

**Marks 5+5+5.**

For the Regular Expression  $(a+b)^*b$ , apply the following transformations using the method studied in the class:

- From RE to NFA.
- The resultant NFA from part (a) to DFA.
- Minimize the resultant DFA from part (b).

Q2. [5+5+5 = 15pts] For the Regular Expression  $(a+b)^*aa$ , apply the following transformations using the method studied in the class:

- From RE to NFA
- The resultant NFA from part (a) to DFA
- Minimize the resultant DFA from part (b)

Question. Marks 10

Minimize the following DFA using partition method.

