Q1

For 1, a clustered index on Emp(age). Since a cluster index can do a great job on range comparison.

For 2, an unclustered index on Dept(deptname) is needed, since to search deptid based on deptname. Also, a uncluster Emp(deptid) is needed to search employees' info based on deptid and a clustered index is already exists.

For 3. An unclustered index on Emp(name) is needed. Since this can help search employees' info based on their name, and a clustered index is already exists.

For 4, an unclustered index on Emp(id. salary) is needed, this is a index-only plan.

For 5, an unclustered index on Emp(age, salary) is needed, this is a index-only plan.

For 6, a cluster index on Dept(floor) is needed.