



Ahsanullah University of Science & Technology

Department of Computer Science & Engineering **Lab Final Examination, Fall - 2019**

Course No: CSE2214

Course Title: Assembly Language Programming Sessional

Date of Examination: 16.09.2020

Submitted By-

Group : A1

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Section : A

Question No: 01

Question:

Write an assembly code to perform the following: if AX contains a negative number, put -1 in BX; if AX contains 0, put 0 in BX; if AX contains a positive number, put 1 in BX.

Answer:

.MODEL SMALL

.STACK 100H

.DATA

.CODE

MAIN PROC

MOV AX,-1

CMP AX,0

JL NEGATIVE

JE ZERO

JG POSITIVE

NEGATIVE:

MOV BX,-1

JMP RETURN

ZERO:

```
MOV BX,0  
JMP RETURN
```

```
POSITIVE:  
MOV BX,1
```

```
RETURN:  
MOV AH,4CH  
INT 21H
```

```
MAIN ENDP  
END MAIN
```

Question No: 02

Question:

Write an assembly code to calculate the sum of the following series. Put the sum in AX.

1 + 5 + 9 + 13 + ... + 41

Answer:

.MODEL SMALL

.STACK 100H

.DATA

.CODE

MAIN PROC

MOV AX, 0

MOV BX, 1;

START:

ADD AX, BX

CMP BX, 41

JE DONE

ADD BX, 4

JMP START

DONE:

MOV AH, 4CH

INT 21H

MAIN ENDP

END MAIN

Question No: 03

Question:

Answer: