I. Read the information below; then complete the exercise that follows.

Although the world population reached to seven billion people, Japan is facing rapid decreasing of population and aged society.

Present population in Japan is about 127 million; it will become 97 million in 2059. See charts.

This big population change will cause the shortage of work forces, decreasing of GDP, heavy burden for younger generation to support social security, such as pension, and medical cost for elderly.

National and local governments are executing countermeasures to ease this drastic population change.

For example, "work and the family balance policy," subsidy program for young family who has the child, and building nursery school.

Its purpose is to help both males, and female workers balance the career and child raising, and expecting the increase of birth rate.

However, we haven't seen any outcomes from these policies yet.

## Question1

Using your knowledge of social science, write a short essay about the cause of Japan's population change from three viewpoints.

- (1) Rational Choice (economical) viewpoint
- (2) Social and Cultural viewpoint
- (3) Psychological viewpoint.

## Question2

Then, make an effective policy measure for Japan, and discuss why your policy idea can be expected to work.

When you consider making public policy, be attentive to the possibility, effectiveness, economic efficiency, and respect to the individual freewill right.

## 人口統計表

## Demographic statistics

Total Population and Growth of Population 1872-2011

表 1-1 総人口および人口増加:1872~2011年

	(1000people)			natural growth of population (1000 people)			other growth		average
year	pop	ulation	Total	sub total	birth	death	sub total	entrance excess	growth per year
		2000		人口		加数	(1,000人)		年平均人
年 次	人	000人)	総 数	自然増加		その他の増加		口増加率	
	(1,000)()		100 30X	総数	出生	死 亡	総 数	入国超過	(%)
1872 (明治 5)	1) 2)	34, 806							
1900 ( 33)	1) 3)	43,847	9,041	9,414	30, 911	21, 498	-373		0.83
1920 (大正 9)		55, 963	12, 116	12,752	34, 284	21, 529	-636		1. 23
1925 ( 14)		59, 737	3, 774	3,934	10, 375	6, 441	-160	50	1. 31
1930 (昭和 5)		64, 450	4, 713	4,726	10, 796	6,070	-13	49	1.53
1935 ( 10)		69, 254	4, 804	4,913	10, 939	6,026	-109	-237	1.45
1940 ( 15)	4)	71, 933	2,679	4, 318	10, 514	6, 196	-1, 639	-1,384	0.76
1945 ( 20)	5)	72, 147	8) 214	4,038	10, 964	6, 926	-3, 824	-3,233	0.06
1947 ( 22)	6)	78, 101	5, 954	1,666	4, 199	2, 533	4, 288	4, 472	4.04
1950 ( 25)		83, 200	5, 098	4, 986	7,814	2, 828	113	500	2. 13
1955 ( 30)		89, 276	6,076	5, 936	9, 806	3,870	140	44	1.42
1960 ( 35)		93, 419	4, 143	4,676	8, 256	3, 580	-533	-86	0.91
1965 ( 40)		98, 275	4, 856	4,943	8, 420	3, 477	-87	-41	1.02
1970 ( 45)		103, 720	5, 445	5, 601	9, 051	3, 451	-156	12	1.08
1975 ( 50)		111, 940	9) 8, 220	6,655	10, 190	3, 535	1, 565	-42	1.54
1980 ( 55)		117,060	5, 121	5, 491	8, 989	3, 498	-370	-54	0.90
1985 ( 60)		121,049	3, 989	4,072	7, 723	3,652	-83	7	0.67
1990 (平成 2)		123, 611	2, 562	2,976	6, 814	3, 837	-414	-43	0.42
1995 ( 7)		125, 570	305	297	1, 222	925	8	-50	0. 24
2000 ( 12)		126, 926	259	226	1, 194	968	33	38	0. 20
2005 ( 17)		127, 768	842	641	5, 712	5,071	201	75	0.13
2010 ( 22)		128, 057	289	-200	5, 471	5,670	489	-164	0.05
2011 ( 23)	7)	127, 799	-259	-180	1,073	1, 253	-79	-79	-0.20

総務省統計局『国勢調査報告』による。1945~70年は沖縄県を含まない。1920年10月~50年9月の期間の自然増加は日本人(内地の内地人)のみについてであり、1950年10月以降は外国人を含む総人口についてのもの。その他の増加とは増加終数と自然増加の差であり別掲の入国超過の外に領域変更その他の増減を含む。1920年10月~50年9月の期間の入国超過は、外国人の自然増加を含む。

し、 $P_0$ ,  $P_1$ はそれぞれ期首、期末人口、n は期間。 1) 旧内閣統計局の推計。 2) 太陰暦1月29日。

- 3)1月1日。
- 4) 国勢調査に基づく補正人口。 5) 11月1日人口調査の結果に基づく総務省統計局の推計。
- 6) 臨時国勢調査の結果。
- 7)総務省統計局『人口推計』による。
- 8) 沖縄県が調査から除かれたことによる減少を含むもので、1940年の数値から沖縄県を除いた場合の年欠間の人口増加は780 (千人)。9) 沖 縄県の復帰による増加を含むものであり、1970年の数値に沖縄県を含めた場合の年次間の人口増加は7,274 (千人)。

第2表 年齢3区分別人口の推移

Popu I	ation i	in three age st	ages			Unit: 10,000 people
			ratio of	(単位 万人)		
у	rear	total population	0-14 years old	15-64 years old	over 65 years old	ratio of young population
区分		総人口		人口に占める割合(%		年少人口指数
E			0~14歳	15~64歳	65歳以上	1271190
昭和25年	F(1950)	8, 411	35. 4	59.6	4. 9	59. 4
30	(1955)	9, 008	33. 4	61.2	5. 3	54. 6
35	(1960)	9, 430	30. 2	64.1	5. 7	47.0
40	(1965)	9, 921	25. 7	68.0	6. 3	37. 9
45	(1970)	10, 467	24. 0	68.9	7. 1	34. 9
50	(1975)	11, 194	24. 3	67.7	7. 9	35. 9
55	(1980)	11, 706	23. 5	67.3	9. 1	34. 9
60	(1985)	12, 105	21.5	68.2	10. 3	31.6
平成元年	F(1989)	12, 325	18.8	69.6	11.6	27. 1
2	(1990)	12, 361	18.2	69.5	12.0	26. 2
3	(1991)	12, 404	17.7	69.8	12.6	25. 3
4	(1992)	12, 445	17.2	69.8	13. 1	24. 6
5	(1993)	12, 476	16. 7	69.8	13. 5	23. 9
6	(1994)	12, 503	16.3	69.6	14. 1	23. 5
7	(1995)	12, 557	15. 9	69.4	14. 5	23. 0
8	(1996)	12, 586	15. 6	69.3	15. 1	22. 6
9	(1997)	12, 617	15. 3	69.0	15. 7	22. 2
10	(1998)	12, 649	15. 1	68.7	16. 2	21.9
11	(1999)	12, 669	14.8	68.5	16. 7	21. 6
12	(2000)	12, 693	14. 6	67.9	17. 3	21. 4
13	(2001)	12, 729	14. 4	67.7	18. 0	21. 2
14	(2002)	12, 744	14. 2	67.3	18. 5	21. 1
15	(2003)	12, 762	14.0	66.9	19. 0	21. (
16	(2004)	12, 769	13. 9	66.6	19. 5	20. 8
17	(2005)	12, 777	13. 7	65.8	20. 1	20. 8
18	(2006)	12, 777	13. 7	65.5	20.8	20. 8
19	(2007)	12, 777	13. 5	65.0	21. 5	20. 8
20	(2008)	12, 769	13. 5	64.5	22. 1	20. 9
21	(2009)	12, 751	13. 3	63.9	22. 8	20. 9
22	(2010)	12, 806	13. 2	63.8	23. 0	20.7
23	(2011)	12, 780	13. 1	63.7	23. 3	20. 5
平成27年	F(2015)	12, 660	12. 5	60.7	26. 8	20. 6
32	(2020)	12, 410	11.7	59.2	29. 1	19. 8
37	(2025)	12, 066	11.0	58.7	30. 3	18. 7
42	(2030)	11, 662	10.3	58.1	31.6	17. 8
47	(2035)	11, 212	10. 1	56.6	33. 4	17. 8
52	(2040)	10,728	10.0	53.9	36. 1	18. 5
57	(2045)	10, 221	9.9	52.4	37.7	18.9
62	(2050)	9, 708	9. 7	51.5	38. 8	18.8
67	(2055)	9, 193	9. 4	51.2	39. 4	18. 3
72	(2060)	8, 674	9. 1	50.9	39. 9	17. 9

(注) 年齢不詳を含む。

資料:平成23年以前は、総務省統計局「国勢調査」「10月1日現在推計人口」 平成27年以降は、国立社会保障・人口問題研究所「日本の将来推計人口-平

成24年1月推計-」の中位推計値

World Population Change: BC - 2100

表 1-9 世界人口の推移と推計:紀元前~2100年

	(million)	(%)		(million)	(%)
year	estimated population	growth rate / year	year	estimated population	growth rate / year
tr: Vhe	推計人口	年平均人口	tr. Va	推計人口	年平均人口
年 次	(100万人)	增加率(%)	年 次	(100万人)	增加率(%)
7000∼600 BC	5~10		2015	7, 284	1.10
1 AD	200~400	0.0	2020	7, 657	1.00
1650	470~545	0.0	2025	8, 003	0.89
1750	629~961	0.4	2030	8, 321	0.78
1800	813~1, 125	0.4	2035	8, 612	0.69
1850	1, 128~1, 402	0.5	2040	8, 874	0.60
1900	1,550~1,762	0. 5	2045	9, 106	0. 52
1950	2, 532	0.8	2050	9, 306	0.44
1955	2,773	1.82	2055	9, 475	0.36
1960	3, 038	1.83	2060	9, 615	0. 29
1965	3, 333	1.85	2065	9, 731	0. 24
1970	3, 696	2.07	2070	9, 827	0. 20
1975	4,076	1.96	2075	9, 905	0. 16
1980	4, 453	1.77	2080	9, 969	0. 13
1985	4, 863	1.76	2085	10,020	0.10
1990	5, 306	1.74	2090	10, 062	0.09
1995	5, 726	1.52	2095	10, 097	0.07
2000	6, 123	1, 34	2100	10, 125	0.06
2005	6, 507	1. 22	5-656		
2010	6, 896	1.16			

1900年以前は, UN, The Determinants and Consequences of Population Trends, Vol.1, 1973 による。1950年以降は, UN, World Population Prospects: The 2010 Revision(中位推計)による。1950年以降は年央(7月1日)現在。

 $\overline{\coprod}$ . Read the sentences below and answer the following questions:

Should anonymous sperm "donation"—a misnomer, since sperm is usually purchased — be permitted? A number of countries, including Sweden, Austria, Germany, Switzerland, the Netherlands, Norway, New Zealand, and several Australian states, have answered no. The United Kingdom recently joined this list, instituting a system whereby new sperm (and egg) donors must put information into a registry, and a donor-conceived child "is entitled to request and receive their donor's name and last known address, once they reach the age of 18." The arguments offered by the legislators in these jurisdictions in favor of these measures, along with the arguments offered by scholarly proponents such as Naomi Cahn, focus on one major consideration: child welfare. The claim is that donor-conceived children are harmed when they are deprived of access to the identity of one of their genetic parents. Interestingly, opponents of these measures have battled on the same playing field, disputing the empirical evidence underlying the claim of harm to children.

(From I.G.Cohen, "Prohibiting Anonymous Sperm Donation and the Child Welfare Error", *The Hastings Center Report*, vol.41, No.5,2011,p.13)

Question1: What do you suppose are the reasons for opposing those measures? (within 200 words)

Question2: Express your opinion on anonymous sperm donation clearly, i.e., logically and coherently.

(within 400 words)