Unit 5

Figures are most while answering.

1. What is CPU? Explain the bus organization of CPU.
2. Derive a CPU control word for the following RTL expressions;
   1. R1<-R4 AND R7
   2. R5<-CMA R6
   3. R2<-R4+R3
3. Define stack and its type with example.
4. Define zero, one, two, three-address instruction with suitable example.
5. Write the following expressions in three, two, one and zero addressing instruction format.
   1. Y← (A + (D/E))– (F\*G)
   2. Y← (A + ((B \* C)– (D\*E)))
   3. Y← (B + ((C \* (D/E))– (F\*G)))
   4. A ← (B \* ((C + (D\*E))– (F/G)))
   5. Z ← (B + (A \* (C/D)))
6. Differentiate between RISC and CISC.
7. Explain the register overlapped window mechanism in RISC architecture.