

MODULE 7

DATA INPUT METHODS

OBJECTIVE QUESTIONS

There are 4 alternative answers to each question. One of them is correct. Pick the correct answer. Do not guess. A key is given at the end of the module for you to verify your answer

LEARNING UNIT 1

7.1.1 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)

7.1.2 A data dictionary is useful as

- (i) it is a documentation aid
 - (ii) it assists in designing input forms
 - (iii) it contains all 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)

7.1.3 By metadata we mean

- (a) very large data
- (b) data about data
- (c) data dictionary
- (d) meaningful data

7.1.4 A data dictionary is usually developed

- (a) At requirements specification phase
- (b) During feasibility analysis
- (c) When DFD is developed
- (d) When a database is designed

7.1.5 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

7.1.6 A data element in a data dictionary may have

- (a) only integer value
- (b) no value
- (c) only real value
- (d) only decimal value

7.1.7 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)

LEARNING UNIT 2

7.2.1 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

7.2.2 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

7.2.3 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**
- (v) Designing good keyboard**

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

7.2.4 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

7.2.5 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

7.2.6 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

7.2.7 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

7.2.8 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

LEARNING UNIT 3

7.3.1 Data inputs which required coding are

- (a) fields which specify prices
- (b) key fields
- (c) name fields such as product name
- (e) fields which are of variable length

7.3.2 Key fields are normally coded

- (i) as they provide a unique identification
- (ii) as they are used for retrieving records
- (iii) as they facilitate cross referencing between applications which use the key
- (iv) as it is useful

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

7.3.3 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
- (e) it is needed in database design

7.3.4 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
- (e) includes all relevant characteristics of item being coded

7.3.5 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
- (e) includes all relevant characteristics of item being coded

7.3.6 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
- (e) includes all relevant characteristics of item being code

7.3.7 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

7.3.8 A concise code is necessarily

- (a) precise
- (b) meaningful
- (c) comprehensive
- (d) difficult

7.3.9 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

7.3.10 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

7.3.11 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

7.3.12 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

7.3.13 In significant codes some or all parts of the code

- (a) are meaningful
- (b) are usable
- (c) are significant
- (d) represent values

7.3.14 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

7.3.15 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

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

- (a) alphanumeric codes
- (b) numeric codes
- (c) hexadecimal codes
- (d) serial number code

7.3.17 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 |

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

- (a) alphanumeric codes
- (b) hexadecimal codes
- (c) decimal numerical codes
- (d) serial number codes

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

- (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

7.3.20 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

7.3.21 Modulus-11 check digit for the code 45672 is

- | | |
|-------|-------|
| (a) 0 | (b) 1 |
| (c) 2 | (d) 3 |

7.3.22 Modulus-11 check digit for the code 85672 is

- | | |
|-------|-------|
| (a) 0 | (b) 1 |
| (c) X | (d) 3 |

7.3.23 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 |

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

- | | |
|-------|-------|
| (a) F | (b) D |
| (c) 1 | (d) 0 |

7.3.25 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

7.3.26 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

7.3.27 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

7.3.28 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

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

- (a) 30
- (b) 31
- (c) 28
- (d) 29

7.3.30 Radix check for a field representing year is

- (a) possible
- (b) not possible
- (c) not relevant
- (d) may be tried

7.3.31 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

7.3.32 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

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

- (a) 5 to 15
- (b) 10 to 25
- (c) 8 to 20
- (d) 3 to 18

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

- (a) 1200
- (b) 12000
- (c) 120
- (d) 2400

7.3.35 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

7.3.36 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

7.3.37 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

7.1.1	b	7.1.2	c	7.1.3	b	7.1.4	c	7.1.5	a	7.1.6	b
7.1.7	c	7.2.1	b	7.2.2	c	7.2.3	a	7.2.4	a	7.2.5	c
7.2.6	c	7.2.7	a	7.2.8	b	7.3.1	b	7.3.2	d	7.3.3	a
7.3.4	b	7.3.5	c	7.3.6	a	7.3.7	d	7.3.8	a	7.3.9	d
7.3.10	b	7.3.11	c	7.3.12	c	7.3.13	d	7.3.14	b	7.3.15	c
7.3.16	b	7.3.17	c	7.3.18	b	7.3.19	d	7.3.20	b	7.3.21	b
7.3.22	c	7.3.23	b	7.3.24	b	7.3.25	c	7.3.26	b	7.3.27	d
7.3.28	c	7.3.29	b	7.3.30	b	7.3.31	b	7.3.32	c	7.3.33	c
7.3.34	d	7.3.35	a	7.3.36	c	7.3.37	c				