MANAGEMENT INFORMATION SYSTEM(2015-2016)

Section-A

Ques1(a).What do you mean by Organizational decision making?

Ans. Organizational Decision Making always involves making a choice to alter some existing condition. It is choosing one course of action in preference to others. When the decision is being made by management on behalf of the organization, it is expending some amount of organizational or individual resources to implement the organizational decision making.
It is not a single, self-contained event: it is a complex process that extends over some period of time.

Ques1(b).Differentiate Business plan and MIS plan.
Ans.

Business Plan	MIS Plan
Business goals and objectives.	Management information system, objectives, consistent to the business goals and objectives.
Business plan and strategy	Information strategy for the business plan implementation playing a supportive role.
Strategy planning and decisions.	Architecture of the Management Information system to support decisions.
Management Plan for execution and control.	System development schedule, matching the plan execution.
Operation plan for the execution.	Hardware and software plan for the procurement and the implementation.

Ques1(c).Define the term 'Digital Firm'.
Ans.A digital firm is one in which nearly all the organization's significant business relationships with cutomers, suppliers and employees are digitally enabled and mediated. In a digital firm core processes are accomplished through digital networks spanning the entire organization or linking multiple organizations.

Ques1(d).Describe 'subsystem concept' of information system management.
AnsSUBSYSTEMS OF AN MIS:
Two approaches of defining the subsystems of an MIS are :

- **According to the organizational functions which they support:**

Major Functional subsystem includes marketing,manufacturing,logistics,personnel, finance and accounting , information processing , top management.

- **According to managerial activities for which they are used:**

Activity subsystem includes transaction processing , operational control , management control , strategic planning.

Ques1(e).List the major differences between decomposition and aggregation with respect to system structure.
Ans. Decomposition
Decomposition also known as **factoring**, is breaking a complex problem or system into parts that are easier to conceive, understand, program, and maintain.
Aggregation

Aggregation is a special case of association. A directional association between objects. When an object 'has-a' another object, then you have got an aggregation between them. Direction between them specified which object contains the other object. Aggregation is also called a "Has-a" relationship.

Ques1(f).Describe the factors to be considered for long term information system planning.

Ans.1 — Don't underestimate the importance of your platform choices: The choices you make have a long tail.
2 — A good starting point: Focus on paper.
3 — Collaboration without structure is a waste of time.
4 — The need for control is not going away.
5 — In a tight economy, it all comes down to process efficiency and automation.
6 — In making choices, think knowledge workers, not document specialists.
7 — You need a plan8 — In everything you do, remember that change is difficult.

Ques1(g).Compare knowledge base and knowledge discovery.

Ans. .Knowledge discovery

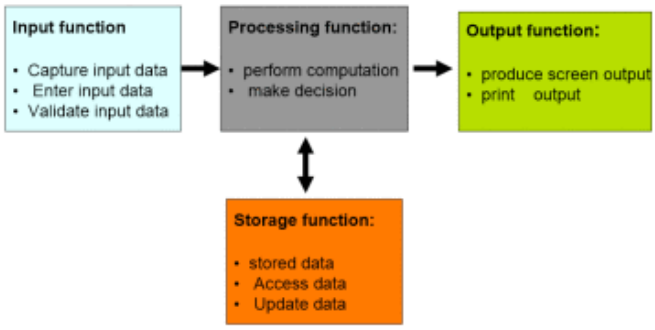
Knowledge discovery is the process of discovering useful knowledge from a collection of data. This widely used data mining technique is a process that includes data preparation and selection, data cleansing, incorporating prior knowledge on data sets and interpreting accurate solutions from the observed results.
Major KD application areas include marketing, fraud detection, telecommunication and manufacturing.

Knowledge base

A knowledge base is a machine-readable resource for the dissemination of information, generally online or with the capacity to be put online. An integral component of knowledge management systems, a knowledge base is used to optimize information collection, organization, and retrieval for an organization, or for the general public.

Ques1(h).Give the activity model of a transaction processing system.

Ans.



Ques1(i).Explain system development life cycle.

Ans. Using the systems approach to develop information system solution can be viewed as a multistep process called information system development cycle also known as SDLC.
The 5 stages of this process are:
1.Investigation
2.Analysis
3.Design
4.Implementation
5.Maintenance

Ques1(j).What is matrix organization?

Ans. An Organizational Structure that facilitates the horizontal flow of skills and information is knpwn as matrix organization.
It is used mainly in the management of large products,drawing employees from different functional disciplines for assignment to a team without removing them from their respective position.
In this organization employees have more than one boss.

Section-B

Ques2(a).How do a client server architecture gets implemented in an information system?Explain.

Ans.A **client-server architecture** is designed for end-users, called **clients**, to access resources such as files, songs, video collections, or some other service from a central computer called a **server**. A server's sole purpose is to do what its name implies - serve its clients! You may have been using this configuration and not even have known it. Have you ever played Xbox Live or used the PlayStation Network? Your Xbox One is the client, and when it logs into the network, it contacts the Xbox Live servers to retrieve gaming resources like updates, video, and game demos.

ITS WORKING

Imagine a customer sitting at a restaurant. He is waiting for the server to come by and take his order. The same rules apply in a client-server network; the client, which can be a laptop, desktop, a smartphone, or pretty much any computerized device, can make a request from the server.

The client uses the **network** as a way to connect with and speak to the server. Just as the customer speaks to his server, the client uses the network to send and receive communications about its order, or request. The server will take the request and make sure that the request is valid. If everything checks out okay, then the server will fetch the request and serve the client.

The server can make a request from the client as well. It may want to check up on the status of the client, or ask if it has received any security patches, or if it still needs resources from the server. If not, the server will close the connection in order to free up network traffic.

Can you imagine a server standing next to a customer who just stares at the menu without ordering anything? After 15 minutes, it would be a good idea for the server to leave and check on other customers. In both cases, the server moves on to other clients as needed.

Ques2(b).Write short notes on organizational behaviour.

Ans. Organisational behaviour is the study and application of knowledge about how people act within an organisation. It is a human tool for human benefit. It applies broadly to the behaviour of people in all types of organisation.

Organisational behaviour revolves around two fundamental components:

1. The nature of the man.

2. The nature of the organisation.

Characteristics of Organisational Behavior:

1. Behavioural Approach to Management.
2. Cause and Effect Relationship
3. Organisational Behaviour is a Branch of Social Sciences
4. Three Levels of Analysis
5. A Science as well as an Art
6. A Body of Theory, Research and Application
7. Beneficial to both Organisation and Individuals
8. Rational Thinking

Ques 3. Illustrate the concepts involved in decision making process in detail.Also discuss how it is helpful to the organization.

Ans. The decision-making process involves the following steps:

1.Define the problem:The decision-making process begins when a manager identifies the real problem. The accurate definition of the problem affects all the steps that follow; if the problem is inaccurately defined, every step in the decision-making process will be based on an incorrect starting point. One way that a manager can help determine the true problem in a situation is by identifying the problem separately from its symptoms.

2.Identify limiting factors

3.Develop potential alternatives: Encouragement of the group to freely offer all thoughts on the subject is important. Participants should be encouraged to present ideas no matter how ridiculous they seem, because such ideas may spark a creative thought on the part of someone else.

4.Analyze the alternatives:After a manager has analyzed all the alternatives, she must decide on the best one. The best alternative is the one that produces the most advantages and the fewest serious disadvantages. Sometimes, the selection process can be fairly straightforward, such as the alternative with the most pros and fewest cons. Other times, the optimal solution is a combination of several alternatives.

5.Select the best alternative: A manager must decide which alternative is the most feasible and effective, coupled with which carries the lowest costs to the organization.

6.Implement the decision:Managers are paid to make decisions, but they are also paid to get results from these decisions. Positive results must follow decisions. Everyone involved with the decision must know his or her role in ensuring a successful outcome.

7.Establish a control and evaluation system: An evaluation system should provide feedback on how well the decision is being implemented, what the results are, and what adjustments are necessary to get the results that were intended when the solution was chosen.

Advantages of Decision Making

1. Multiple Perspectives decisions can be a positive because they allow all individuals to give their opinion based on their unique knowledge. Have different perspectives on one issue gives you a better scope for determining the correct solution.

2. Increase Understanding and Knowledgedecision making has the ability to enhance collective understanding and ensure that everyone has a voice that is listened to.

3. Commitment Growth for Teams People are more willing to commit when they are a part of a larger group and will develop a sense of pride and accomplishment for being a vital part of a group. Decision making is ideal when the opinions of all are necessary to making the correct choice on any topic.

Ques 4. Explain about the structure and functionalities involved in the execution of a project .

Ans. The structure/phases to be followed in the execution of project are:

1.Project Strategy and Business Case:In this phase, we define the overall project business requirement , and propose the approach or methodology that we want to use to address it.

2.Preparation: Here, you work with key stakeholders and project team members who have already been identified to establish and start the project.

3.Design: In this phase you start the work involved with creating the project's deliverables, using the project strategy, business case, and Project Initiation Document as your starting point. Then work with relevant stakeholders to develop the designs of the main deliverables. In larger projects, you may use business analysts to help you with this.

4.Development and Testing: With all of the planning and designing complete, the project team can now start to develop and build the components of the project output – whether it's a piece of software, a bridge, or a business process.

5.Training and Business Readiness: This stage is all about preparing for the project launch or "go live." Do the following things during this phase:

- Train users.
- Put in place ongoing support.
- Transfer data to new systems.
- Identify what's required for the project to be effective from the launch date, and ensure that you adequately address this.

6.Support and Benefits Realization: Make sure you provide transitional support to the business after the project is launched, and consider what's required before your team members are reassigned. Project teams are often assigned to other work too soon after the project has gone "live", meaning that project benefits are often not fully realized.

7.ProjectClose: Closing a project is not the most exciting part of the project lifecycle, but, if we don't do it properly, we may obstruct the ongoing delivery of benefits to the organization.

Ques 5. Describe the process of building a business model for information system management.

Ans. Business model:

A business model as an abstract representation of an organization. This may be conceptual, textual, and/or graphical, of all core interrelated architectural, co-operational, and financial arrangements designed and developed by an organization presently and in the future, as well all core products and/or services the organization offers, or will offer, based on these arrangements that are needed to achieve its strategic goals and objectives.

Process of building a business model for information system management is:

1. Size the value of your solution in the target segment.

Customers often complain that existing approaches are not intuitive or integrated, but old solutions may be familiar and locked in. Estimate your costs, including a 50 percent gross margin, as a lower bound on a price. Products too expensive for the market won't succeed, and prices too low will leave you exposed. Match with competitor prices and market demographics.

2. Confirm that your product or service solves the problem.

Once you have a prototype or alpha version, expose it to real customers to see if you get the same excitement and delight that you feel. Look for feedback on how to make it a better fit. If it doesn't relieve the pain, or doesn't work, no business model will save you.

3. Test your channel and support strategy.

Now is the time to pitch the entire business model to a group of customers or a specially selected focus group. This is not just a product pitch, but must include all elements of your pricing, marketing, distribution and maintenance. Here again is your chance to make pivots for almost no cost.

4. Talk to industry experts and investors.

A small advisory board of outside people with experience in your domain can give you the unbiased feedback you need, as well as connections for setting up distribution and sales channels. It's also valuable to talk to potential investors for their views, even if you are bootstrapping the effort.

5. Plan and execute a pilot or local rollout.

Good traction on a limited rollout is great validation of a business model. It allows you to test costs, quality and pricing in a few stores or a single city, with minimum jeopardy and maximum speed for recovery and corrections. Save your viral campaign and major inventory buildup for later.

6. Focus on collecting customer references.

Give extra attention to those first few customers, and ask for publishable testimonials and word-of-mouth support in return. If you can't get their support, even with your personal efforts, take it as a red flag that the business will probably not scale at the rate you projected.

7. Target national trade shows and industry association groups.

You need positive visibility, credibility and feedback from these organizations as a final validation of your business model, as well as your product model, in the context of major competitors. This may also be a great source for leads as a key part of that final rollout and scale-up effort.

Ques 7. Discuss the role of information system in globalization of education.

Ans. Globalization affects information systems in a lot of aspects like the use of internet by general public in the world, global e-mail providers like hotmail and yahoo connects the whole world together.

Information systems has big role in globalization by influencing different cultures through internet, where big economies and developed countries benefit the most out of this.

Globalization has revolutionized internal management. It has also made easier the interaction between countries, regions and continents, thus contributing to profitability.

It is the private sector's philosophy that propelled efforts to utilize every means, including information technology, to make companies survive, even the biggest and the most powerful company in the world.

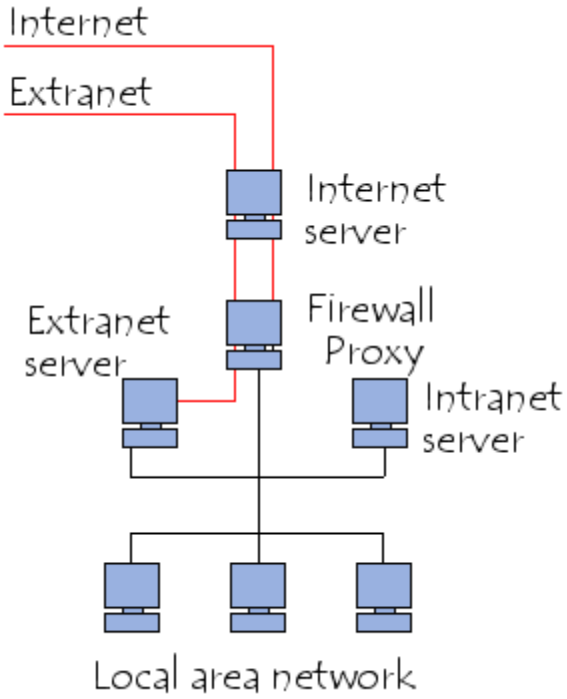
IT has played a significant role in the economic and social processes of globalisation. Technology does not determine social and organizational change.The World Wide Web is only a few years old and has witnessed explosive growth in terms of the number of people connected and the amount of information available on it. It is now possible to make available an enormous amount of information to anyone with access to the Net and, increasingly, to carry out a variety of transactions from filling in and sending forms to ordering and paying for goods and services on-line. We need to harness the potential of the technologies available.

The recent advantages in information technology have opened up opportunities to provide basic government services to a much broader segment of the population with optimal quality at the desired time, place and cost.So,information system plays a major role in globalization of education.

Ques 8. Describe 'Intranet' and 'Extranet'.Write their specific applications with suitable examples.

Ans. Intranet

An **intranet** is a set of Internet services (for example a web server) inside a local network, i.e. only accessible from workstations of a local network, or rather a set of well-defined networks that are invisible (or inaccessible) from the outside. It involves the use of Internet client-server standards (using TCP/IP) protocols such as, for example, the use of Web browsers (HTTP protocol-based client) and Web servers (HTTP protocol), to create an information system inside of an organization or enterprise.



An intranet is generally based on a three-tier architecture, comprising:

- clients (generally Web browsers);
- one or several application servers (middleware): a web server which makes it possible to interpret CGI, PHP, ASP or other scripts and translate them into SQL queries to query a database;
- a database server.

In this manner, the client machines handle the graphical interface while the different servers handle the data. The network makes it possible to exchange queries and the responses between clients and servers.

Advantages of an Intranet

An Intranet makes it possible to create an information system at a low cost (specifically, the cost of an Intranet may very well be limited to the cost of the material, its maintenance and updating, with client workstations operating with free navigators, a server running under Linux with the Apache web serve, and the database server MySQL).

On the other hand, considering the "universal" nature of the means in play, any type of machine can be connected to the local network, i.e. the Intranet.

Extranet

An **extranet** is an extension of the information system of the company to its partners located outside of the network.

Access to the extranet must be secured to the extent that the same provides access to the information system for persons located outside of the enterprise.

This might involve simple authentication (authentication via user name and password) or strong authentication (authentication via a certificate). It is recommended to use HTTPS for all web pages that are consulted from the outside to secure the transport of HTTP queries and answers and to prevent, in particular, the open transfer of the password on the network.

An extranet is therefore neither an Intranet nor an Internet site. It is rather a supplementary system providing, for example, the clients of an enterprise, its partners or its subsidiaries with privileged access to certain computer resources of the enterprise via a Web interface.

Section-C

Ques 9. Explain how cloud based services get benefited due to information systems.

Cloud computing offers your business many benefits. It allows you to set up what is essentially a virtual office to give you the flexibility of connecting to your business anywhere, any time. With the growing number of web-enabled devices used in today's business environment (e.g. swmartphones, tablets), access to your data is even easier. There are many benefits to moving your business to the cloud:

1. **Reduced IT costs**

Moving to cloud computing may reduce the cost of managing and maintaining your IT systems. Rather than purchasing expensive systems and equipment for your business, you can reduce your costs by using the resources of your cloud computing service provider. You may be able to reduce your operating costs because:

- the cost of system upgrades, new hardware and software may be included in your contract
- you no longer need to pay wages for expert staff
- your energy consumption costs may be reduced
- there are fewer time delays.

2. **Scalability.**

Business can scale up or scale down your operation and storage needs quickly to suit your situation, allowing flexibility as your needs change. Rather than purchasing and installing expensive upgrades yourself, your cloud computer service provider can handle this for you. Using the cloud frees up your time so you can get on with running your business.

3. **Business continuity**

Protecting your data and systems is an important part of business continuity planning. Whether you experience a natural disaster, power failure or other crisis, having your data stored in the cloud ensures it is backed up and protected in a secure and safe location. Being able to access your data again quickly allows you to conduct business as usual, minimising any downtime and loss of productivity.

4. **Collaboration efficiency**

Collaboration in a cloud environment gives your business the ability to communicate and share more easily outside of the traditional methods. If you are working on a project across different locations, you could use cloud computing to give employees, contractors and third parties access to the same files. You could also choose a cloud computing model that makes it easy for you to share your records with your advisers (e.g. a quick and secure way to share accounting records with your accountant or financial adviser).

5. **Access to automatic updates**

Access to automatic updates for your IT requirements may be included in your service fee. Depending on your cloud computing service provider, your system will regularly be updated with the latest technology. This could include up-to-date versions of software, as well as upgrades to servers and computer processing power.

6. **Flexibility of work practices**

Cloud computing allows employees to be more flexible in their work practices. For example, you have the ability to access data from home, on holiday, or via the commute to and from work (providing you have an internet connection). If you need access to your data while you are off-site, you can connect to your virtual office, quickly and easily.

Ques 10.What are the points to be considered for successful implementation of knowledge management? Explain each point brief.

Ans. Points to be considered for successful implementation of knowledge management are:

1.Define goals and objectives.

A successful software launch in an organization can almost always be linked back to a clear understanding of the goals and objectives – from every layer of the company. So get together with department heads and other company leaders to clearly define a list of goals for your knowledge management solution.

2. Be transparent about your motives.

With defining goals and objectives comes transparency. Don't be afraid to address problems your organization is facing head on. If customer success employees are struggling to find the information they need to assist a customer in a timely fashion, marketing has noticed a lack of consistency in brand messaging, sales is taking too long to onboard new reps, etc., employees need to hear it, and be reassured these problems will be resolved with the implementation of a knowledge management solution.

3. Budget adequate resources.

Preparing your knowledge management solution for launch is not the place to save on the budget. Many knowledge management solutions offer options that are an additional investment, such as a promo bar or white labeling. These features will help your employees to feel comfortable and familiar with the new software. Consider the positive effect these upgrades will have on employee engagement, and budget accordingly.

4. Recruit internal champions.

Identify one or multiple members from each department of your organization who are driven, upbeat, and eager to improve organizational functionality. These internal champions should come from a variety of layers in your company. This group will assist leadership in drumming up excitement for the launch and will be the participants of the soft launch (more details on this to come).

5. Define your knowledge structure.

Quality knowledge management solutions will require you to structure your company knowledge into a hierarchy of information (categories, tags, etc.). Think very carefully about what knowledge structure makes sense for your organization, seek advice from team leaders, and work with your knowledge management solution provider to learn how other clients organize their structure, and what works for them.

6. Hold a soft launch.

Once all the kinks are sorted out, hold a soft launch with the champions you previously identified. Kick off the soft launch with a training on knowledge management solution best practices, and reiterate the goals and objectives of the KMS. Allow champions to use the KMS for roughly 2 weeks as a test period.

7. Listen and react to feedback.

Once the test period is over, hold a follow up meeting with your champions. Welcome all feedback, positive and negative, and don't just listen; react. These are the people who will use the knowledge management solution on a daily basis, so you want to optimize the solution for their use. When it's all said and done, be sure to thank the participants of the soft launch with a lunch or gift to show your appreciation for the important role they play in successfully implementing the KMS.

8. Link knowledge to people.

When an employee has a question in the workplace, often one of the most time consuming steps in identifying an answer is knowing who to ask. Consider setting up a knowledge directory as a post within your knowledge community that identifies experts on various subjects. This will save your employees quite a bit of time when it comes to searching for the information they need to do their job.

9. Involve leadership.

From the very beginning, your organization's C-suite should be at the forefront of the KMS launch effort. Members of the C-suite should be the ones to articulate goals and objectives at the initial meeting, should be heavily involved in the soft launch, and should be the first to post once the KMS has officially launched. Participation from the C-suite will demonstrate they are serious about this change, and will encourages others to take it seriously as well.

10. Hold a contest to encourage engagement.

What better way to get your employees excited about the new knowledge management solution than offering a little incentive? Kick off the launch with a fun contest that everyone will enjoy; offer a lunch with leadership, a paid day off, a bonus, or whatever prize is appropriate for your organization to the employee(s) who most actively contributes to the KMS.

11. Hold regular employee trainings.

Failing to hold regular employee trainings on best practices for the knowledge management solution is the kiss of death to your KMS. Hold regular quarterly trainings, as well as trainings when there is an important product update or change, to keep employees engaged and sharing company knowledge efficiently.

Ques 11. Give an example that how information system can support the five functions of management the ten roles of management and the three levels of management activities.

Ans. Information system can support the five functions of management the ten roles of management and the three levels of management activities in following way:

1.Planning

The planning function of management controls all the planning that allows the organization to run smoothly. Planning involves defining a goal and determining the most effective course of action needed to reach that goal. Typically, planning involves flexibility, as the planner must coordinate with all levels of management and leadership in the organization. Planning also involves knowledge of the company's resources and the future objectives of the business.

2.Organizing

The organizing function of leadership controls the overall structure of the company. The organizational structure is the foundation of a company; without this structure, the day-to-day operation of the business becomes difficult

and unsuccessful. Organizing involves designating tasks and responsibilities to employees with the specific skill sets needed to complete the tasks. Organizing also involves developing the organizational structure and chain of command within the company.

3.Staffing

The staffing function of management controls all recruitment and personnel needs of the organization. The main purpose of staffing is to hire the right people for the right jobs to achieve the objectives of the organization. Staffing involves more than just recruitment; staffing also encompasses training and development, performance appraisals, promotions and transfers. Without the staffing function, the business would fail because the business would not be properly staffed to meet its goals.

4.Coordinating

The coordinating function of leadership controls all the organizing, planning and staffing activities of the company and ensures all activities function together for the good of the organization. Coordinating typically takes place in meetings and other planning sessions with the department heads of the company to ensure all departments are on the same page in terms of objectives and goals. Coordinating involves communication, supervision and direction by management.

5.Controlling

The controlling function of management is useful for ensuring all other functions of the organization are in place and are operating successfully. Controlling involves establishing performance standards and monitoring the output of employees to ensure each employee's performance meets those standards. The controlling process often leads to the identification of situations and problems that need to be addressed by creating new performance standards. The level of performance affects the success of all aspects of the organization.