1. Discuss the various cases of MUL & DIV instructions with examples.
2. Describe the following instruction with suitable examples:
    - AAA
    - XOR
    - CMP
    - DAA
    - LOOP
    - LABEL
3. Explain all the rotate instructions with suitable examples.
4. Explain Attribute byte in
    - Monochrome monitors
    - CGA text mode
5. Write a program using INT 10h to:
    - Change the video mode
    - Display the letter "D" in 200H locations with attributes black on white blinking (blinking letters "D" are black and the screen background is white)
6. Write a program that
    - Clears the screen
    - Sets the cursor at the center of the screen
7. Explain the following DOS Interrupts with examples.
    - Output a string to monitor
    - Output a single character to monitor
    - Input a string character with echo and without echo
8. How can you input a string of data from the keyboard? Explain with a program.
9. What are the sources of interrupts? Briefly explain the steps taken by a processor to execute an interrupt instruction.
10. Discuss the differences between INT and CALL instructions.
11. Explain Interrupt Vector table and Interrupt Service Routine.
12. With a neat block diagram explain 82C55 PPI.
13. Explain the control word format of 8255 PPI. Write the control words for
    - PORT A as input, PORT B as output, PORT C as output
    - PORT A as output, PORT B as input, PORT C as input in simple I/O mode.
14. Describe the following instruction with suitable examples:
    - CBW
    - IDIV
    - IMUL
    - SAL & SHL
    - PUSH & POP
15. Describe the following instruction with suitable examples:
    - CLD
    - REPE
    - LODSB
    - SCASB
    - XLAT
    - IN & OUT

Also, the lab programs – Binary Search, nCr,

8a, 8b