Examination	: Block Exam	Seat No.	: _____
Date	:	**Day**	: Monday
Time	:	**Max. Marks**	: 36

INSTRUCTIONS:
1. Figures to the right indicate maximum marks for that question.
2. The symbols used carry their usual meanings.
3. Assume suitable data, if required & mention them clearly.
4. Draw neat sketches wherever necessary.

Q. 1 **Do as directed.**

(a) Explain Real address and virtual address. **[2]**

(b) Explain three speedup techniques. **[2]**

(c) Write steps involved in execution of CLEAR instruction. **[2]**

(d) State the limitations of programmed IO method. **[2]**

(e) What do you mean by page and page frames? **[2]**

(f) "Branch instructions reduce the efficiency of instruction pipelining." Justify **[2]**

Q. 2 Attempt the following questions. **[12]**

(a) A file contain the word "computer organization".suppose each character occupy 5 bit .calculate file size and average opcode length for both cases fixed and variable length.Comment which is better. **[6]**

(c) Explain with diagram segmentation with paging technique. **[6]**

Q. 3 (a) Explain the IBM System /360 in detail with diagram. **[6]**

(b) What are the basic steps for DMA transfer process? Explain with diagram **[6]**