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Final Examination / CSC 101.

Q2

~~Answer: CPU itself has three comp~~

Q1

Answer: - The three main components are:-

- Memory or storage unit, control unit, ALU (Arithmetic Logic Unit)
- Memory or ~~the~~ storage unit - This unit can store instructions, data, and intermediate results. This unit supply supplies information to other units of the computer when needed. It is also known as internal storage unit or the main memory of the primary storage or Random Access Memory (RAM).
- Control Units - This unit controls the operations of ~~the~~ all parts of the computer but does not carry out any actual data processing operations.
- ALU (Arithmetic logic Unit) - This unit is consists of two subsections, they are - Arithmetic section and Logic section.
 - Arithmetic section - Funtion of arithmetic section is to perform arithmetic operations like addition, subtraction, multiplication, and division. All complex operations are done by making repetitive use of the above operation.

→ P.T.O

- Logic Section - Function of logic section is to perform logic operations ~~the~~ such as comparing, selection, matching, and merging of data.

④ Answer → (a) Facebook - The Facebook application is a software.
(b) Ulab Moodle - The Ulab Moodle is a user.

⑤ Answer - The impacts and applications of computers in business and military. Computers help in research, production, distribution, marketing, banking, team management, business automation, data storage, employee management, and very helpful to increase productivity at a labour cost, less time with high quality. That's why the use of a computer is important in business. The computer ~~have~~ ^{have} played an increasingly important role in the military. The computers in the military have been adapted or designed to do a broad range of tasks, such as analysing intelligence, organizing product data for military leaders, geospatial analysis, controlling smart weapons or communications. The impact of computers in business ~~productivity~~ ^{productivity}. Computers can have a ~~position~~ ^{positive} and negative impact on small business productivity.

② Answer - (a) $(FBAD)_{16} = 1001$

② Answer - a) $(FBAD)_{16} = \underbrace{001}_1 \underbrace{110}_6 \underbrace{101}_5 \underbrace{10}_6 \underbrace{10}_5 \underbrace{011}_3$
 $= (165653)_8$

b) $A - (12.345)_{10} = (1100.010110000)_2$

$\therefore 12 = 1100$

$0.345 \times 2 = 0.69$	- 0
$0.69 \times 2 = 1.38$	- 1
$0.38 \times 2 = 0.76$	- 0
$0.76 \times 2 = 1.52$	- 1
$0.52 \times 2 = 1.04$	- 1
$0.04 \times 2 = 0.08$	- 0
$0.08 \times 2 = 0.16$	- 0
$0.16 \times 2 = 0.32$	- 0
$0.32 \times 2 = 0.64$	- 0

2	12	
2	6	- 0
2	3	- 0
2	1	- 1
	0	- 1
$= 1100$		

③ Answer - a) $(1001)_2 \times (1011)_2$

1001
x 1011
1001
1001x
0000xx
1001xx
1100011
(Answer)

(b) $(11000)_2 \div (101)_2$
 $= (10011001100)_2$

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