Roll No...............................

Total No. of Questions—8]

[Total No. of Printed Pages—10

Time Allowed—3 Hours

Maximum Marks—100

NCL

Answer **all** questions.

Marks

SECTION—A

1. Objective type questions : 1×20=20

   (a) Which of the following is not a way in which multinational firms can structure their Global Insurance Programme ?

      (i) They can buy insurance in one country and arrange for coverage wherever they do business

      (ii) Have their own Insurance Companies ?

      (iii) Allow local management in each country to purchase insurance

      (iv) By using a master programme that is globally controlled and coordinated by Global Insurer through subsidiaries, associated or partners.

   (b) The key document in outsourcing agreements that helps to strategic relationship including the identification of responsibilities and results is

      (i) Memorandum of understanding

      (ii) Mutual current letter

      (iii) Service level agreement

      (iv) Strategic level agreement.

NCL

P. T. O.

(c) .... networks connect peripherial devices of remote location with a single central processor usually a main frame computer.

    (i) Distributed system network

    (ii) Local area network

    (iii) Distributed area network

    (iv) Teleprocessing network.

(d) The Central processing unit requires the instructions to be written in a .... form in order to carry on the functions.

    (i) Machine language

    (ii) Binary

    (iii) Procedural language

    (iv) Either (i) or (ii).

(e) The device in a Computer system record data by changing the state of .... and .... constituting the peripherials.

    (i) Magnetic devices and Transistors

    (ii) IC's and Electromagnets

    (iii) Circuits and Magnetic devices

    (iv) Any one of the above.

(f) .... is a non-procedural language similar to a fourth generation language composed of high level commands that DBMS software interprets and executes.

    (i) Data question language

    (ii) Data query language

    (iii) Data dictionary

    (iv) None of the above.

(g) In order to be an appointed actuary for an insurer, a person shall satisfy the following :

    (i) must be ordinarily resident in India

    (ii) must be an employee of the insurer or a consulting actuary in case of general insurance business

    (iii) must possess a certificate of practice issued by the Actuarial Society of India

    (iv) All of the above.

(h) .... refers to the structuring of hardware and software to achieve effective and efficient information processing.

    (i) System objective

    (ii) System development

    (iii) System integration

    (iv) System implementation.

(i) Once the design team identifies the necessary features for the system, which of the following are chosen

    (i) In-house development

    (ii) Software development companies

    (iii) Computer manufacturers

    (iv) Any one of the above.

(j) The data structure/(s) common among information system/(s) is/(are)

    (i) Tree

    (ii) Network

    (iii) Relational

    (iv) All of the above.

(k) Insurers could retrieve from query and reporting tools the following :

    (i) Agency listing

    (ii) Loss reserves by accident year

    (iii) Loss ratios by line of business

    (iv) All of the above.

(l) The benefits of customer relationship marketing for an organisation include

    (i) Increasing sales

    (ii) Higher costs

    (iii) Employee allocation

    (iv) All of the above.

(m) Symmetric key encryption approach uses a .... specified data field as the encryption key.

    (i) Double

    (ii) Single

    (iii) Either (i) or (ii)

    (iv) None of the above.

(n) In a data flow diagram, match the following correct combination :

(a)	Processes	(i) Squares
(b)	Data flow	(ii) Arrows
(c)	Data store	(iii) Rectangles
(d)	External destination for data	(iv) Circles.

NCL   Marks

(o) Asset-Liability management by an insurance company involves ....
and ....

    (i) affordable price, quality, service

    (ii) proper product design, asset management

    (iii) flexibility, affordable price

    (iv) affordable price, flexibility.

(p) In the process of defining the logic of a programme, the programming team
creates several types of documentation, these include the following, except

    (i) Structure charts

    (ii) Test papers

    (iii) Memos, working papers

    (iv) Pseudo codes.

(q) System implementation begins when the information system steering committee
.... the detailed specification produced during system design. It
ends with the acceptance of the system of management as an operation success

    (i) Accepts

    (ii) Rejects

    (iii) Accepts

    (iv) None of the above.

(r) Critical business intelligence success factors for an insurance company do not
include

    (i) Develop a clear project plan and scope

    (ii) Obtain knowledgeable staff

    (iii) Do not involve end user

    (iv) Select insurance specific data model.

(s) The Premium charged by an Insurance Company depends on

    (i) amount of anticipated loss

    (ii) cost of doing business

    (iii) both (i) and (ii)

    (iv) Any one of the above.

(t) Broad guidelines adopted by a rate-maker do not include which one of the following ?

    (i) The rate should be adequate to meet loss burden, yet not be excessive

    (ii) The rate should allocate cost burden among insured on a fair basis

    (iii) The rate should encourage loss control efforts among insureds, if possible

    (iv) The rate should predict and prevent loss making events.

2. Match Part 'A' with Part 'B' :   10

Part 'A'	Part 'B'
1. Rapid application development and object oriented approaches	(a) What activities to outsource, estimating costs and benefits, and finally choosing the outsourcer.
2. Case tools increase the productivity of personnel assigned to project teams	(b) Pure premium and loading, the insurer must also make allowance for the credibility factor or extent to which he can rely on the loss experience.
3. To assist in the control of development projects, there are several project management tools, ...	(c) That help ensures that transactions are valid, properly authorised, and completely and accurately processed.
4. The methodology of outsourcing begins with determining	(d) And at the same time, improve the quality of the new system and their documentation.

5. BPR is on going activity that focuses on the redesign of business processes to achieve dramatic improvement in performance ....

6. The make up of the insurance premium is a function of ....

7. Insurers are now investing large sums in business intelligence tools,' ....

8. Information system controls, that affect only a specific application are application controls ....

9. As humans, we think of data as consisting of characters, fields, records, files, and the database, ...

10. Three activities, that involve accountant and auditors, during operation phase, ...

(e) This is carried out by a systematic process to identify and eliminate all nonvalue-added activities.

(f) Are intended to shorten development time and decrease costs.

(g) Are post implementation review, system maintenance, and accounting for system costs.

(h) Which comprise of datamarts, datawarehouses and various types of querying and reporting tools.

(i) Some information system do not use files, instead they use database management system to store and locate data records.

(j) Like context diagram, work breakdown structures, gantt, pert, CPM charts.

3. Expand the following :   10

   1. GC

   2. CD

   3. DFD

   4. WBS

   5. MOLAP

   6. ASCII

7. CASE

8. EDI

9. OOPS

10. VAN

11. EBCDIC

12. DSS

13. ROLAP

14. DQL

15. DBA

16. GP = PP + LP (GP)

17. DM

18. RAD

19. PP = PPi (Z) + PPp (1 − Z)

20. WAN.

SECTION—B

4. Short descriptive questions : 10

   (a) State the reasons for the system failure and explain any three.

   (b) Name various functions of Insurers and describe any three.

5. (a) How do you think multinational companies can structure their Global Insurance Programme ? 5

   (b) What is Generalised Audit Software ? Discuss its advantages. 5

6. (a) Discuss Auditor's involvement in System Design with reference to Audit module, Processing steps and Specification review. 9

   (b) Identify the risks that arise mostly from reasons other than weakness in data security and discuss in brief. 6

SECTION—C

CASE STUDY

7. A Life Insurance Company is to manage so much to data pertaining to various departments in the company, the intermediaries, the customers and various other activities.

   The number of policyholders in the leading insurance firm in India is more than 10 million. The products offered are so diverse with many permutations and combinations. The intermediaries that distribute the insurance products, like agents are numbering around ten lakhs and the customer grievances/claims have to be properly managed to keep the customers happy. The medical records and other particulars of the customers have to be kept safe for a number of years.

   As the number of years for which the business is done grows, the data turns out to be very huge and enormous. With the setting up of private insurance companies, further increase in data relating to customers is generated. More work is generated in the areas of policy servicing, new business acquisition, billing, loans, investment, personnel management and office services. All the information needs to be streamlined to stay competitive.

   Every insurance company also should maintain close coordination between its head office, regional offices, divisional offices and branch offices.

   Q. How do you think all this can be achieved using modern science and technology ?

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8. The Indian Railways seems to be the most sought after way of transport for the common man in India. Surprisingly enough we find that almost all the trains run full and the last minute efforts to get reservation always have long lines of passengers eagerly waiting to get their tickets.

   Till a few years back, the waiting period was what made the things really disappointing because until the last minute the reservation clerk was not revealing the position.

   People who wanted to make a long distance travel involving two or more trains too had nightmares because a confirmed reservation ticket was being issued from the originating station to the changing point from where another reserved ticket should be availed. A telegram used to be sent to the station at

10

the changing point requesting to book the reserved ticket. However, in most of the cases, the passenger used to hear from the reservation clerks at the station at changing point that they have not received any communication at all or there is no availability of reservation. This naturally used to put many passengers to difficulty not knowing how to proceed further as their entire plan gets upset.

Thanks to the modern technology of computers and networking, the times have changed and railways have taken many initiatives to help the customers. Now the customers need not wait in the lines to know the reservation position, they can enquire about the latest position through more effective telephone lines or computer terminals set up outside the reservation counters, which provide minute to minute details.

Passengers have the convenience to reserve their tickets from any place to any place in India sitting at any single location. They can themselves see the reservation position on the Internet and book their tickets on line. They can even cancel any ticket at any place in India, without bothering about the place of purchase of the ticket.

Q. **How do you think the data processing is managed in such a situation ?
Discuss.**