Question Bank – 7

7.1 What is a data dictionary?

7.2 Why is a data dictionary necessary?

7.3 What are the main advantages of creating a data dictionary?

7.4 What data about a data element is stored in a data dictionary?

7.5 For the requirements statement given in PPT 7.1.3 (Vendor supplying items to a company) develop the data dictionary entry for vendor code, vendor name and vendor address.

7.6 What is the difference between on-line and off-line data entry?

7.7 Why are input data records divided into batches for off-line data entry?

7.8 What is the purpose of a data validation program?

7.9 What are the main principles used in designing forms for data entry?

7.10 A good and a bad design for entering date in a form is given in Section PPT 7.2.5 and 7.2.6. What are the reasons for saying that one of them is good and the other bad?

7.11 Design a form to be used by a salesman to report to the office about the sales executed by him at different customer locations.

7.12 What is the main difference between menus, templates and command modes of interactive data entry? When is each of these modes appropriate?

7.13 Design a dialogue hierarchy for entering data on customers (of a manufacturer).

7.14 Design a dialogue hierarchy and the screens for a system used to reserve seats in long distance buses.

7.15 Why are data fields coded in an information system?

7.16 Can the name of a person be used as a code, for say, his bank account?   If not,

   why?

7.17 What are the requirements of a good coding scheme?

7.18 Is a concise code comprehensive? If not, why?

7.19 Is a meaningful code necessarily comprehensive?

7.20 Is a comprehensive code necessarily meaningful?

7.21 Is a precise code necessarily concise?

7.22 What is the advantage of a serial number code? Why is it not normally used?

7.23 What is the main advantage of block codes?

7.24 Design a group classification code to code (i) motor vehicles,, (ii) music

   cassettes, and (iii) books

7.25 Is a group classification code meaningful?

7.26 Give an example of a significant code. Are significant codes expandable?

7.27 Add a Modulus-11 check digit to the codes (i) 48467, (ii) 96432, and (iii)

   87646257.

7.28 Modulus-37 check is suitable for alphanumeric codes. Add a modulus-37

   character to the codes (i) 4AB9W, (ii) XBY483, and (iii) CAZ4642.

7.29 The following code was entered by an operator:449632. The last digit is a

   modulus-11 check digit. Is this code correct?

7.30 If a code uses hexadecimal digits, what should be N if the modulus-N check digit

   system is to be used with such codes? What are the allowable weights if single

   transcription and transposition errors are to be detected?

7.31 If modulus-11 check digit system is to generate detection of multiple identical

digit transcription error (i.e., a code such as 45565 is wrongly entered as 48868),

what should be the constraints on the weights?

7.32 A see-saw error is one in which one digit of the code is increased by x and

another decreased by x. For example, 486732 becoming 456762. When can

modulus N check detect such errors?

7.33 Why is it useful to assign sequence numbers for data records? What are the

types of errors detected by sequence numbering?

7.34 What is the purpose of batch control record? What is the type of information

contained in a batch control record?

 A set of data records for student examination results has the following format:

 Roll no. Name   Marks (out of 100)

              Paper 1   Paper 2   Paper 3   Paper 4

 Design for these records a batch control record and a record control field and any

 other appropriate checks for the fields.

7.35 Give some example of fields for which a radix error check is appropriate.

7.36 What is the difference between range check and a radix check?

7.37 What are the appropriate range checks for the age of individuals in an employee

file, a high school student file, and height of students in a student file.

7.38 Give some examples of fields where reasonableness check would be applicable.

7.39 Give some examples of inter-field relationship checks.

7.40 What is the main difference between menus, templates and command modes of

interactive data entry? When is each of these modes appropriate?

7.41 Design a dialogue hierarchy for entering data on customers (of a manufacturer).

7.42 Design a dialogue hierarchy and the screens for a system used to reserve seats in

long distance buses.