

**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-**

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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 NEGETIVE**

**JE ZERO**

**JG POSITIVE**

**NEGETIVE:**

**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:**