Alliance Strategies.** Establishing new business linkages and alliances with customers, suppliers, competitors, consultants, and other companies. These linkages may include mergers, acquisitions, joint ventures, forming of "virtual companies".