

Information System

Unit 01 – (1.2)

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The components of a system

- ▶ A system is a combination of components that work together to fulfill a task.
- ▶ Computer is a system.
- ▶ Data Input, Processing and data output are components of a system.
- ▶ Computers and computer based systems are used to process data.

- ▶ Data input, processing and data output are components of a system.

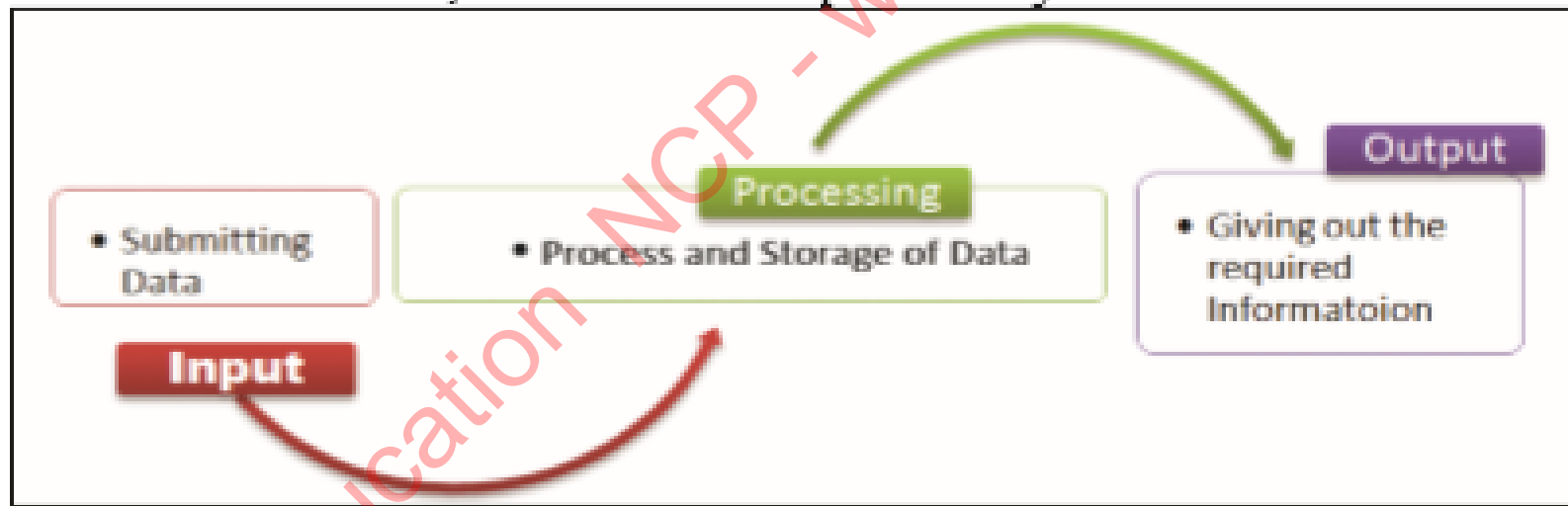
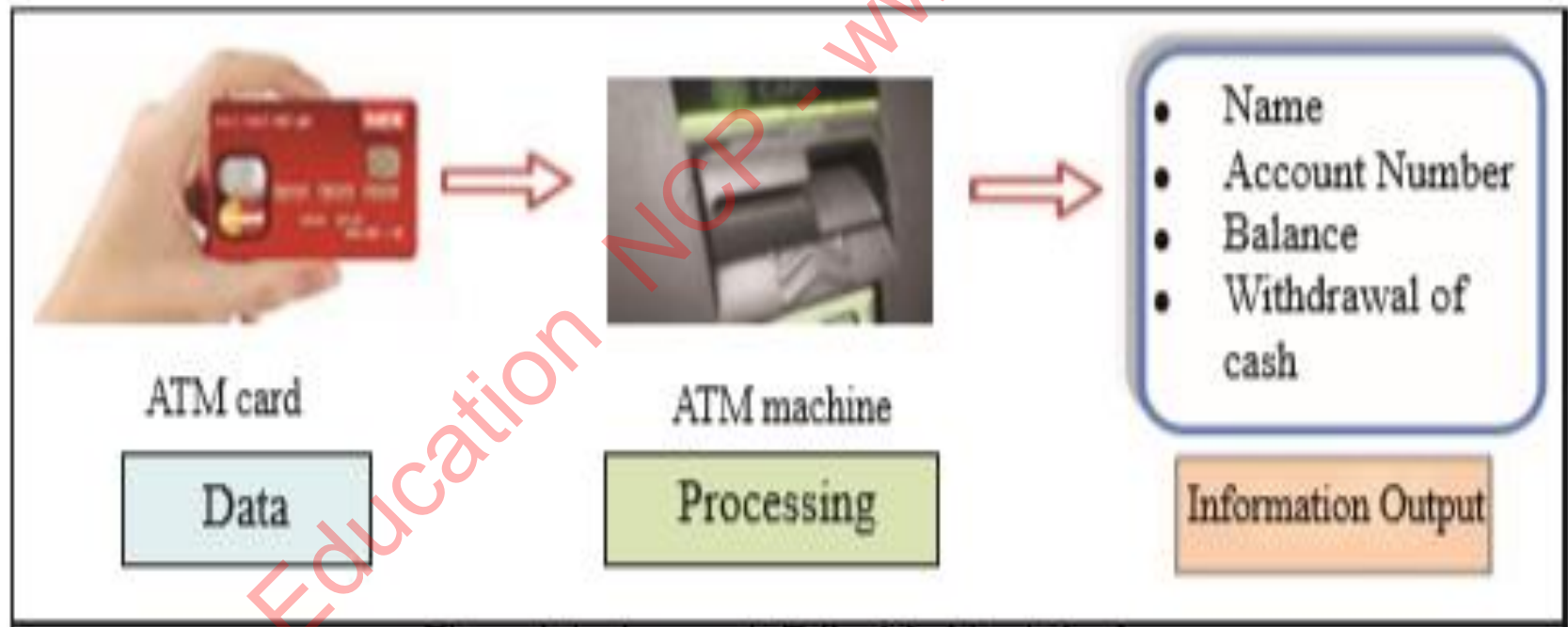


Figure 1.2 Components of a computer system

Systems use in our day today activities.

Example 1 - ATM Automatic Teller Machine

When the bank ATM card is inserted to ATM machine, data is processed and information regarding the account is given.



Systems use in our day today activities...contd

Example 2 - Finger print reader to record the attendance of organization



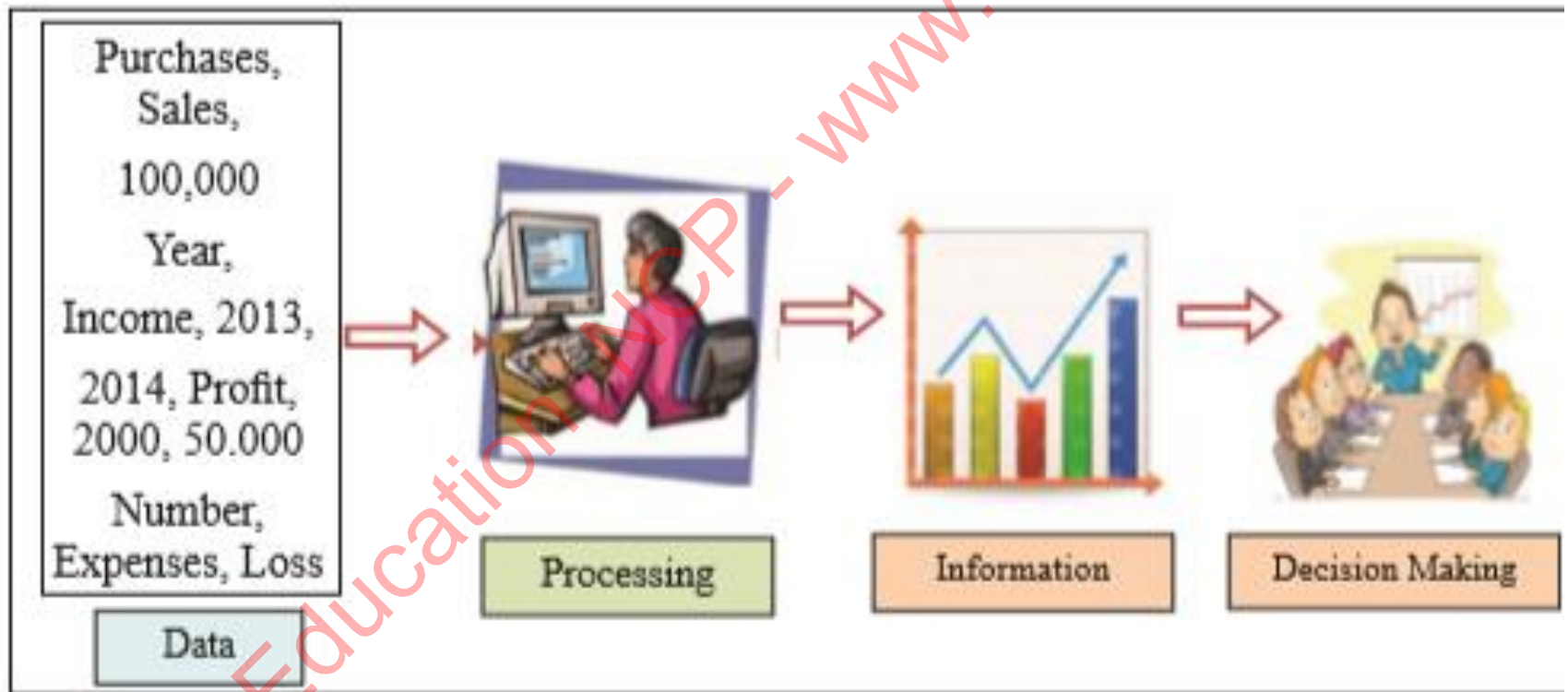
Systems use in our day today activities...contd

Example 3 - QR Code used in newspapers and magazines



Systems use in our day today activities...contd .

Example 4 - Processing business information



Evaluation



Past Papers
Questions & Answers
from
2007 – 2019

Education NCP - www.edncp.lk

G.C.E. (O/L) 2010 – Paper 1

- ▶ 2). “.....(B)..... is processed into
.....(C)... by information system.”

Which of the following pairs of terms is appropriate for (B) and (c) respectively ?

1. Information, Data
2. Data, Information
3. Data , Instruction
4. Instructions, information

G.C.E. (O/L) 2010 – Paper 11

1)

iii.

Imagine that you have purchased a few items from a shop. The cashier has issued the bill. You have found that the amount mentioned in the bills is incorrect and you have informed the cashier. By considering yourself as a system, identify the input, process. And the output in the above scenario.

G.C.E. (O/L) 2011 – Paper 11

- ▶ 1).
 - ii.

G. C. E. (Ordinary Level) candidates can obtain their examination results from web site of the department of Examination. When the Index number is entered to the data entry form of the web site, the system validate it. If it is valid, then the results will be retrieved from the data base and displayed on the screen. Write the input, process and out put for the scenario.

G.C.E. (O/L) 2012– Paper 1

▶ 2.

In a library information system when a user enters the title of a book, its availability is indicated after searching the data base. Which of the following indicates the correct order for input, process and output of the system?

1. Book title, availability of the books, searching the data base
2. Book title, searching the data base ,availability of the books,
3. searching the data base, Book title, availability of the books,
4. searching the data base , availability of the books, Book title.

G.C.E. (O/L) 2013 – Paper 1

▶ 1).

Consider the following conversion of data into information.

◦ Data -----→ (x) -----→ Information

• Which of the following is most suitable to replace X ?

1. Displaying
2. Processing
3. Programming
4. Testing

G.C.E. (O/L) 2016 – Paper 11

▶ 1.

◦ iv.

Geetha uses an Automated Teller Machine (ATM) to withdraw money from her bank account. First she inserts the ATM card into the machine and enters the secret pin code. Then she enters the amount of money she wants to withdraw. The system checks the balance available in her account dispenses money as the balance available in her account is more than the amount of money Geetha wants to withdraw. At the same time the system updates the balance available by deducting the amount of money dispensed from the previous balance.

◦ From the above scenario , write down an example each for input, processing and output.

G.C.E. (O/L) 2017 – Paper 11

▶ 1

◦ iv)

Sama goes to a bookshop to buy 3 exercise and 2 pens. After finding the items, she takes them to the counter, where the sales assistant scans the barcode stickers attached to each item into the information system in the shop. Quantities of each items are also entered into the system. The system calculate the cost of all the items. Then the system prints the bill for the transaction.

- Write down one example each for input, process and output of the information system.

G.C.E. (O/L) 2018 – paper 1

- ▶ A person inserts his auto Teller machine card into a bank ATM and enters the pin code. Then he enters the amount of money he wants to withdraw. After checking the available balance in the amount, the ATM dispenses the money, updates the balance and displays the new balance.

Which of the following , lists an input, a process and an output in the given scenario respectively?

1. Amount of money to withdraw, new balance, money
2. Amount of money to withdraw, updating the balance, new balance
3. new balance, pin code, Amount of money to withdraw
4. Updating the balance, pin code, new balance

Answers

according to the Making Scheme

▶ G.C.E. (O/L) 2010 – Paper 1

- 2). Data, Information

▶ G.C.E. (O/L) 2010 – Paper 11

- ▶ 1)–iii input – purchase price of each item n the total amount mentioned in the bill
- ▶ process – add purchase prices together and compare it with the amount mentioned in the bill. Decide that it is incorrect
- ▶ output – inform the cashier that the bill is incorrect.

▶ G.C.E. (O/L) 2011 – Paper 11

- ▶ input – index number
- ▶ process – validate and retrieve information from databases/ access data base
- ▶ output – Display results

▶ G.C.E. (O/L) 2012– Paper 1

20. Book title, searching the data base ,availability of the books,

Answers

according to the Making Scheme

- ▶ G.C.E. (O/L) 2013 – Paper 1
 - 2) processing
- ▶ G.C.E. (O/L) 2016 – Paper 11
 - Input – one of (PIN number/amount to withdraw/card details)
 - Process – update account balance/compare/check amount and balance/ validate PIN)
 - Output – account balance/ cash/ money/receipt/card
- ▶ G.C.E. (O/L) 2017 – Paper 11
 - Input – bar code , quantity (3,2acceptable)
 - Process – using barcode calculate cost of items
 - Output – bill
- ▶ G.C.E. (O/L) 2018 – paper 1
 - 2). Amount of money to withdraw, updating the balance, new balance