

**LAGOS CITY POLYTECHNIC, IKEJA**  
**SCHOOL OF ENGINEERING AND APPLIED SCIENCE**

**DEPARTMENT OF COMPUTER SCIENCE**

**2013/2014 FIRST SEMESTER EXAMINATION**

<b>COURSE TITLE:</b> ASSEMBLY LANGUAGE	<b>NO OF QUESTIONS :</b> 6
<b>COURSE CODE:</b> COM 323	<b>TIME ALLOWED:</b> 2 HRS
<b>FOR WHOM:</b> HND YR II CS	<b>PT EXAMINER:</b>
<b>NO OF STUDENT:</b> ANY	<b>INSTRUCTIONS:</b> ANSWER FOUR

**QUESTIONS**

1. (a)  $39FFH + B25H$  (b)  $A0021H - 49H$   
(c) Convert  $110000111011$  to Hex (d) Convert  $567.B$  to binary
2. (a) Write an 8080/8085 program to output 4 on the screen.  
(b) Explain the following:  
(i) MOV (ii) ADD (iii) SUB (iv) IN  
(v) OUT (vi) HLT
3. (a) List and explain the ten registers in 8080/8085 Assembly Language  
(b) Name the general purpose registers  
(c) Name the register pairs  
(d) Name the two-byte registers
4. Write an 8080/8085 routine to divide the value in the accumulator by 10. (Assume the dividend is already in A and is between 10 and 255.)
5. Write the correct instruction or routine for each of the following functions  
(a) Move the value from register C to register L  
(b) Move the value from register B to memory  
(c) Move the value from memory to register D  
(d) Add 5 to the value in register A.  
(e) Add the value in register C to the value in register A.
6. Code directives for each of the following functions.  
(a) Define a uninitialized ten byte data area named QUESTA  
(b) Define a data named QUESTB initialized to 5 BH  
(c) Define a string of initialized bytes containing the digit 0 through 9 in pure binary code,  
not ASCII. Name the area DIGITS.  
(d) Define a string of initialized bytes containing SELF-TEST.  
Name the area QUIZ.  
(e) Set the label ZEROS equal to zeros.

