7.1 A data dictionary has consolidated list of data contained in

(i) dataflows (ii) data stores

(iii) data outputs (iv) processes

a. (i) and (iii)
b. (i) and (ii)
c. (ii) and (iv)
d. (i) and (iv)

7.2 A data dictionary is useful as

(i) it is a documentation aid

(ii) it assists in designing input forms

(iii) it contains al data in an application including temporary data used in processes

(iv) it is a good idea in system design

a. (i) and (ii)
b. (i) and (iv)
c. (i),(ii) and (iii)
d. (i) and (iv)

7.3 By metadata we mean

a. very large data
b. data about data
c. data dictionary
d. meaningful data

7.4 A data dictionary is usually developed

a. At requirements specification phase
b. During feasibility analysis
c. When DFD is developed
d. When a datadase is designed

7.5 A data dictionary has information about

a. every data element in a data flow
b. only key data element in a data flow
c. only important data elements in a data flow
d. only numeric data elements in a data flow

7.6 A data element in a data dictionary may have

a. only integer value
b. no value
c. only real value
d. only decimal value

7.7 A data element in a data flow

(i) may be an integer number

(ii) may be a real number

(iii)may be binary

(iv)may be imaginary

a. (i),(ii),(iv)
b. (iii),(iv),(ii)
c. (i),(ii),(iii)
d. (i) and (ii)

7.8 It is necessary to carefully design data input to a computer based system because

a. it is good to be careful
b. the volume of data handled is large
c. the volume of data handled is small
d. data entry operators are not good

7.9 Errors occur more often when

a. data is entered by users
b. data is entered by operators
c. when data is handwritten by users and entered by an operator
d. the key board design is bad

7.10 Good system design prevents data entry errors by

(i) Designing good forms with plenty of space to write in block capitals

(ii)By giving clear instructions to a user on how to fill a form
(iii)Reducing keystrokes of an operator
(iv)Designing good keyboard

a. i, ii, iii
b. i, ii, iv
c. i, ii
d. iii and iv

7.11 In on-line data entry it is possible to

a. Give immediate feedback if incorrect data is entered
b. Eliminate all errors
c. Save data entry operators time
d. Eliminate forms

7.12 The main problems encountered in off-line data entry are:

(i)Data are entered by operators

(ii)Data entered by hand in forms batched and forms may be missed or misread
(iii) Errors are detected after a lapse of time
(iv)Data are entered by users

a. i and ii
b. i and iii
c. ii and iii
d. iii and iv

7.13 In interactive data input a menu is used to

a. enter new data
b. add/delete data
c. select one out of many alternatives often by a mouse click
d. detect errors in data input

7.14 In interactive data input a template is normally used to

a. enter new data
b. add/delete data
c. select one out of many alternatives often by a mouse click
d. detect errors in data input

7.15 In interactive data input terminal commands are normally used to

a. enter new data
b. add/delete data
c. select one out of many alternatives often by a mouse click
d. detect errors in data input

7.16 Data inputs which required coding are

a. fields which specify prices
b. key fields
c. name fields such as product name
d. fields which are of variable length

7.17 Key fields are normally coded

a. i and ii
b. i and iv
c. ii and iii
d. i and iii

7.18 A code is useful to represent a key field because

a. it is a concise representation of the field
b. it is usually done by all
c. it is generally a good idea
d. it is needed in database design

7.19 By the term "concise code" we understand that the code

a. conveys information on item being coded
b. is of small length
c. can add new item easily
d. includes all relevant characteristics of item being coded

7.20 By the term "expandable code" we understand that the code

a. conveys information on item being coded
b. is of small length

c. can add new item easily
d. includes all relevant characteristics of item being coded

7.21 By the term "meaningful code" we understand that the code

a. conveys information on item being coded
b. is of small length
c. can add new item easily
d. includes all relevant characteristics of item being code

7.22 By the term "comprehensive code" we understand that the code

a. conveys information on item being coded
b. is of small length
c. can add new item easily
d. includes all relevant characteristics of item being coded

7.23 A concise code is necessarily

a. Precise
b. Meaningful
c. Comprehensive
d. Difficult

7.24 Serial numbers used as codes are

(i) concise

(ii) meaningful
(iii) expandable
(iv) comprehensive

a. i and ii
b. ii and iii
c. ii and iv
d. i and iii

7.25 Block codes are

(i)concise

(ii)meaningful
(iii)expandable
(iv)comprehensive

a. i and ii
b. ii and iii
c. iii and iv
d. i and iii

7.26 Group classification codes are

(i)concise

(ii)meaningful
(iii) expandable

(iv)comprehensive

a. i and ii
b. i, ii and iii
c. ii, iii and iv
d. i, ii and iv

7.27 Significant codes are

(i)concise

(ii)meaningful
(iii)expandable
(iv)comprehensive

a. i and ii
b. i, ii and iii
c. ii, iii and iv
d. i, ii and iv

7.28 In significant codes some or all parts of the code

a. are meaningful
b. are usable
c. are significant
d. represent values

7.29 Errors in codes are detected by

a. proper design of code
b. introducing redundant digits/characters designed to detect errors
c. making the code concise
d. making the code precise

7.30 Design of error detecting codes requires good

a. knowledge of mathematics
b. statistical mechanics
c. statistics of errors normally committed during data entry
d. Boolean algebra

7.31 A modulus-11 check digit is used to detect error in

a. alphanumeric codes
b. numeric codes
c. hexadecimal codes
d. serial number code

7.32 A modulus-11 check digit will detect

(i)single transcription errors
(ii)single transposition errors
(iii)multiple digit transcription errors
(iv)and correct a single error

a. i and iii
b. i and iv
c. i and ii
d. iii and iv

7.33 A modulus-17 check will detect single transcription errors in

a. alphanumeric codes
b. hexadecimal codes
c. decimal numerical codes
d. serial number codes

7.34 For modulus-11 check digit to detect a single transposition errors

a. weights should all be distinct
b. weights may all be equal and > 0
c. weights should be less than 8
d. weights should all be > 0 and distinct

7.35 For modulus-11 check digit to detect a single transcription errors

a. weights should all be distinct
b. weights may all be equal and > 0
c. weights should be less than 8
d. weights should all be > 0 and distinct

7.36 Modulus-11 check digit for the code 45672 is

a. 0
b. 1
c. 2
d. 3

7.37 Modulus-11 check digit for the code 85672 is

a. 0
b. 1
c. X
d. 3

7.38 For modulus-11 check digit to detect single transposition or single transcription error the number of digits in the codes should not exceed

a. 9
b. 10
c. 11
d. 99

7.39 Modulus-17 check character for the hexadecimal code AB4567 is

a. F
b. D
c. 1
d. 0

7.40 Sequence numbering of records is used to

(i)Identify each record uniquely
(ii)Track a missing record in a batch of records
(iii)Count number of records
(iv) Sort the records

a. i, ii
b. i, ii, iii
c. i, ii, iii, iv
d. i and iv

7.41 A batch control record uses

(i)Batch totals of selected fields
(ii)A simple count of number of records in a batch
(iii)Modulus-11 check digit of each key field
(iv)Totals of selected fields of record totalled for the batch

a. i and ii
b. i, ii, iv
c. i, ii, iii, iv
d. iii and iv

7.42 A record total uses

a. batch totals of selected fields
b. count of numbers of records
c. modulus-11 check digit sum of all fields
d. total of selected fields of a record

7.43 If a field is known to represent an angle of a triangle, radix used to check should be

a. 90
b. 60
c. 180
d. 360

7.44 If a field is known to represent days of a month, radix used to check should

a. 30
b. 31
c. 28
d. 29

7.45 Radix check for a field representing year is

a. Possible
b. not possible
c. not relevant
d. may be tried

7.46 An appropriate range check for marks in an examination paper whose maximum marks 100 is

a. 100
b. 0 to 100
c. – 99 to +99
d. 99

7.47 An appropriate range check for month field in a date is

a. 12
b. –12 to 12
c. 1 to 12
d. 0 to 12

7.48 An appropriate range check of age of a tenth standard student in a high school

a. 5 to 15
b. 10 to 25

c. 8 to 20
d. 3 to 18

7.49 Reasonableness checks for monthly mess bill of a student if daily rate is Rs. 40 is

a. 1200
b. 12000
c. 120
d. 2400

7.50 Batch control totals will detect

(i)incorrect data entry of a field
(ii)missing record
(iii) data records out of order
(iv)inconsistent data

a. i and ii
b. i, ii and iii
c. ii, iii and iv
d. iii and iv

7.51 If records are out-of-order then error may be detected by

a. batch control totals
b. radix check
c. sequence number check
d. range check

7.52 In payroll record a reasonable inter-field relationship check is to relate salary field with

a. age field
b. department field
c. designation field
d. increment field

Key to Objective Questions

7.1 b 7.2 c 7.3 b 7.4 c 7.5 a 7.6 b
7.7 c 7 .8 b 7.9 c 7.10 a 7.11 a 7.12 c 7.13 c 7.14 a 7.15 b 7.16 b 7.17 d 7.18 a
7.19 b 7.20 c 7.21 a 7.22 d 7.23 a 7.24 d 7.25 b 7.26 c 7.27 c 7.28 d 7.29 b 7.30 c 7.31 b 7.32 c 7.33 b 7.34 d 7.35 b 7.36 b
7.37 c 7.38 b 7.39 b 7.40 c 7.41 b 7.42 d
7.43 c 7.44 b 7.45 b 7.46 b 7.47 c 7.48 c 7.49 d 7.50 a 7.51 c 7.52 c