

## Question Bank

- 11.1 What is the difference between on-line and off-line data entry?
- 11.2 Why are input data records divided into batches for off-line data entry?
- 11.3 What is the purpose of a data validation program?
- 11.4 What are the main principles used in designing forms for data entry?
- 11.5 A good and a bad design for entering date in a form is given in Section 11.1. What are the reasons for saying that one of them is good and the other bad?
- 11.6 Design a form to be used by a salesman to report to the office about the sales executed by him at different customer locations.
- 11.7 Why are data fields coded in an information system?
- 11.8 Can the name of a person be used as a code, for say, his bank account? If not, why?
- 11.9 What are the requirements of a good coding scheme?
- 11.10 Is a concise code comprehensive? If not, why?
- 11.11 Is a meaningful code necessarily comprehensive?
- 11.12 Is a comprehensive code necessarily meaningful?
- 11.13 Is a precise code necessarily concise?
- 11.14 What is the advantage of a serial number code? Why is it not normally used?
- 11.15 What is the main advantage of block codes?
- 11.16 Design a group classification code to code (i) motor vehicles,, (ii) music cassettes, and (iii) books
- 11.17 Is a group classification code meaningful?
- 11.18 Give an example of a significant code. Are significant codes expandable?

- 11.19 Add a Modulus-11 check digit to the codes (i) 48467, (ii) 96432, and (iii) 87646257.
- 11.20 Modulus-37 check is suitable for alphanumeric codes. Add a modulus-37 character to the codes (i) 4AB9W, (ii) XBY483, and (iii) CAZ4642.
- 11.21 The following code was entered by an operator:449632. The last digit is a modulus-11 check digit. Is this code correct?
- 11.22 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?
- 11.23 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?
- 11.24 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?
- 11.25 Why is it useful to assign sequence numbers for data records? What are the types of errors detected by sequence numbering?
- 11.26 What is the purpose of batch control record? What is the type of information contained in a batch control record?
- 11.27 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.

- 11.28 Give some example of fields for which a radix error check is appropriate.
- 11.29 What is the difference between range check and a radix check?
- 11.30 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.
- 11.31 Give some examples of fields where reasonableness check would be applicable.
- 11.32 Give some examples of inter-field relationship checks.
- 11.33 What is the main difference between menus, templates and command modes of interactive data entry? When is each of these modes appropriate?
- 11.34 Design a dialogue hierarchy for entering data on customers (of a manufacturer).
- 11.35 Design a dialogue hierarchy and the screens for a system used to reserve seats in long distance buses.