

Roll No.....

Time allowed : 3 hours

Maximum marks : 100

Total number of questions : 8

Total number of printed pages : 8

## PART—A

*(Answer Question No.1 which is compulsory and any two of the rest from this part.)*

1. (a) Choose the most appropriate answer from the given options in respect of the following :
  - (i) Data dictionary is included in —
    - (a) System design documentation
    - (b) Software documentation
    - (c) Operations documentation
    - (d) User reference documentation.
  - (ii) A network service application that allows messages and announcements to be posted and read and accessed by dialing a telephone number is called —
    - (a) Internet
    - (b) Electronic data interchange
    - (c) Electronic bulletin board
    - (d) World wide web.
  - (iii) A protocol that allows users to transfer files from one computer to another is called —
    - (a) TCP/IP
    - (b) FTP
    - (c) HTTP
    - (d) LAN.
  - (iv) Network topology refers to —
    - (a) The amount of information that can be transmitted through any telecommunication channel
    - (b) Layout of the cables in connecting devices in a net
    - (c) A special software that manages the file server in a LAN
    - (d) A communication processor that connects dissimilar networks.

(v) In electronic commerce, the payment application encrypts and transmits the credit card information to the acquiring bank through secure communications with —

- (a) Secured sockets layer
- (b) Open trading protocol
- (c) Public key encryption
- (d) Open profiling standard.

*(1 mark each)*

(b) Re-write the following sentences after filling-up the blank space with appropriate word(s)/figure(s) so as to convey the correct meaning :

- (i) Software techniques used to organise the database structure and provide access to information in it is known as \_\_\_\_\_.
- (ii) \_\_\_\_\_ is a highly sophisticated ERP system that incorporates various technologies, directory services and other embedded system architecture for flexibility on information sharing.
- (iii) The ability to analyse in real time multi-dimensional information stored in data warehouses is called \_\_\_\_\_.
- (iv) An emerging application area in artificial intelligence that basically uses interactive artificial reality created by the computer is called \_\_\_\_\_.
- (v) \_\_\_\_\_ is a cableless telecommunication channel that uses frequencies rented from public radio networks to transmit data and information.

*(1 mark each)*

(c) Whenever an old system has to be converted into a new system, what are the major forms of conversion available ?

*(5 marks)*

(d) Complete Business Solutions Limited (CBSL) is presently operating from third floor of Express Towers, Cyber City. The CBSL is in the business of providing complete intranet software solutions to their clients. Most of its executives provide off-site solutions to the clients problems; only in rare cases they go to the site and provide the solutions. For last two years, their operations have become almost double and the company has recruited about 40 executives. Since the present office-place on the third floor of Express Towers can accommodate additional 20 executives, the company has a serious challenge of providing necessary office-place to the remaining executives. Lot of debate is going on in the company, however, so far, no satisfactory solution is obtained. But, one thing decided by the company is that it is not going to acquire additional floor space either in the same building or elsewhere.

Assume that you have been contacted, and as a consultant, you are required to suggest workable and economical solution to the company. Suggest your solution in this regard and also describe how the same can be implemented.

*(5 marks)*

2. Integrated Solutions Ltd., Bangalore (ISLB) is an international consulting firm providing total systems solutions to businesses competing in the global environment by using cutting edge technologies. The mission of ISLB is to provide the best services to its customers in terms of technology, soundness and customer satisfaction.

### **The Organisation of ISLB**

The organisational structure of ISLB includes President (Venkat), a General Manager (Krishnan) and three departments—administration, software development and consultancy, headed by Lakshmi, Vanitha and Narayan respectively.

Krishnan is responsible for the execution of strategic plans, and is also supposed to ensure coordination among all departments. Each departmental head is reporting directly to him. Lakshmi, as a head of administration, is responsible for all non-technical tasks needed to run business smoothly. Vanitha is recently promoted to the position of departmental head of the software development department. This department works mainly with the internal consultants to develop software applications. They rarely interact directly with the clients. However, they are often sent to de-bug problems after implementation of the software.

Narayan heads the consultancy department. Whenever a potential client is identified, Narayan first reviews the requirements of the potential project from the client and then, assigns a consultant of the consultancy department as a project leader to the project. The project leader does a detailed study with the help of others so as to assist in the decision as to whether the project is feasible for ISLB to take up.

Once the company decides to go for a project, then a project team is constituted consisting of consultants and analysts. Software department is involved only when needed at the later stage of the project. The administration department provides all administrative support, customer services, and billing.

### **Information Systems at ISLB**

Although ISLB provides state-of-the art technology consultancy to its clients, its internal operations are still based on 1990's technology. Each department has its own local area network (LAN) running on its own server. All servers are linked to a web server that provides access to the internet and e-mail support. One employee from the software development department is attached to each department to provide necessary software support. When there is work pressure in a department, internal upgrades and maintenance is tend to be postponed or ignored.

The administration department uses an off-the-shelf accounting and pay-roll software. It keeps customer database which can be accessed by the consultancy department as well. To solve their problems, employees have developed their own spread-sheet or word-based files. Due to lack of integration of departments, there is a serious problem of communication among the departments. As a consequence, the administrative staff has to call other departments to seek necessary information. This has caused delays in providing efficient services both internally and externally.

The software development department has two servers — one unix based and other microsoft NT based — supporting programme development. Programmers communicate either through Vanitha or directly with the consulting group for the details of the requirements. Vanitha does not always know the details of the applications being developed within the company. Hence, often similar software modules are being developed simultaneously by different programmers for different projects.

Most activities are organised according to projects, and there is very little information-sharing across projects.

### **The Challenges**

Due to intense competition, ISLB has started facing noticeable shrinkage in the clients' base and clients have become highly cost sensitive. Therefore, all kinds of internal inefficiencies have to be weeded out from the company. Venkat has started realising need to improve internal inefficiencies to make ISLB more competitive. Serious consideration should be given as to how to improve the IT infrastructure at ISLB to support its business and organisational strategy. Venkat is also considering to offer online consultancy to reach a larger market at a lower cost. Currently, ISLB has a website that simply provides information about the company.

You are an external consultant hired by Venkat to analyse the situation at ISLB. Prepare a report for ISLB to be reviewed by all departmental heads under the following headings :

- (i) Problems
- (ii) Solutions
- (iii) Conclusions.

(15 marks)

3. (a) Differentiate between *any three* of the following :

- (i) 'Offline purchasing process' and 'online purchasing process' in e-commerce.
- (ii) 'Switched multi-mega bit data service' (SMDS) and 'asynchronous transmission mode' (ATM).
- (iii) 'Simplex transmission' and 'full duplex transmission'.
- (iv) 'Digital wallet' and 'electronic wallet'.

(3 marks each)

(b) Coimbatore Municipal Corporation has 30 departments and hundreds of employees. Three years ago, the city launched a Rs.20 crore information systems development project that would take the city to the era of e-governance. The new system will become the city's 'nerve centre'. It will automate and integrate almost all functions of the city administration, and will contain more than 2,000 modules with various

levels of sophistication. For example, the sub-systems range from a simple purchase requisition to the fire department's despatch system, to an EDI system that connects the city to its 5,000 suppliers, to the decision support systems for the top city administrators. The system will be ready for delivery in January, 2008.

Identify three advantages each that will accrue to the citizens and the officials of Coimbatore Municipal Corporation by this shift to e-governance.

(6 marks)

4. (a) Is it correct to say that 'decision tables' are similar to flow-charts and can be used either independently or as a complement to flow-charts ?

(3 marks)

- (b) Name any three ERP modules and write the main objectives of each ERP module.

(3 marks)

- (c) Write short notes on *any three* of the following :

- (i) Web-browsers
- (ii) M-commerce
- (iii) Electronic fund transfer (EFT)
- (iv) Uniform resource locator (URL).

(3 marks each)

### PART—B

*(Answer Question No.5 which is compulsory and any two of the rest from this part.)*

5. (a) Choose the most appropriate answer from the given options in respect of the following :

- (i) Non-verbal communication is being represented by —

- (a) Eye contact and facial expressions
- (b) Body movements
- (c) Dress and physical appearance
- (d) All of the above.

- (ii) The statement which is accurate about business writing is —

- (a) Quantity enhances quality
- (b) Support all assertions with references
- (c) Focus completely on the sender, since only the sender knows what is intended
- (d) Conciseness is what counts in business.

- (iii) Expert writers tend to spend most of their time on which phase of the three-step writing process —
- (a) Revising, proof reading and evaluating
  - (b) Researching, organising and composing
  - (c) Analysing, anticipating and adapting
  - (d) Visualising, researching and adapting.
- (iv) The best recommendation for delivering an effective oral presentation is —
- (a) Memorise the entire oral presentation so that you don't have to use notes
  - (b) Read the entire oral presentation to the audience so that nothing important will be overlooked
  - (c) Use note cards or outlines containing key sentences and major ideas
  - (d) Allow the audience to ask questions and answer only those questions.
- (v) Line chart is used for —
- (a) Organising large amounts of data into columns and rows
  - (b) Helping readers visualise percentages and parts of a whole
  - (c) Illustrating management structure and lines of authority
  - (d) Showing changes in quantitative data over a period of time.

*(1 mark each)*

- (b) Re-write the following sentences after filling-up the blank space with appropriate word(s)/figure(s) so as to convey the correct meaning :
- (i) The strategy of making radical changes by collaborative methods in an organisation is called \_\_\_\_\_.
  - (ii) Executives who are risk averse have \_\_\_\_\_mindset.
  - (iii) A meeting conducted to generate as many ideas, views or solution to a problem is a \_\_\_\_\_.
  - (iv) \_\_\_\_\_ is the potential for learning practical skills based on self-awareness, motivation, self-regulation, empathy and adeptness in relationship.
  - (v) The communicator who is oriented towards establishing order, organising, scheduling and structuring through the communication process uses \_\_\_\_\_ style of communication.

*(1 mark each)*

- (c) "ACHIEVE Model provides a strong foundation for leading a team effectively." Critically comment on the statement.

*(5 marks)*

- (d) Re-write the letter reproduced below, revising it for weaknesses in its contents :

**BREEZE BANK**  
**888 Beach Road Branch**  
**Chennai 600001**  
**Phone: (044) 224-7525**  
**Fax: (044) 224-8742**

Ms. Little  
 28 Fashion Street  
 Chennai 600034  
 Dear Customer,

Re: Insulting Behaviour

I cannot believe what you told me on the phone ! My people are extremely well trained in customer service. We pride ourselves on being the best. We have won three separate awards for sensitivity to clients. This is why what you told me is completely unacceptable. Absolutely unbelievable !

After you called, I checked with my teller, Vincent, to see why he refused to process the cheque you brought in to cash. My investigation revealed that your cheque had material alteration that was not countersigned by the payer.

It seems that Vincent, who one of our trainees, didn't take the time to tell you about this inconsistency. He should have. His behaviour is inexcusable. In addition, you claim that when you returned later to question him about the reason, he implied that you were so old that you must have forgotten that you'd been told about the reason before. Again such behaviour is unacceptable.

I spoke to Vincent and he's very sorry, and he says he was under a lot of pressure. I assure you that this will never happen again.

Thank you for your complaint.

Yours sincerely,

Kumar  
 Bank Manager

(5 marks)

6. (a) The Managing Director of Happy Insurance Company began to look more closely at the company's administration function, which accounted for a large proportion of the overall salary costs, as part of the restructuring exercise that he initiated few months ago. The Managing Director concluded that this over large department was over-structured and consequently too bureaucratic. Clearly, savings in time and costs could be made by restructuring.

The imminent retirement of Director (Administration) was therefore timely and the Managing Director began to write a new job description for the pending vacancy. Although he gave some thought to possible internal candidates, he rejected them all and decided the best thing was "a new beginning" with an experienced person brought in from outside the company.

Draft an advertisement for the post of Director (Administration).

(8 marks)

- (b) Write a one-sentence press release announcing the change of address of the company for its publication in newspapers. (2 marks)
- (c) "Every leader may not be an effective manager, but every manager must be an effective leader." Do you agree ? Support your answer with necessary reasoning. (5 marks)
7. (a) Comment on *any three* of the following :
- (i) Planning and control are two highly integrated activities.
  - (ii) In an interview, the right word may be effective, but no word may be as effective as a rightly timed pause.
  - (iii) A good summary is one that is self-sufficient.
  - (iv) Semantics can be described as the science that deals with meanings.
  - (v) Anyone can counsel, but not all can counsel effectively. (2 marks each)
- (b) Hard Task Enterprise (HTE), Noida is in the business of providing variety of business solutions to power generating companies in India. It is dominated by the culture of hard task conservative stereotype management, constantly pushing employees to perform and ignoring the personal needs and growth of the employees. Even while recruiting executives at the middle level, the focus remains on the academic qualifications and experience and no significance, whatsoever, is accorded to a person's emotional intelligence. Due to all these, most of the executives of the company have low morale, sagging spirit, and feelings of sinking and depression. At the top level, the management does not care for even the basic principle. 'Time is money' and consequently, time management is very bad at the top. This also pushes middle level executives very hard to meet the deadlines. In brief, the executives of the company are very stressed and emotionally upset and the management is not at all caring.
- Vidur has recently joined HTE as General Manager (HR) and is very much concerned about this kind of environment in the company. Therefore, he has approached you, as a consultant, and has briefed about the prevailing conditions in the company with a request to suggest the ways/measures to improve the existing pathetic conditions of the company by improving the emotional quotient of the executives.
- You are required to prepare a report to be submitted to Vidur suggesting ways and measures that will make executives of the company emotionally stable and competent so as to increase their emotional quotient. (9 marks)
8. Write short notes on *any five* of the following :
- (i) Proximity
  - (ii) Force-field analysis
  - (iii) Why, why analysis
  - (iv) SQ3R – framework for effective reading
  - (v) Time management
  - (vi) Frank Jefkins seven point formula. (3 marks each)