Suggestive topic for microprocessors.

1. 8051 → 1) block diagram, features,
2) function of A, B, PSW, DPTR, PCON, SCON, TCON
3) explain the following signal- EA PSEN
4) what is SFR, explain it.
5) draw the internal state RAM (copy)
*6) Explain memory organization of 8051 (pg-30 fig 2.8A 2.8B)
**7) explain the addressing modes of 8051, with example programe → copy.
*8) explain the function of following instruction.
→ MOV R0, # 35H.
→ DJNZ
→ CJNE
→ SUBB,
9) explain the total no. of interrupt and their address vector of 8051.

2. 8086 → 1st chap →

1. what is segmentation why is it required.
2. Describe pipelining, with architecture of 8086 diagram and explanation of BIU, and EU
3. physical address calculation.
4) function of PSW[flag],
5) Discuss the functions of following signals.
→ RESET, LOCK, RQ/GT, TEST,
6) Memory Banking? explain with diagram.
7) Difference → i) 8086 & 8088
ii) 8086 8085 (less imp.)
iii) min mode, max mode. (less imp.)
8) short note → i) 8288 bus controller (upper part - fig 1.15, pg 16)
ii) 8284 clock generator (") of pg - 23 1.13.
9) Read and write cycle of min and max. mode. (timing diagram)

*1) Describe the addressing modes of 8086 ~~of~~ with example.

*2) Describe the following instruction — XLAT, AAA, LOOP, TEST

3) programe of movs, pg-67
   * cmps, pg — 68
   scas, "

- chap 3 →
  → program → copy - 3.1, 3.2, 3.5, 3.6, 3.7
- chap 4 →
  → explain the interrupt cycle of 8086
  → short note IVT
  → Delay program — 4.5, Pg — 153
- chap 5 →
  → Memory interfacing → copy ~~program~~ problems, program - 5.1, 5.2, 5.3
  → Differenciate — I/O mapped I/O, memory maped I/O.
  → Why Latch is used with o/p and buffer is used with i/p operation, problem — 5.6, 5.7, 5.8, 5.9.

8255 →

→ all programs from ~~8522~~. 8255
(problem — & 5.10, 5.11, 5.13, stepper motor
1 step — 200 step..

*→ Describe the Handshake signal of 8255 for ~~i/p and~~ mode 1.

→

8251 → block Diagram.
→ mode instruction & comand instruction control word format.
→ asynchronous and synchronous Data length.
→ (problem → no. → 6.6

8259 → ICW & OCW format with example. → 6.3
→ Interrupt sequence of 8259.
→ explain the mode → cascade [with fig.], FNM (fullynested), Automatic rotation, specific rotation.