

 Universiti Malaysia PAHANG <small>Engineering • Technology • Creativity</small>	COURSE: Computer Architecture & Organization		MARK : /10	
	TOPIC: ASSEMBLY LANGUAGE	COURSE CODE: BCN1043		
	ASSESSMENT: QUIZ	BIL: 3		DATE:

Matric No : _____

Section : _____

1. Give **TWO (2)** advantage of Assembly Language compared to high-level language.

[2 Marks]

- require less memory
- require less execution time
- able to perform highly technical tasks that would be difficult, if not impossible in high-level language

2. Write the instruction set for the expression of $Y = (A-B) / (C+D \times E)$:

a) Three instruction-address format

SUB Y, A, B
 MPY T, D, E
 ADD T, T, C
 DIV Y, Y, T

[2 Marks]

b) Two instruction-address format

MOVE Y, A
 SUB Y, B
 MOVE T, D
 MPY T, E
 ADD T, C
 DIV Y, T

[3 Marks]

c) One instruction-address format

LOAD D
 MPY E
 ADD C
 STOR Y
 LOAD A
 SUB B
 DIV Y
 STOR Y

[3 Marks]