PGDCA–106

P. G. D. C. A. EXAMINATION, 2018

Paper Sixth

SYSTEM ANALYSIS AND DESIGN

Time : Three Hours] [*Maximum Marks : 100*

Note : Attempt questions from all Sections as directed.

Inst. : The candidates are required to answer only in serial order. If there are many parts of a question, answer them in continuation.

Section—A

(Short Answer Type Questions)

Note : Attempt all questions. Each question carries 4 marks.

1. (A) What is the difference between information requirement, determination and specification ?

    (B) What are the characteristics of a good information system ?

    (C) What is the difference between tangible and intangible benefits ?

    (D) What do you understand by levelling of DFD ?

    (E) What is normalization of a relation ? What is a functional dependency ?

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(F) What is the purpose of a data validation program ?

(G) Define Seek time and Latency time of a disk.

(H) What are the various headings used in a report ? Why are they required ?

(I) What in the purpose of security measures in an information system ?

(J) What is the difference between a physical and a logical DFD ?

Section—B

(Long Answer Type Questions)

Note : Attempt any *two* questions. Each question carries 15 marks.

2. What is the basic difference between business data processing system and MIS ? What type of information is provided by MIS ?

3. Why is feasibility analysis necessary before designing a system ? In designing an information system for a hostel, what constraints should be taken into account during feasibility analysis ?

4. Describe the general strategy an analyst should use to gather information. What are the main sources of information in an organisation ? What are the methods of gathering information ?

5. What is the difference between an external entity and a process in a DFD ? What is the main merit of DFD ? What is the role of DFD as a documentation aid ?

Section—C

(Long Answer Type Questions)

Note : Attempt any *two* questions. Each question carries 15 marks.

6. Develop E-R diagram for the following :

    (i) Customer withdrawn money from his account

    (ii) Students write examination

    (iii) Students attend classes

    (iv) Pro forma write books

7. Why are data fields coded in an information system ? What are the requirements of a good coding scheme ? In a concise code comprehensive ? If not, why ?

8. How are addition and deletions of records handled in a random file organisation ? Is it easier to handle this in random file organisation compared to sequential file organisation ?

9. What type of output will you use for the following :

    (i) Strategic management

    (ii) Tactical management

    (iii) Operational management

150