Instruction: Mechano-Informatics (Essay)

Answers should be written either in Japanese or English.

1) Do not open this problem booklet until the start of the examination is announced.
2) Two problems are provided. Answer both of them.
3) If you find missing, misplaced, and/or unclearly printed pages in the problem booklet, notify the examiner.
4) Two answer sheets are provided. Check the number of them, and if you find excess or deficiency, notify the examiner. You must use a separate sheet for each problem. When you run short of space to write your answer on the front side of the answer sheet, you may use the back side by clearly stating so in the front side.
5) In the designated blanks at the top of each answer sheet, write examination name (科目名) "Mechano-Informatics (Essay)", "Master" or "Doctor" (修士・博士), your applicant number (受験番号), and the problem number (問題番号). Omission in filling up these blanks may void your test score. Filling in the number of sheets (枚／枚中) is unnecessary.
6) An answer sheet is regarded as invalid if you write marks and/or symbols unrelated to the answer.
7) Submit both answer sheets even if they are blank.
8) Use the blank pages in the problem booklet for your draft.
9) Fill in your applicant number on the blank below, and submit this booklet. Also submit the Japanese booklet with your applicant number in the corresponding blank.

Applicant number:
MEMO
(Do not detach this page)
Problem 1

It is predicted that the Japanese population will decrease down to 90 million in 2055, and the ratio of senior citizen older than 65 years old will exceed 40%. For such social situations, discuss what support robots can offer, and what technological and social breakthroughs are necessary to spread the support.
MEMO
(Do not detach this page)
Problem 2

Answer the following questions about the research you wish to pursue in the doctor course.

Q. 1. State the research title.

Q. 2. State the goal and the outline of your research.

Q. 3. Describe the practical research plan with the methods to carry out the research.

Q. 4. Describe your career plan and the meaning of the research in the doctor course therein.