Name: KEY   **Id#**

Q1.

(i)   Write a procedure that receives the address of a string and the its size from the stack and prints it. The procedure should preserve the content of all registers changed during its implementation except the BP register.

(ii)   Write a program to use the procedure to print the string "This is an Easy Test !!". Show the place of the procedure definition in the program.

(i)

```
DISPLAY PROC Near
        MOV BP, SP
        ; saving used registers
        PUSH AX
        PUSH BX
        PUSH CX
        PUSH DX

        ; getting the parameters fro teh stack
        MOV CX, [BP+2]
        MOV BX, [BP+4]

        ; printing the string
        MOV AH, 2
Next:
        MOV DL, [BX]
        INT 21H
        INC BX
        LOOP Next

        ; restoring used registers
        POP DX
        POP CX
        POP BX
        POP AX
        RET 4
DISPLAY ENDP
```

(ii)

```
.mode small
.data
MSG DB  "This is an Easy Test !!"
.code
.startup

; passing parameters on stack
LEA AX, MSG
PUSH AX
MOV AX, 22
PUSH AX
; calling procedure
CALL DISPLAY

.exit
; procedure is defined here

END
```