

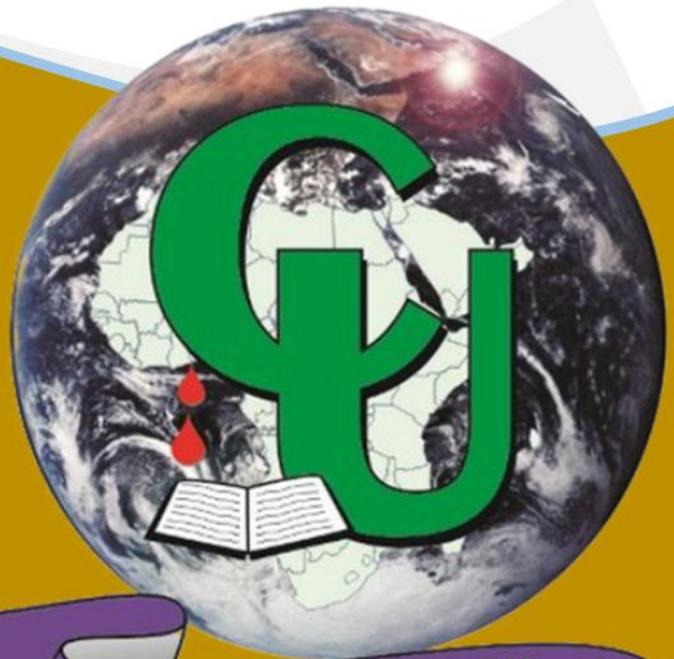
COVENANT UNIVERSITY

TUTORIAL KIT

PROGRAMME: DSS

ALPHA SEMESTER

300 LEVEL



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COVENANT UNIVERSITY
CANAAANLAND, KM 10, IDIROKO ROAD,
P.M.B. 1023, OTA, OGUN STATE, NIGERIA

TITLE OF EXAMINATION: B.Sc. DEGREE EXAMINATION

COLLEGE: CBS
DEPARTMENT: ECONOMICS AND DEVT. STUDIES
SESSION: 2014/2015 SEMESTER: ALPHA EXAMINATION
CODE: DSS 311 COURSE TITLE: DEMOGRAPHIC DATA EVALUATION
INSTRUCTIONS: ANSWER ALL QUESTIONS IN (PART A) and ANSWER
QUESTIONS 1, 2, 3 IN (PART B) and any other One

TIME ALLOWED: 2 HOURS

13th November, 2014

PART A

- 1) Give three conditions that will make Chandrasekhar-Deming formula to be unbiased.
- 2) Outline demographically, three reasons why age data is crucial to demographers
- 3) Distinguish between single round survey and multiround survey. Outlining their merits and limitation
- 4) Explain various steps needed in conducting population census.
- 5) Outline possible sources of errors of coverage
- 6) Give three limitations of a macro-analytic technique
- 7) Describe the various Techniques of Census Taking
- 8) Under the Demographic data sources, explain the concept of Establishment and maintenance of vital registration

(3 Marks each)

PART B

ANSWER QUESTION 1, 2, 3 and any other One

(1) Given the census figures below, answer the following questions:

(a) Compute the joint score(Age-sex accuracy) index **(7 Marks)**

(b) Provide brief explanation on the result **(3 Marks)**

Age Group	Male	Female
0-4	825,789	830,931
5-9	729,181	731,901
10-14	601,279	604,367
15-19	513,320	556,676
20-24	416,083	492,589
25-29	361,901	379,247
30-34	282,439	275,434
35-39	211,356	218,631
40-44	161,179	164,597
45-49	122,486	122,834

50-54	97,850	105,762
55-59	71,905	72,933
60-64	62,678	68,797
65-69	52,499	47,994
70-74	37,066	31,869
75+	47,279	38,573

(10 Marks)

(1c) A census was recently conducted in the country in 2006. Describe the typical patterns of error expected in the data collected:

(a) From the point of view of respondents **(3 Marks)**

(b) Based on enumerators' assessment **(3 Marks)**

(6 Marks)

2. (a) Using Myers' procedure, examine the degree of digital preference (or dislike) in the age data below: **(7 Marks)**

Age	Number	Age	Number	Age	Number	Age	Number
10	1,045	30	806	50	394	70	83
11	1,047	32	525	51	269	71	30
12	1,142	32	650	52	351	72	60
13	1,088	33	581	53	264	73	32
14	1,115	34	551	54	266	74	21

15	971	35	639	55	366	75	38
16	984	36	531	56	253	76	19
17	945	37	470	57	167	77	15
18	861	38	542	58	234	78	18
19	743	39	502	59	177	79	7
20	719	40	543	60	300	80	23
21	724	41	309	61	122	81	5
22	670	42	495	62	201	82	8
23	640	43	327	63	154	83	5
24	646	44	289	64	118	84	5
25	559	45	465	65	205	85	10
26	589	46	334	66	79	86	7
27	569	47	337	67	73	87	8
28	655	48	436	68	77	88	5
29	606	49	318	69	89	89	5

2.(b) Age data are basic to population studies, yet they are grossly distorted in Africa. Why is it so? **(3 Marks)**

(10 Marks)

3. (a) What do you understand by Smoothing formula? **(2 Marks)**

(b)What are the merit and Demerit? **(4 Marks)**

(c) Using smoothing procedure, adjust the age-sex data **(4 Marks)**

Age Group	Enumerated Population
0-4	186458
5-9	147051
10-14	135179
15-19	124194
20-24	109241
25-29	79196
30-34	60011
35-39	55494
40-44	42978
45-49	30621
50-54	28908
55-59	14894
60-64	18760
65-69	8688

70-74	9628
75-79	4073
80-84	4725
85+	4979

(10 Marks)

(4) Given that $S_x = p_x + (-1)x_e$ where S_x is the true population and P_x is the enumerated population and 'e' is the error term. If X is a variable in this relationship.

Show that: $S_o = \frac{-P_2 + 4P_{-1} + 10P_o + 4P_1 - P_2}{16}$

16

(10 Marks)

5(a) Explain what is sampling error influenced by (2 Marks)

(b) List and explain the various classifications of sampling method (8 Marks)

(10 Marks)

MARKING GUIDE

PART A

(1) Give three conditions that will make Chandrasekhar-Deming formula to be unbiased.

SOLUTION:

-) When the probability of a given events' inclusion in one data collection system is independent of the probability of its inclusion in the other
-) The net matching error is equal to zero. This means that the number of failure to match which refer to some event are equal number of failure
-) When the recorded events are in scope. In other words, it took place at a specified place and during a specified period. (3 Marks)

(2) Outline demographically, three reasons why age data is crucial to demographers

SOLUTION:

-) Age statistics or data are vital for a correct evaluation of current pattern of fertility and mortality and for making any type of reliable population estimate

-) Many of the special needs and problem of a particular society both present and in future will be determine in large measure by the age structure of the population
-) Virtually every aspect of human behavior from subjective attitude and physiological capabilities to subjective characters such as income, occupation ,labour force participation may be expected to vary with age **(3 Marks)**

(3) Distinguish between single round survey and multi-round survey. Outlining their merits and limitation.

Solution:

One-shot retrospective survey is a kind of survey where by the enumerator pay “one visit” during the exercise and asks the entire question including the past events.

Merits

- It is simple and easy to conduct
- The result of one-shot retrospective survey will come out before the multi-round and dual record system
- Relatively inexpensive
- Flexible
- Can include detailed data
- Needs little continuity effort

Limitations

- Changes cannot be detected in one-shot, but the situation is not so others.
- Vital events are not accurately measured

Multiround survey

In multi-round surveys (repeated surveys or follow-up surveys) repeated visits are made to households in selected sample areas in order to ascertain what events have occurred during the intervals between visits.

Merits

- Serve as a control on coverage and content errors
- Follow-up allows control for sampling distortion

Limitations

- It is slow in nature
- It needs continuity of effort over (extended) time
- High cost **(3 Marks)**

(4) Explain various steps needed in conducting population census.

Solution:

The major steps to be followed in a census include.

- Planning and preparation
- Collecting information

- Compilation and analysis
 - Evaluation
- (3 Marks)**

(5) Outline possible sources of errors of coverage

Solution:

- ∫ Due to faulty administration control procedure.
 - ∫ Completed record can be lost or misfiled at any stage of data processing.
 - ∫ Records which are completed at the local level may be lost during the forwarding process.
- (3 Marks)**

(6) Give three limitations of a macro-analytic technique

Solution:

- ∫ Unfortunately, the equation does not provide information on which component is inaccurate
 - ∫ The extent of error in any component cannot be measure nor can “Correction factors” be estimated
 - ∫ It should also be noted that compensative error may produce close agreement between both sides of the equation even when serious errors exist and therefore there is need for cautious when interpreting the result.
- (3 Marks)**

(7) Describe the various Techniques of Census Taking

Solution:

- ∫ **DEJURE**
 - ∫ **DEFACTO**
- (3 Marks)**

(8) Under the Demographic data sources, explain the concept of Establishment and maintenance of vital registration

Solution:

This is another source of population statistics. It consists of continuous registration of births, deaths, and marriages. In many developing countries, vital statistics are non-existent : in those where they do exist, the data are inadequate and defective to the extent that they can hardly serve to measure accurately levels and trends of fertility and mortality at any given time.

(3 Marks)

PART B

ANSWER QUESTION 1, 2, 3 and any other One

(1) Given the census figures below, answer the following questions:

(a) Compute the joint score(Age-sex accuracy) index **(7 Marks)**

(b) Provide brief explanation on the result **(3 Marks)**

Age Group	Male	Female
0-4	825,789	830,931
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30-34	282,439	275,434
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40-44	161,179	164,597
45-49	122,486	122,834
50-54	97,850	105,762
55-59	71,905	72,933
60-64	62,678	68,797
65-69	52,499	47,994
70-74	37,066	31,869
75+	47,279	38,573

(10 Marks)

Solution:

Age Group	Population		Age Ratio		Deviation from 100		Sex Ratio	Difference
	Male	Female	Male	Female	Male	Female		
0-4	825789	830931	-	-	-	-	99.4	-
5-9	729181	731901	102.2	102.0	2.2	2.0	99.6	0.2

10-14	601279	604367	96.8	93.8	-3.2	-6.2	99.5	-0.1
15-19	513320	556676	100.9	101.5	0.9	1.5	92.2	-7.3
20-24	416083	492589	95.1	105.3	-4.9	5.3	84.5	-7.7
25-29	361901	379247	103.6	98.8	3.6	-1.2	95.4	11.0
30-34	282439	275434	98.5	92.1	-1.5	-7.9	102.5	7.1
35-39	211356	218631	95.3	99.4	-4.7	-0.6	96.7	-5.9
40-44	161179	164597	96.6	96.4	-3.4	-3.6	97.9	1.3
45-49	122486	122834	94.6	90.9	-5.4	-9.1	99.7	1.8
50-54	97850	105762	100.7	108.0	0.7	8.0	92.5	-7.2
55-59	71905	72933	89.6	83.6	-10.4	-16.4	98.6	6.1
60-64	62678	68797	100.8	113.8	0.8	13.8	91.1	-7.5
65-69	52499	47994	105.3	95.4	5.3	-4.6	109.4	18.3
70-74	37066	31869	-	-	-	-	116.3	6.9
75+	47279	38573					122.6	
Total	4,591,731	4,745,678	-	-				
Mean	-	-	-	-	3.62	6.18	-	6.31

Age-Sex Accuracy Index = 3 times mean difference in sex ratios plus mean deviations of male and female age ratios.

$$= 3 \times 6.31 + 3.62 + 6.18$$

$$= 28.7$$

(7 Marks)

Interpretation: This means that the data is slightly inaccurate, concluding that there are more misreporting of ages **(3 Marks)**

(1c) A census was recently conducted in the country in 2006. Describe the typical patterns of error expected in the data collected:

(a) From the point of view of respondents

) At the very oldest age, there appear to be an exaggeration in age

) Rounding up reported ages to a year ending in 0 or 5 or sometimes to an even digit is fairly common.

(3 Marks)

(b) Based on enumerators' assessment

) There are generally many omission of children under five(5) years of age particularly of infant under 3-yrs.

) Many young male adult and to a lesser extent, young female adult are often missed.

) In older adult ages while they are married and settle down, they are now "found" and reported by the census enumerator.

(3 Marks)

2. (a) Using Myers' procedure, examine the degree of digital preference (or dislike) in the age data below: **(7 Marks)**

Age	Number	Age	Number	Age	Number	Age	Number
10	1,045	30	806	50	394	70	83
11	1,047	32	525	51	269	71	30
12	1,142	32	650	52	351	72	60
13	1,088	33	581	53	264	73	32
14	1,115	34	551	54	266	74	21
15	971	35	639	55	366	75	38
16	984	36	531	56	253	76	19
17	945	37	470	57	167	77	15
18	861	38	542	58	234	78	18
19	743	39	502	59	177	79	7
20	719	40	543	60	300	80	23
21	724	41	309	61	122	81	5
22	670	42	495	62	201	82	8
23	640	43	327	63	154	83	5
24	646	44	289	64	118	84	5
25	559	45	465	65	205	85	10

26	589	46	334	66	79	86	7
27	569	47	337	67	73	87	8
28	655	48	436	68	77	88	5
29	606	49	318	69	89	89	5

Solution:

Terminal Digit	10+	20+	Weight 1	Weight 2	Blended Population 1	Blended Population 2	Blended Sum	Relative Frequency	Deviation from 10%
0	3913	2868	1	9	3913	25812	29725	11.54	1.54
1	3031	1984	2	8	6062	15872	21934	8.506	-1.50
2	3577	2435	3	7	10731	17045	27776	10.77	0.77
3	3091	2003	4	6	12364	12018	24382	9.456	-0.54
4	3011	1896	5	5	15055	9480	24535	9.515	-0.48
5	3253	2282	6	4	19518	9128	28646	11.11	1.11
6	2796	1812	7	3	19572	5436	25008	9.70	-0.30
7	2584	1639	8	2	20672	3278	23950	9.29	-0.71
8	2828	1967	9	1	25452	1967	27419	10.63	0.63
9	2447	1704	10	0	24470	0	24470	9.49	-0.51
Total							257845		

Digit: 1, 3, 4, 6, 7, 9(Avoidance)

Digit: 0,2,5,8 (Preference)

2.(b) Age data are basic to population studies, yet they are grossly distorted in Africa. Why is it so?

Solution

-) Digital preference or aversion
 -) Deliberate misstatement
 -) Ignorance of correct age
- (3 Marks)**

3. (a) What do you understand by Smoothing formula?

Smoothing of age data is a process of adjusting or correcting for the irregularities in the age data. Most age distributions are usually corrected by methods of graduation or smoothing, but the graduated age distributions normally provide only possible patterns or rough approximations of the expected age distribution

(2 Marks)

(b) What are the merit and Demerit?

ADVANTAGE OF UNSMOOTHING FORMULA

-) It smoothen out the irregularities in the Age Misreporting
- DISADVANTAGES OF UNSMOOTHING FORMULA**

-) Extreme values are missed out
 -) Extreme values may be distorted by relatively few large numbers given a wrong picture of the population
 -) What we have may be a true picture of the population, correcting again means creating error
- (4 Marks)**

(c) Using smoothing procedure, adjust the age-sex data **(4 Marks)**

Age Group	Enumerated Population
0-4	186458
5-9	147051
10-14	135179
15-19	124194
20-24	109241
25-29	79196
30-34	60011
35-39	55494
40-44	42978
45-49	30621
50-54	28908
55-59	14894
60-64	18760
65-69	8688
70-74	9628
75-79	4073
80-84	4725
85+	4979

(10 Marks)

Po = 135179

$$P1 = 124194$$

$$P2 = 109241$$

$$P-1 = 147051$$

$$P-2 = 186458$$

$$So = \frac{-(186458) + 4(147051) + 10(135179) + 4(124194) - (109241)}{16}$$

$$= \frac{2141071}{16}$$

$$= 133817 (10- 14)$$

$$Po = 124194$$

$$P1 = 109241$$

$$P2 = 79196$$

$$P-1 = 135179$$

$$P-2 = 147051$$

$$So = \frac{-(147051) + 4(135179) + 10(124194) + 4(109241) - (79196)}{16}$$

$$= \frac{1993373}{16}$$

$$= 124586 (15- 19)$$

$$Po = 60011$$

$$P1 = 79196$$

$$P_2 = 109241$$

$$P_{-1} = 124194$$

$$P_{-2} = 135179$$

$$S_0 = \frac{-(135179) + 4(124194) + 10(109241) + 4(79196) - (60011)}{16}$$

$$= \frac{1710780}{16} = 106924 \text{ (20-24)}$$

$$P_0 = 79196$$

$$P_1 = 60011$$

$$P_2 = 55494$$

$$P_{-1} = 109241$$

$$P_{-2} = 124194$$

$$S_0 = \frac{-(124194) + 4(109241) + 10(79196) + 4(60011) - (55494)}{16}$$

$$= \frac{1289280}{16} = 80580 \text{ (25-29)}$$

$$P_0 = 60011$$

$$P_1 = 55494$$

$$P_2 = 42978$$

$$P_{-1} = 79196$$

$$P_{-2} = 109241$$

$$S_0 = \frac{-(109241) + 4(79196) + 10(60011) + 4(55494) - (42978)}{16}$$

$$16$$

$$= \frac{986651}{16} = 61666 \text{ (30-34)}$$

$$P_0 = 55494$$

$$P_1 = 42978$$

$$P_2 = 30621$$

$$P_{-1} = 60011$$

$$P_{-2} = 79196$$

$$S_0 = \frac{-(79196) + 4(60011) + 10(55494) + 4(42978) - (30621)}{16}$$

$$= \frac{857079}{16} = 53567 \text{ (35-39)}$$

$$P_0 = 42978$$

$$P_1 = 30621$$

$$P_2 = 28908$$

$$P_{-1} = 55494$$

$$P_{-2} = 60011$$

$$S_0 = \frac{-(60011) + 4(55494) + 10(42978) + 4(30621) - (28908)}{16}$$

$$= \frac{685321}{16} = 42833 \text{ (40-44)}$$

$$P_0 = 30621$$

$$P_1 = 28908$$

$$P_2 = 14894$$

$$P-1 = 42978$$

$$P-2 = 55494$$

$$\begin{aligned} S_0 &= \frac{-(55494) + 4(42978) + 10(30621) + 4(28908) - (14894)}{16} \\ &= \frac{523366}{16} = 32710 \quad (45-49) \end{aligned}$$

$$P_0 = 28908$$

$$P_1 = 14894$$

$$P_2 = 18760$$

$$P-1 = 30621$$

$$P-2 = 42978$$

$$\begin{aligned} S_0 &= \frac{-(42978) + 4(30621) + 10(28908) + 4(14894) - (18760)}{16} \\ &= \frac{409402}{16} = 25588 \quad (50-54) \end{aligned}$$

$$P_0 = 14894$$

$$P_1 = 18760$$

$$P_2 = 8688$$

$$P-1 = 28908$$

$$P-2 = 30621$$

$$\begin{aligned} S_0 &= \frac{-(30621) + 4(28908) + 10(14894) + 4(18760) - (8688)}{16} \\ &= \frac{300303}{16} = 18769 \quad (55-59) \end{aligned}$$

$$P_0 = 18760$$

$$P_1 = 8688$$

$$P_2 = 9628$$

$$P_{-1} = 14894$$

$$P_{-2} = 28908$$

$$S_0 = \frac{-(28908) + 4(14894) + 10(18760) + 4(8688) - (9628)}{16}$$

$$= \frac{243392}{16} = 15212 \text{ (60-64)}$$

$$P_0 = 8688$$

$$P_1 = 9628$$

$$P_2 = 4073$$

$$P_{-1} = 18760$$

$$P_{-2} = 14894$$

$$S_0 = \frac{-(14894) + 4(18760) + 10(8688) + 4(9628) - (4073)}{16}$$

$$= \frac{181465}{16} = 11342 \text{ (65-69)}$$

$$P_0 = 9628$$

$$P_1 = 4073$$

$$P_2 = 4725$$

$$P_{-1} = 8688$$

$$P_{-2} = 18760$$

$$S_0 = \frac{-(18760) + 4(8688) + 10(9628) + 4(4073) - (4725)}{16}$$

16

$$= \frac{123839}{16} = 7740 (70-74)$$

P₀ = 4073

P₁ = 4725

P₂ = 4979

P₋₁ = 9628

P₋₂ = 8688

$$S_0 = \frac{-(8688) + 4(9628) + 10(4073) + 4(4725) - (4979)}{16}$$

$$= \frac{84475}{16} = 5280 (75-79)$$

(4) Given that $S_x = p_x + (-1)^x e$ where S_x is the true population and P_x is the enumerated population and 'e' is the error term. If X is a variable in this relationship.

Show that: $S_0 = \frac{-P_2 + 4P_{-1} + 10P_0 + 4P_1 - P_2}{16}$

16

Solution:

$S_x = P_x + (-1)^x e$

Taking the range from -2 to +2

When x = -2

$S_{-2} = P_{-2} + (-1)^{-2} e$

$S_{-2} = P_{-2} + e$

$P_{-2} = S_{-2} + e \dots\dots\dots (i)$

When x = -1

$S_{-1} = P_{-1} + (-1)^{-1} e$

$$S_{-1} = P_{-1} - e$$

$$P_{-1} = S_{-1} + e \quad \dots\dots\dots \text{(ii)}$$

When $x = +1$

$$S_{+1} = P_{+1} + (-1)^1 e$$

$$S_{-1} = P_{-1} - e$$

$$P_{+1} = S_{+1} + e \quad \dots\dots\dots \text{(iii)}$$

When $x = +2$

$$S_{+2} = P_{+2} + (-1)^2 e$$

$$S_{+2} = P_{+2} + e$$

$$P_{+2} = S_{+2} + e \quad \dots\dots\dots \text{(iii)}$$

$$S_0 = \frac{-P_{-2} + 4P_{-1} + 10P_0 + 4P_1 - P_2}{16}$$

$$16 S_0 = -P_{-2} + 4P_{-1} + 10P_0 + 4P_1 - P_2$$

Substitute;

$$\begin{aligned} 16 S_0 &= -(S_{-2} - e) + 4(S_{-1} + e) + 10(S_0 - e) + 4(S_{+1} + e) - (S_{+2} - e) \\ &= -S_{-2} + e + 4S_{-1} + 4e + 10S_0 - 10e + 4S_{+1} + 4e - S_{+2} + e \\ &= -S_{-2} + 10e - 10e + 4S_{-1} + 10S_0 + 4S_{+1} - S_{+2} \end{aligned}$$

$$16 S_0 = -S_{-2} + 4S_{-1} + 10S_0 + 4S_{+1} - S_{+2}$$

Subt. P component into equ.

$$\begin{aligned} 16 S_0 &= -(P_{-2} + e) + 4(P_{-1} - e) + 10(P_0 + e) + 4(P_{+1} - e) - (P_{+2} + e) \\ &= -P_{-2} - e + 4P_{-1} + 10P_0 + 10e + 4P_{+1} - P_{+2} \end{aligned}$$

$$16 S_0 = -P_{-2} + 4P_{-1} + 10P_0 + 4P_{+1} - P_{+2}$$

Therefore, $S_0 = \frac{-P_{-2} + 4P_{-1} + 10P_0 + 4P_{+1} - P_{+2}}{16}$

(10 Marks)

5(a) Explain what is sampling error influenced by

A sampling error is influenced by the following:

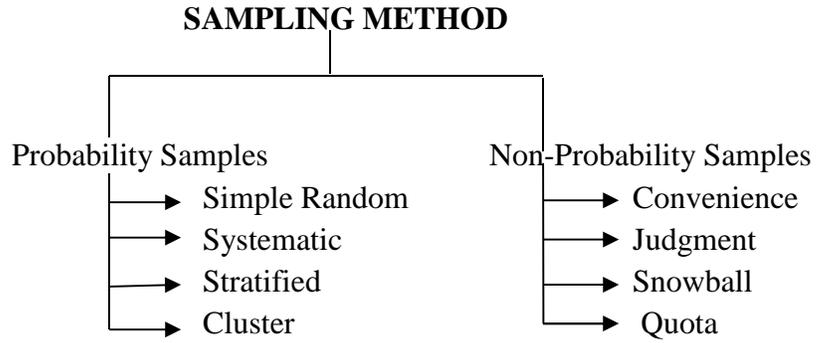
- (i) Sample and population sizes

- (ii) The variability of the characteristic of interest in the population
 - (iii) The sample design and the estimation method
- (b) List and explain the various classifications of sampling method

(2 Marks)

Solution:

Classification of Sampling Methods



(8 Marks)

TITLE OF EXAMINATION: B.Sc. DEGREE EXAMINATION

COLLEGE: CDS
SESSION: 2014/2015
COURSE CODE: DSS 314
INSTRUCTIONS:
TIME ALLOWED:

DEPARTMENT: ECONOMICS AND DEVT. STUDIES
SEMESTER: ALPHA EXAMINATION
COURSE TITLE: LABOUR FORCE CONCEPTS AND MEASUREMENTS1
ANSWER QUESTIONS 1 AND ANY OTHER 2
2 HOURS

17th November, 2014

1(a) Complete the working life and interpret your observations

Age group (in years)	% in the labor force	extrapolated % in LF from exact x to x+5	survivors at beginning of age interval*	Number of persons living during age interval x to x+5*
	wx	wx*	lx	LX
15-19	0.3527	0.5652	95672	476831
20-24	0.5241	0.5652	95060	473368
25-29	0.4859	0.5652	94287	469250
30-34	0.4992	0.5652	93413	464322
35-39	0.5459	0.5652	92316	457833
40-44	0.5845	0.5652	90817	448859
45-49	0.5797	0.5066	88726	436416
50-54	0.5574	0.5066	85840	419274
55-59	0.5305	0.5066	81870	395954
60+	0.3586	0.5066	76512	364538

(7 Marks)

1(b)Outline the various uses and Limitations of life table **(6 Marks)**

1(c) Outline and explain factors influencing changes in women's participation in labour force.

(6Marks)

1(d) Describe various factors influencing birth rate and Total fertility rate of women in labour force in any given population. **(6 Marks)**

1(e) Explain the following concepts;

- i Wage Earners
- ii Unpaid Workers.
- iii Job seekers
- iv Visible Unemployment.
- v Disguised Unemployment **(1 Mark each)**

(30 Marks)

2(a) If the population of an economy is 310 million people of which 75 million are under 16 years old, 45 million do not want to work and 16 million are looking for work actively. Calculate the labour force, labour force participation rate and the unemployment rate. (6 Marks)

2(b) Explain vividly the standards used to define economically active population. (6 Marks)

2(c) With clear illustrations, describe the various sources of labour statistics. (8 Marks)

(20 Marks)

(3a) (i) Highlight and explain the various types of unemployment in Nigeria. (6 Marks)

(ii) With a clear illustration, how serious is the employment problem in Nigeria? (6 Marks)

(3b) For each of the following information given below, describe the type of unemployment that explains their situations.

- i A computer programmer is laid off because of a recession
- ii A literacy editor leaves her job in Ikeja to look for a new job in Lagos Island
- iii An unemployed college graduate is looking for his first job
- iv Advances in technology make the assembly-line worker's job obsolete
- v Slumping sales leads to the cashier being laid off
- vi An individual refuses to work for minimum wage
- vii A high school graduate lacks the skills necessary for a job
- viii A skilled glass blower becomes unemployed when a new machine does her job faster

(1 Mark Each)

(20 Marks)

4 (a) Why does the government collect statistics on the unemployed? (4 Marks)

(b) Mention and explain factors influencing size of labour force in any country (8 Marks)

(c) Use the information about Employment situation of a Country to answer the following questions. Numbers are in millions.

	2004	2005
Population	223.6	226.5
Adult population	168.2	169.5
Number of unemployed	7.4	8.1
Number of employed	105.2	104.2

- i What is the labour force in 2004 and 2005? (2 Marks)
- ii What is the labour force participation rate in 2004 and 2005? (2 Marks)

- iii From 2004 and 2005, the size of the adult population increased while the labour force decreased. Provide explanations why this might have occurred. (4 Marks)

(20Marks)

MARKING GUIDE

1(a) Complete the working life and interpret your observations

Age group (in years)	% in the labor force	extrapolated % in LF from exact x to x+5	survivors at beginning of age interval*	Number of persons living during age interval x to x+5*
	wx	wx*	lx	LX
15-19	0.3527	0.5652	95672	476831
20-24	0.5241	0.5652	95060	473368
25-29	0.4859	0.5652	94287	469250
30-34	0.4992	0.5652	93413	464322
35-39	0.5459	0.5652	92316	457833
40-44	0.5845	0.5652	90817	448859
45-49	0.5797	0.5066	88726	436416
50-54	0.5574	0.5066	85840	419274
55-59	0.5305	0.5066	81870	395954
60+	0.3586	0.5066	76512	364538

(7 Marks)

1(b)Outline the various uses and Limitations of life Table

SOLUTION

USES

-) The life table is a widely-used statistical table in demographic, social and health studies
-) life table is used to calculate life expectancy, at birth and at other ages. However life tables provide other interesting demographic data.

) It is used to provides the survival curve for a cohort of individuals(Since the life table measures the probability of death)

Limitations

- Life table estimates have all the disadvantages of any statistical measure based on population censuses and vital records.
- Data on ages and mortality registries may be incomplete or biased.
- The same can be said about the procedure used in closing the final, open interval of the mortality table (e.g, 85 and more, 90 and more) and the information inaccuracies existing in these age intervals.
- Also, important differences in specific age/sex groups with high mortality may be overlooked, since this would have little effect on the overall life expectancy. **(6 Marks)**

1(c) Outline and explain factors influencing changes in women's participation in labour force.

(6Marks)

1(d) Describe various factors influencing birth rate and Total fertility rate of women in labour force in any given population.

Solution:

- Children in Labor Force
- Cost of raising and educating children
- Availability of pension systems
- Urbanization
- Education and employment for women
- Infant mortality rate
- Average marrying age
- Abortion
- Availability of birth control

(6 Marks)

1(e) Explain the following concepts;

- ❖ Wage Earners: - Those who earn salary either daily/ weekly.
- ❖ Unpaid Workers: - They are often family workers e.g. Housewife.
- ❖ Job seekers: - They are classified as unemployed
- ❖ Visible Unemployment: - Those working shorter hour than they desired.
- ❖ Disguised Unemployment: - Those working long hours in a job but low return.

(1 Mark each)

(30 Marks)

2(a) If the population of an economy is 310 million people of which 75 million are under 16 years old, 45 million do not want to work and 16 million are looking for work actively. Calculate the labour force, labour force participation rate and the unemployment rate.

Solution:

$$\begin{aligned} \text{Labour force} &= 310 - 75 - 45 = 190 \text{ million} \\ \text{Participation rate} &= 190 / (310 - 75) = 190/235 = 0.8085 = 80.85\% \\ \text{Unemployment rate} &= 16/190 = 0.084 = 8.4\% \end{aligned}$$

(6 Marks)

2(b) Explain vividly the standards used to define economically active population.

Solution:

There are two standards that can be use to define economically active population:

❖ **Gainfully Occupied**

In this approach, each person is asked about his usual occupation without any enquiry about when exactly the work is done. The concept have the advantage of being easy to administer in a census or survey; one question need to be ask, that is, “ what is your occupation?” Approach / long period

❖ **Labour force Approach / short period**

The labour force approach define the economic active population as number of people actually at work or seeking work during some particular short period.(6 Marks)

2(c) With clear illustrations, describe the various sources of labour statistics.

- **There are two broad categories of sources of labour statistics:**

❖ **National Statistics**

- a) Population census
- b) Labour force sample survey
- c) Established survey
- d) Employment Exchanges

❖ **International Statistics**

- a) Bulleting
- b) Demographic Year Book

(8 Marks)

(20 Marks)

(3a) (i) Highlight and explain the various types of unemployment in Nigeria. (6 Marks)

-) Frictional Unemployment
-) Cyclical Unemployment
-) Structural Unemployment

(ii) With a clear illustration, how serious is the employment problem in Nigeria?

Employment is one of the most pressing social and economic problems of our time; consequently, measures of utilization and non-utilization of labour are of great deal of interest to analysts and policy makers. (6 Marks)

(3b) For each of the following information given below, describe the type of unemployment that explains their situations.

- i. A computer programmer is laid off because of a recession **(Cyclical)**
- ii. A literacy editor leaves her job in Ikeja to look for a new job in Lagos Island **(Frictional)**
- iii. An unemployed college graduate is looking for his first job **(Frictional)**
- iv. Advances in technology make the assembly-line worker's job obsolete **(Structural)**
- v. Slumping sales leads to the cashier being laid off **(Cyclical)**
- vi. An individual refuses to work for minimum wage **(Frictional)**
- vii. A high school graduate lacks the skills necessary for a job **(Structural)**
- viii. A skilled glass blower becomes unemployed when a new machine does her job faster **(Structural)**

(1 Mark Each)

(20 Marks)

4 (a) Why does the government collect statistics on the unemployed?

SOULTION

When workers are unemployed, they, their families, and the country as a whole lose. Workers and their families lose wages, and the country loses the goods or services that could have been produced. In addition, the purchasing power of these workers is lost, which can lead to unemployment for yet other workers. Addressing the issue of unemployment requires information about the extent and nature of the problem. How many people are unemployed? How did they become unemployed? How long have they been unemployed? Are their numbers growing or declining? Are they men or women? Are they young or old? Are they White, or Black, or Asian, or of Hispanic ethnicity? How much education do they have? Are they concentrated in one area of the country more than another? These statistics—together with other economic

data—can be used by policymakers to determine whether measures should be taken to influence the future course of the economy or to aid those affected by joblessness. (4 Marks)

(b)Mention and explain factors influencing size of labour force in any country

SOLUTION

Factors that causes the size of labour forces:

1. Demographic factors
2. Economic factors
3. Social factors
4. Cultural factors
5. Age of citizen
6. Total Population- birth rates and death rate , the real size, net migration

(8 Marks)

(c) Use the information about Employment situation of a Country to answer the following questions. Numbers are in millions.

	2004	2005
Population	223.6	226.5
Adult population	168.2	169.5
Number of unemployed	7.4	8.1
Number of employed	105.2	104.2

iv What is the labour force in 2004 and 2005?

Answer:

2004: $7.4 + 105.2 = 112.6$ million

2005: $8.1 + 104.2 = 112.3$ million (2 Marks)

v What is the labour force participation rate in 2004 and 2005?

Answer:

2004: $(112.6/168.2) \times 100 = 66.9\%$

2005: $(112.3/169.5) \times 100 = 66.3\%$ (2 Marks)

vi From 2004 and 2005, the size of the adult population increased while the labour force decreased. Provide explanations why this might have occurred.

Answer:

Earlier retirements, students staying in college longer, more parents staying at home with children, discouraged workers discontinuing their job search.

(4 Marks)

(20Marks)

COVENANT UNIVERSITY

CANAANLAND, KM 10, IDIROKO ROAD, P.M.B. 1023, OTA, OGUN STATE, NIGERIA

TITLE OF EXAMINATION: B. Sc DEGREE EXAMINATION

COLLEGE: CBS SCHOOL: SOCIAL SCIENCES.

DEPARTMENT: ECONOMICS& DEV'T STUDIES

PROGRAM: DEMOGRAPHY&SOCIAL STATISTICS

SESSION: 2014/2015 SEMESTER: ALPHA

COURSE CODE: DSS313

COURSE TITLE: NATURE, EVOLUTION AND ORGANISATION OF SOCIAL INVESTIGATION

Time Allowed: 2hrs

Date: 11th November, 2014

Instruction: Answer Question No.1 and any other TWO

1(a) How are you expected to state the research objectives of your B.Sc project?
(5marks)

(b) State four aspects that are explored by any social researcher (6marks)

(c) Outline the Scriptural Evidences of Origin of Social Investigation (3marks)

(d) Clarify the roles of social researcher in social investigation (5marks)

(e) State nine disparities between 'In-depth interviews' and 'Focus Group Discussions' in any social research. (9marks)

(f) Explain two characteristics of Non-Experimental Research Design. (2marks)

Total = 30marks

2 (a) Justify this statement with facts 'the quantitative approaches involve the collection of numerical data in order to explain, predict, and or control phenomena of interest'. (10marks)

(b) Discuss the basic stages of social investigation you know. (10marks)

Total = 20marks

3 (a) Discuss briefly the classifications of non-experimental designs you know. (10marks)

(b) What do you understand by 'research problem' in a social investigation? (4marks)

(c) State four issues that must be taken into consideration when stating your research objectives. (6marks)

Total = 20marks

4 (a) What do you understand by 'research design' (5marks)

(b) Explain briefly the issues that are connected to research design. (15marks)

Total = 20marks

5(a) Describe the preparations involved in planning a community research. (10marks)

(b) Discuss the major challenges faced in planning any research. (10marks)

MARKING GUIDE TO DSS313 ALPHA SEMESTER 2014/2015 SESSION

1(a) I am expected to state B.Sc project my research objectives in the following ways:

-)] Cover the different aspects of the problem and its contributing factors in a **coherent** way and in a **logical sequence**;
-)] Are **clearly phrased in operational terms**,
-)] specify exactly what you are going to do, where, and for what purpose;
-)] **Be realistic by** considering local conditions; and
-)] Use **action verbs** that are specific enough to be evaluated. (5marks)

(b) Four aspects that are explored by any social researcher include:

- Social and economic structures;
- Social attitudes;
- Values and behaviours; and
- The factors which motivate and constrain individuals and groups in society. Each point carry 1.5 multiply by 4 (6marks)

(c) The Scriptural evidences of Origin of Social Investigation are:

- Basically, it is a scriptural injunction for all disciples as contained in the Gospel according to St John Chapter 5 verse 39. Every disciple of Jesus Christ is mandated to be a researcher. **“Search the scripture for in them ye have eternal life”.**
- Joshua could be regarded as the father of social investigation, having done extensive literature review as commanded in Josh 1:8 designed and formulated investigation strategies (Research) to know the potential of the Promised-Land and to find out if his people would be able to subdue the then occupiers of the land (they’ve been promised and desired to possess).
- A scientific analysis of Joshua chapter 1 and chapter 2 verse 1-24 shows that despite God’s promise and spiritual authority (unction) upon Joshua to possess wherever the sole of his feet touches (Josh 1:3). (3marks)

(d) The roles of social researcher in social investigation are:

1. Social researchers collect data using the methods of social research such as social surveys, focus groups, in-depth interviews and case studies.
2. They also analyse and interpret data and feed the end users and into policy process. He analyses behaviors of groups of people in their environment and special situations.
3. Determines the wants or needs of people through statistical investigation.
4. Social researcher informs the development, implementation and evaluation of a wide range of community, organisation and government decisions and policies. Social Research plays a crucial role in evidence-based policy making today and becoming a social researcher offers an exciting opportunity to work at the heart of government and.
5. He predicts or makes forecast that is based on the available research evidences / outcomes.
(5marks)

(c) **The disparities between 'In-depth interviews' and 'Focus Group Discussions' in any social research include:**

-) In-depth interview is conducted one-on-one while FGD an interactive group discussion and led by a moderator.
-) The duration of in-depth is longer and varied but it is time consuming whereas FGD is usually last for 1 to 2 hours.
-) In-depth gives opportunity for probing to uncover hidden and sensitive issues (personal opinions/beliefs & values) while FGD is unstructured (or loosely structured) discussion. Moderator encourages free flow of ideas.
-) In-depth require skilled interviewers thus it is very expensive while FGD is inexpensive and fast.
-) In-depth involves interviewer that could be bias easily whereas FGD is usually recorded (i.e. using tape or video or other recording devices).
-) In-depth starts with general questions and rapport establishing questions then proceed to more purposive questions while FGD is respondents feel a group pressure to conform because it covers an issue thoroughly.
-) In-depth does not involve the use of computer and internet technology while FGD make use of computer and internet technology for on-line focus groups.
-) FGD involves 8 to 12 members in the group who fit the profile of the target group or consumer while in-depth does not involve group of people.
-) In-depth interview is flexible while FGD is somehow rigid.

Each point carry 1mark = 9marks

(f) The two characteristics of Non-Experimental Research Design are:

-) No manipulation: Researcher observes a phenomenon without manipulating the independent variables(s)

-) Independent variables have already occurred, so no control over them
-) It carries clear and concise problem statement that is based on a theoretical framework or natural phenomenon.

Pick two points, each point carry 1mark =2marks

Total = 30marks

2 (a) In order to justify this statement with facts ‘the quantitative approaches involve the collection of numerical data in order to explain, predict, and or control phenomena of interest’; the following points are expedient:

1. **Descriptive research** involves collecting data in order to test hypotheses or answer questions regarding the subjects of the study. In contrast with the qualitative approach the data are numerical. The data are typically collected through a questionnaire, an interview, or through observation. In descriptive research, the investigator reports the numerical results for one or more variables on the subjects of the study. Few examples of descriptive research studies are as follows:

- How do parents feel about a 12- years old teen with pregnancy?
- How do undergraduates spend their week-end on the campus?
- How do students behave when examination date is announced?

2. **Correlational research** attempts to determine whether and to what degree, a relationship exists between two or more quantifiable (numerical) variables. However, it is important to remember that just because there is a significant relationship between two variables it does not follow that one variable causes the other. When two variables are correlated you can use the relationship to predict the value of one variable or its effect on other. Correlation implies prediction but not causation. The investigator frequently uses the correlation coefficient to report the results of correlational research.

Examples of correlational research are:

- The use of impromptu test to predict success in school examination.
- The relationship between intelligence and self-esteem.
- The relationship between anxiety and achievement.

1. **Causal-comparative research** attempts to establish cause-effect relationships among the variables of the study. The attempt is to establish that values of the independent variable have a significant effect on the dependent variable. This type of research usually involves group comparisons. The groups in the study make up the values of the independent variable. For example gender (male versus female), preschool attendance versus no pre-school attendance, or children with a working mother versus children without a working mother.

Examples of causal-comparative research studies are.

- The effect of week-end exit and effective comprehension in class during the week.
 - The effect of having a working mother on school absenteeism.
 - The effect of sex (gender) on algebra achievement.
2. **Experimental research** like causal-comparative research that attempts to establish cause-effect relationship among the groups of subjects that make up the independent variables of the study, the experimental research subject the cause (the independent variable) to certain control.

Some examples of experimental research are:

- The comparative effectiveness of personalized instruction versus traditional instruction on computational skill.
- The effect of self-paced instruction on self-concept.

- The effect of positive reinforcement on attitude toward school.
Explanation of each point carry 2.5 marks x 4 points=10marks

(b) The basic stages of social investigation include:

The research process is the overall scheme of scientific activities in which scientist engage in order to produce knowledge. It is the cornerstone of scientific enquiry. There is variety of approaches to social research although each researcher will adopt ways that are unique because of the particular time and place in which the study is conducted. Nevertheless, all research projects share a common goal of furthering understanding of the society and thus they share certain basic approach / stages. The following are therefore the basic stages of social investigation. **(2.5marks)**

1. Problem Identification
2. Objectives
3. Theory
4. Hypothesis,
5. Research Design
6. Data collection
7. Data analysis
8. Generalization / interpretation of Results
9. Recommendations

Each point carry 0.5mk x 9points =4.5mks

All the stages are interconnected hence one cannot do one without the other. They are interconnected. Each stage affects theory and they are affected by theory as well. From the diagram it is clear that a researcher who has no knowledge on his / her own about the subject matter and no knowledge of how to analyze data may find himself unable to formulate an adequate hypothesis, research design or gather the right data. Adequate knowledge is *sin-qua-non*. A researcher can do irreparable harm to a beautiful study by performing one of the early steps inadequately e.g. by writing a non-testable hypothesis or by securing an inadequate sample. Therefore, research is a system of interdependent related stage **(3mks)**

3 (a) **The classifications of non-experimental designs include:**

I. EXPLORATORY STUDIES

It is a small scale study of relatively short duration which is carried out when little is known about a situation or a problem. When doing exploratory studies, we describe the needs of other categories of respondents and the possibilities for actions. We may want to go further and try to explain the differences we identify as the causes of problem and then compare the groups. Large amount of information can be obtained from a large population in an economical manner.

But most often it is very expensive and requires expertise in the choice of sampling techniques, questionnaire construction, interview process and analysis in order to produce a reliable and valid report. It time consuming.

II. DESCRIPTIVE STUDIES

Descriptive studies involve the systematic collection and presentation of data to give a clear picture of a particular situation. It can be carried out on a small or large scale of a limited number of cases. **A case may be for example, a village, state, community, organization, a health centre, family planning clinic, etc.** Case studies are common in social sciences, health and management sciences. If one wishes to assess facts concerning / pertaining to a large population, a more extensive cross sectional survey could be designed. This (Cross sectional survey) would aim at quantifying the distribution of certain variables in a study population at one point of time. They may cover for example: physical characteristics of people, socio economic characteristics of people such as age, sex, marital status, income, etc, the behaviour of the people and knowledge and attitude. That may help to explain their behaviour and or even that occur in a population. When cross sectional survey covers the total population, it is called **CENSUS**.

Descriptive Research is to

- observe, describe, & document aspects of a situation as it naturally occurs
- serve as a starting point for hypothesis generation or theory development

III. COMPARATIVE / ANALYTICAL STUDIES

An analytical study attempts to establish causes or risk factors for certain problem. This is done by comparing two or more groups some of which have or develop the problem or which have not. There are 3 common types of analytical studies. They are:

- A. Cross-Sectional comparative Studies
- B. Cohort Studies
- C. Case Control

A. CROSS-SECTIONAL COMPARATIVE STUDIES

Many cross sectional surveys focus on comparing as well as describing group for example a survey on malnutrition.

1. May wish to establish the percentage of malnourished
2. May establish socio-economic, physical, political variables that influence the availability of food.
3. Feeding practices
4. The knowledge beliefs, opinions that influence such practices

The researcher would not only describe these variables but by comparing malnourished children with where malnourished children , he or she would try to determine which socio-economic, behaviour and their dependent variables have contributed to malnourishment

B. CASE CONTROL STUDY:

In case of a control study, the investigator compared one group among whom a problem is present example malnutrition, smoking, anemia, hypertension, TB with another group called a Control or comparison group where the problem is absent, to find out what factors have contributed to the problem.

For example, in a study of the causes of neonatal death, the investigator selects his cases are children who died within the 1st month of life and the control children who survive their 1st month of life. He then interviews

their mothers to compare the history of these two groups of children to determine whether certain risk factors are more prevalent among the children who died than among those children who survived.

C. COHORT STUDY

In a cohort study, a group of individual that is exposed to a risk factor (study group) is compared with a group of individual not exposed to the risk factors (control group). The researcher follows both groups over time and compare the occurrence of the problem that he or she expects to be related to the risk factors in the 2 groups to determine whether a greater proportion of those with risk factors are indeed affected.

An example of a cohort study is a study of smokers and non-smokers conducting to determine the importance of smoking as a risk factor for developing lung cancer or a study of fertile and infertile women to determine the importance of STD as a cause of infertility. A study may start with one large cohort.

It is possible to use a 3 type analytical study i.e. cross sectional comparison, case study or cohort to investigate possible cases of a problem. For example, if you assume there is a causal-relationship between the uses of certain water resources and the incidence of diarrhea among a group of children in a village with direct water source.

1. You can select a group of children under-5 years and check at regular interval, say every 2 weeks whether the children have had diarrhea and how serious it was. Children using the expected source and those using the other sources of water supply would be compared to the incidence of diarrhea (Cohort Study).
2. You can also conduct a case control study for example you may compare children who present themselves at a health centre with diarrhea (cases) during a particular period of time with children presenting themselves with other complaints of roughly the same severity like acute respect infection (control) during the same time and determine the source of water they had used.
3. In a cross sectional comparative study, you could interview mothers to determine how often their children have had diarrhea during for example the past months, obtain information on their sources of drinking water and compare the source of drinking water of children who did and did not have diarrhea.

Each detail explanation carry 1mark = 9marks +1 bonus mark for a candidate with good presentation (neat) =10marks

(b) **A research problem is the situation that causes the researcher to feel apprehensive, confused and ill at ease. It is the demarcation of a problem area within a certain context involving the WHO or WHAT, the WHERE, the WHEN and the WHY of the problem situation.**

There are many problem situations that may give rise to social investigation. (4marks)

(c) Four issues that must be taken into consideration when stating your research objectives are:

-) It must cover the different aspects of the problem and its contributing factors in a **coherent** way and in a **logical sequence**;
-) They must be **clearly phrased** in **operational terms**, specifying exactly what you are going to do, where, and for what purpose;
-) They are **realistic thereby** considering the local conditions; and
-) They use **action verbs** that are specific enough to be evaluated.

Each point carry 1.5mk x 4points = 6mks

4 (a) Research design refers to the strategy to integrate the different components of the research project in a cohesive and coherent way in order to address a defined set of questions. It is the theory that decides what can be observed and it is also contingent upon the research problem as well as the objectives of the study. It propels the kind of data collection procedures to be employed and dictates the expected analytical procedures to be used. Research design provides the glue that holds the research project together. (5marks)

(b) The issues that are connected to research design include:

1. **Experimental Designs:** that use random assignment to groups or programs. **An experiment** is a cohort (group of subjects) study in which the investigator manipulates the predictor variable-otherwise called the treatment, program or intervention-and then observes the outcome. One group received the treatment and the other does not. (4marks)
2. **Quasi-experimental designs** that doesn't use random assignment. **A Quasi-Experimental design** is one in which the treatment comparison groups are not assigned by randomization. For example, a study of difference in comprehension ability between Part IV undergraduates and Pry VI students is a quasi-experimental design. This is because pronounced / visible dissimilarities already exist between the groups hence true cause of the difference could not be ascertained. Comparison between disable and able individuals falls into this category also. It is not too suitable in social investigation though it is very cheap. (5marks)
3. **Non-Experimental** is a research design where there is no control group. It is very strong for descriptive research especially for one-shot survey design. (2marks)

Reasons for Undertaking Non-Experimental Studies

-) Some number of human characteristics / independent variables are not subject to experimental manipulation or randomization
-) Some variables cannot ethically be manipulated.
-) For some research, it is not practically possible to conduct a true experiment
-) It is more realistic to explore some phenomena in their natural manner

Each point carry 1mark = 4marks

Total= 15marks

5(a) The preparations involved in planning a community research are:

(10marks)

- Visiting the community Chief or traditional ruler by the researcher and motivating him through gift items
- Soliciting for the cooperation of the community members through their leader
- Intimating the community leader with the topic of the research
- Emphasize on the benefits of the research to the community
- Booking new appointment date with community leader for the conduct of survey.

- The researcher familiarizes himself/herself with the appointed key-informants; who will assist him and his team on the day of interviews.

Tick 5 points with explanation, each point=2mks; Total=10mks

(b) The major challenges faced in planning any research include:

I. Objective and Resources

This implies the goal of the study and it is necessary to state the objectives precisely. It has to go beyond a statement of broad aims. The initial stage of problems should explain why a survey is being done, the types of questions it intends to cover and the kinds of results expected and what one expects the survey to achieve. One's objectives must merge with the men and materials available. It is expedient to ensure that the available resources are not spread too thinly to prevent the survey from achieving its stated objectives.

II. Coverage

One has to define the population to be covered, the sample units to be used, the geographical and socio-demographical factors deciding whether the coverage is full or partial and a method of selecting the potential respondents worth considering properly before embarking on the study.

Sampling frame could be a voter register, list of matriculated students. The researcher needs to decide how to deal with the problem of non response due to refusal or non-contact. However, the problem of non-response is almost inevitable but can be reduced to minimum through follow-up and reminder.

III. Data Collection

The choice of method of data collection is influenced by the subject matter of the research. It also depended on the unit of enquiry and the scope of the survey.

Some surveys may adopt observation method or personal interviews or combination of both. Each approach has its strength and weakness.

IV. Errors:

Planning as a rational combination of technique and organizational intuition should recognize omnipresent of errors. The problems and how to limit their occurrence effect on result should be anticipated and guarded against.

V. Fieldwork

The issue of staff recruitment, training, instruction, reward system, field supervision should be determined in advance.

VI. Documents

Proper arrangement to be made on how to complete the questionnaires, interview record sheets, instructions and manuals and their proper documentation

VII. Timing of the Survey

Every survey should be time bound. Survey is not indefinite. It always has the commencement time and the final result time. Also the appropriate time to contact the respondents should be planned so that researcher would not encroach on their leisure hours. Timing also refers to the update of the sampling frame. For example it will be out of date to be using data of student enrolment in 1960 for a study of 2007. Three year or less would be appropriate.

VIII. Cost

Cost of sample selection, printing, sundry expenses and the collection of questionnaire and other sundry expenses should be well estimated and ensure it is within the budget.

IX. Staffing

Social surveys especially large ones, who require personnel of varying skills such as psychologists, economists, statisticians, computer experts etc. All these are to be properly considered.

Each detail explanation carry 1mark = 9marks +1 bonus mark for a candidate with good presentation (neat) =10marks

TOTAL =70 MARKS

COVENANTUNIVERSITY

CANAANLAND, KM 10, IDIROKO ROAD

P.M.B 1023, OTA, OGUN STATE, NIGERIA

TITLE OF EXAMINATION: B.SC EXAMINATION

COLLEGE: COLLEGE OF BUSINESS STUDIES

SCHOOL: SCHOOL OF SOCIAL SCIENCE

DEPARTMENT: ECONS & DEV. STUDIES

SESSION: 2014/2015 CREDIT UNIT: 2

COURSE CODE: DSS 315

SEMESTER: ALPHA

COURSE TITLE: STATISTICAL DATA PROCESSING 1

INSTRUCTION: ANSWER QUESTION 1 AND ANY OTHER TWO QUESTIONS

QUESTION 1

The tables below are outputs from SPSS, kindly answer the following questions with respect to the tables.

- What statistical technique output is presented below? **(2 marks)**
- What are the dependent and independent variables? **(3 marks)**
- How are the variables measured? **(5 marks)**
- By careful observation, identify what this analysis seeks to address. **(5 marks)**
- Interpret the tables accordingly by using the right statistical terms: **(15 marks)**

Total children ever born

	Sum of Squares	df.	Mean Square	F	Sig.
Between Groups	64759.282	3	21586.427	2873.814	.000
Within Groups	292524.810	38944	7.511		
Total	357284.093	38947			

Post-hoc Test: Multiple Comparison

(I) Highest educational level				95% Confidence Interval
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	(J) Highest educational level	Mean Difference (I-J)	Std. Error	Sig.	Lower Bound	Upper Bound
No education	Primary	.490	.040	.000	.39	.59
	Secondary	2.731	.033	.000	2.65	2.81
	Higher	2.726	.051	.000	2.60	2.86
Primary	No education	-.490	.040	.000	-.59	-.39
	Secondary	2.241	.040	.000	2.14	2.34
	Higher	2.236	.056	.000	2.09	2.38
Secondary	No education	-2.731	.033	.000	-2.81	-2.65
	Primary	-2.241	.040	.000	-2.34	-2.14
	Higher	-.005	.051	1.000	-.13	.13
Higher	No education	-2.726	.051	.000	-2.86	-2.60
	Primary	-2.236	.056	.000	-2.38	-2.09
	Secondary	.005	.051	1.000	-.13	.13

(Sub-total 30 marks)

QUESTION 2

- What is Statistics? (2 marks)
 - Explain with examples four relevance of statistics to the field of demography. (8 marks)
 - A researcher administered 100 copies of questionnaire on a particular area of interest. Clearly identify and explain the steps he/she must take to make informed decisions on the data collected. (10 marks)
- 20 marks

QUESTION 3

Differentiate the following terms with examples:

- Continuous and Categorical variables (4 marks)
- Parametric and Non-parametric techniques (4 marks)
- Open-ended and Closed questions (4 marks)
- Data and Variable (4 marks)
- Longitudinal and Cohort study (4 marks)

20 marks

QUESTION 4

- The table below is an output of _____ analysis (3 marks)
- What is the purpose of conducting this analysis? (5 marks)
- Interpret the table below: (12 marks)

Type of place of residence * Highest educational level

	Highest educational level				Total
	No education	Primary	Secondary	Higher	

Urban	Count	2317	2570	7853	2805	15545
	% within Type of place of residence	14.9%	16.5%	50.5%	18.0%	100.0%
Rural	Count	11423	4534	6554	892	23403
	% within Type of place of residence	48.8%	19.4%	28.0%	3.8%	100.0%
Total	Count	13740	7104	14407	3697	38948
	% within Type of place of residence	35.3%	18.2%	37.0%	9.5%	100.0%

20 marks

QUESTION 5

- a.) What is measurement with respect to the field of statistics? **(4 marks)**
 - b.) Mention and explain with relevant examples the four types of measurement. **(12 marks)**
 - c.) Explain the relationship between measurement level and statistical techniques. **(4 marks)**
- 20 marks**

MARKING GUIDE

Question 1

- a.) The statistical technique output presented is “One-way ANOVA”, which is a parametric technique. **(2 marks)**
- b.) **Dependent Variable:** Children Ever Born **(1½ marks)**
Independent Variable: Mother’s Highest Educational Level **(1½ marks)**
- c.) **Dependent variable:** This is a continuous variable and was measured on a ratio scale
Independent variable: This is a categorical variable and was measured on nominal scale
(2 ½ marks each = 5 marks)
- d.) The purpose of the analysis is to identify the effect of mother’s education on the number of children they have ever born. That is, differences in number of children ever born by women as influenced by their various categories of education. **(5 marks)**
- e.) **Interpretation:**
The first table is called the ANOVA table. Here, the F-statistic is the focus of interest. The sig-value of the F-statistic shows that the categories of the independent variable are significantly different (p-value= 0.000), hence, we proceed to the post-hoc table. The post-hoc table shows us the interplay that exist among the categories of the independent variable in influencing the dependent variable. In respect to mothers who had no education, the result shows that mothers who had no education have 1 child more than those who had primary education and 3 more children than mothers who had secondary and higher education.

Also, mothers with primary education were reported to have 2 children less than those who had no education, but had 2 children more than mothers who had secondary and higher education. Furthermore, mothers with secondary education had 2 and 3 children less than the number of children of mothers who had primary and no education respectively. Finally, there is little or no difference between number of children of mothers with secondary education and those who had higher education. This could be due to the fact that higher education in this context could mean vocational schools, college of education, polytechnic and not necessarily university. In this case, the level of understanding of mothers with secondary education and those who might fall within the categories mentioned under higher education may not be too different as regards fertility behaviour and family planning, compared with those who actually had university education.

(15 marks)

(Sub-total = 30 marks)

Question 2

- a.) It is the development and application of a body of methods and theories for collection, organization, presentation, analysis and interpretation of data for the purpose of making better decisions.
- Statistics is the mathematical science involved in the application of quantitative principles to the collection, analysis, and presentation of numerical data (Dept. of Statistics- The Florida State University).
 - Statistics as a discipline is the development and application of methods to collect, analyze and interpret data. Modern statistical methods involve the design and analysis of

experiments and surveys, the quantification of biological, social and scientific phenomenon and the application of statistical principles to understand more about the world around us. (Dept. of Statistics- University of Nebraska- Lincoln)

(2 marks for definition)

b.) Uses of Statistics in the Field of Demography

1. Statistics helps in providing a better understanding and exact description of events such births, deaths and migration in the field of demography.
2. Statistics helps in proper and efficient planning of a statistical inquiry in any of the major areas of focus or interest in demography.
3. Statistics helps in collecting an appropriate quantitative data.
4. Statistics helps in presenting complex data in a suitable tabular, diagrammatic and graphic form for an easy and clear comprehension of the data.
5. Statistics helps in understanding the nature and pattern of variability of a phenomenon through quantitative observations.
6. Statistics helps in drawing valid inference, along with a measure of their reliability about the population parameters from the sample data.

(2 marks each for any 4 points = 8 marks)

c.) Steps that must be taken to make informed decision

Data Entry and Coding: This is the next stage after the questionnaire has been administered by the interviewer. This is the act of entering/ inputting the information provided by the respondents on the questionnaire into a statistical software for further computation. In cases where the categories of the variable were not pre-coded, during the process of entry this is done.

Data processing: This is done in order to ensure consistency in the pattern in which the respondent answered the questions and to correct inconsistency where necessary.

Data Analysis: This is the process of subjecting the data for statistical computation or manipulation through estimation techniques for meaningful use.

Data Interpretation: After the analysis has been done, the next stage is to provide meanings to the results or explain the outputs for informed decision making.

Data Presentation: After the interpretation, the researcher must present or organize the results in a logical and meaningful way for the proper understanding of the end-users.

(10 marks)

(Sub-total = 20 marks)

Question 3

a.) Continuous variables are numeric or metric in nature and can be measured on ratio or interval scale. They are generated through open ended questions. Examples are: height, CGPA, weight, age in years, etc. While categorical variables are non-metric in nature and can be measured on nominal or ordinal scale. They are majorly generated through closed ended questions. They can also be called grouped variables. Examples are: Gender (Male-1, Female-2); Religion (Christianity-1, Islam-2, Traditional-3), Place of Residence (Urban-1, Rural-2), etc. **(4 marks)**

b.) Parametric techniques are techniques that involves the use of continuous dependent variable, while non-parametric techniques are those techniques that uses categorical dependent variable. Examples of parametric techniques are ANOVA, Regression,

Correlation, etc., while Chi-square, Kruskal Wallis rank test, Spearman Rank test, etc. are examples of non-parametric. (4 marks)

- c.) Open-ended questions are those types of questions that allow respondents to express themselves freely. Respondents are at liberty to make their opinion known about a subject matter. Examples of such questions are: How many children do you think is ideal for a family? In your own opinion, what is the performance of the health care service in your locality? Closed-ended questions are questioned that provide the respondents with options. Examples of such are: Marital Status _____ 1.) Single 2.) Married 3.) Separated 4.) Others; Place of Residence _____ 1.) Rural 2.) Urban (4 marks)
- d.) Data are body of facts and figures, while variable is anything that can assume any value. Variable can also be defined as the characteristics of the population of interest. Examples of data are Scores of 5 students in a mathematics test which can be represented as: 10, 13, 14, 9, 12 (these are figures), I do not believe in Sharia law, I have two children (these are facts); Examples of Variables are: features of students in Demography 300 level can be represented as: male, female, Christian, never married, etc. (4 marks)
- e.) Longitudinal surveys gather information at different points in time in order to study changes over extended periods of time, while in cohort study a specific population whose members changed over the duration of the study is followed over a length of time. Example of longitudinal survey can be collection of information on fertility behavior of population, mortality rate, migration rate, etc. in order to monitor changes and the patterns. Examples of cohort study can be a study of women who entered marital union the same year who were being monitored until they ended up their child bearing years.

(4 marks)

(Sub-total = 20 marks)

Question 4

- a.) This is a Cross Tabulation analysis. (3 marks)
- b.) The purpose is to know the association that exist between the place of residence of respondents and their highest educational attainment. (5 marks)
- c.) **Interpretation:** The table shows that 15 percent of the respondents who stayed in the urban centres had no education, while 17 percent, 51 percent and 18 percent had primary, secondary and higher education respectively. Furthermore, 49 percent of the respondents who lived in the rural areas had no education, 19 percent, 28 percent and 4 percent had primary, secondary and higher education respectively. (12 marks)

Question 5

- a.) Measurement is the act of assigning numerals to variables according to rules. (4 marks)
- b.) Nominal Level
Ordinal Level
Interval Level
Ratio Level

Nominal Level of Measurement

The nominal level of measurement is the lowest of the four ways to characterize data. Nominal means "in name only" and that should help to remember what this level is all about. Nominal data deals with names, categories, or labels.

Data at the nominal level is qualitative. Colors of eyes, yes or no responses to a survey, and favourite breakfast cereal all deal with the nominal level of measurement. Example: Gender- 1) male 2) Female. (3 marks)

Ordinal Level of Measurement

The next level is called the ordinal level of measurement. Data at this level can be ordered, but no differences between the data can be taken that are meaningful. Here you should think of things like a list of the top ten cities to live. The data, here ten cities, are ranked from one to ten, but differences between the cities don't make much sense. There's no way from looking at just the rankings to know how much better life is in city number 1 than city number 2. Another example of this are letter grades. You can order things so that A is higher than a B, but without any other information, there is no way of knowing how much better an A is from a B. As with the nominal level, data at the ordinal level should not be used in calculations. (3 marks)

Interval Level of Measurement

The interval level of measurement deals with data that can be ordered, and in which differences between the data does make sense. Data at this level does not have a starting point.

The Fahrenheit and Celsius scales of temperatures are both examples of data at the interval level of measurement. You can talk about 30 degrees being 60 degrees less than 90 degrees, so differences do make sense. However 0 degrees (in both scales) cold as it may be does not represent the total absence of temperature. Data at the interval level can be used in calculations. However, data at this level does lack one type of comparison. Even though $3 \times 30 = 90$, it is not correct to say that 90 degrees Celsius is three times as hot as 30 degrees Celsius. (3 marks)

Ratio Level of Measurement

The fourth and highest level of measurement is the ratio level. Data at the ratio level possess all of the features of the interval level, in addition to a zero value. Due to the presence of a zero, it now makes sense to compare the ratios of measurements. Phrases such as "four times" and "twice" are meaningful at the ratio level. Distances, in any system of measurement give us data at the ratio level. A measurement such as 0 feet does make sense, as it represents no length. Furthermore 2 feet is twice as long as 1 foot. So ratios can be formed between the data. At the ratio level of measurement, not only can sums and differences be calculated, but also ratios. One measurement can be divided by any non-zero measurement, and a meaningful number will result. (3 marks)

- c.) The statistical technique used in analysing the data is a function of the level of measurement that generated the data set. Nominal and Ordinal data—descriptive & non-parametric statistic. E.g. Frequencies, mode, median, Chi-Square, Spear-man Rank correlation etc. Interval and Ratio data—descriptive, non-parametric & parametric statistic. E.g. Student t test, ANOVA, Regression, Correlation, etc. (4 marks)

(Sub-total = 20 marks)

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TITLE OF EXAMINATION: B. Sc. DEGREE EXAMINATION

COLLEGE:CBSSSCHOOL: SOCIAL SCIENCES.

DEPARTMENT: ECONOMICS& DEV'T STUDIES

PROGRAM: DEMOGRAPHY&SOCIAL STATISTICS

SESSION:2014/2015SEMESTER: ALPHA EXAMINATION

COURSE CODE: DSS 317

COURSE TITLE: INTRODUCTION TO CARTOGRAPHY

Time Allowed: 2hrs

Date: 24thNovember, 2014

Instructions:Answer All Questions In Section Aandany TWOIn Section B.

SECTION A- PRACTICAL SECTION

INSTRUCTION:Study the attached Oranre District Map and use it to answer questions 1-10. This section carries 40 marks because each question carries four (4) marks. Answer all questions in this section and all workings must be clearly shown.

1. Use the linear scale under the map to determine the scale of the map in representative fraction.
2. Calculate the area of Oranre District Map
3. Calculate the actual distance by road from Ajigba to Ogba
4. What is the angular bearing of Ogba from Oranre?
5. What is the approximate gradient of River Ohun between points X and Y?
6. The feature marked Z can best be described as and why?
7. What is the direction of River Ohun from River Oyi?
8. What is the ground distance between settlements Ajigba and Aru as crow flies, taking your measurement from their settlement locations?
9. Reduce the map of Oranre District twice its original size and include the largest town in the map where it should be. Show all workings clearly.
10. Mention any four (4) occupations likely to be engaged in by the inhabitants of Oranre District.(Total Marks = 40 marks)

SECTION B

INSTRUCTION:Answer any two(2) questions of your choice in this section. Each question carries 15 marks

Question1. Topographical maps are like useless or meaningless pieces of paper without conventional signs. Discuss (15marks)

2a) What is Cartography and why is it a science, a technology and an art? (7marks)

b. What is the difference between map and map reading? (3mark)

c. Highlight any five (5) reasons for map reading (5marks)

3. Write short notes on each of the following (3marks each)

a) Knol

b) Trigonometrical station

c) Alluvial plain

d) Spur

e) Cuesta

MARKING GUIDE

1i). Causes of Population growth in Africa (10 marks): Poverty, Poor or non-health education, growth and expansion of med services, Low status of women, Lack of social security, High value of children, Cultural tenets, High population size and population growth rate, Unfavorable age/young structure of population and population momentum, High TFR, contraception use, Improvement in mortality decline, Low age at marriage/early marriage.

ii). World major resource regions and characteristics (10 marks):-

1. Equatorial Regions- consists of i) Equatorial lowland region, and ii) Equatorial highland region.
Cctics- temp. is high and heavy rainfall, trees grow close together and creepers and parasitic plants exist, thick forests with trees such as ebony, mahogany, teak, oil palm, rubber, monkeys, apes, snakes, tiger, leopards, elephants are common. Some parts of equatorial region have tin, bauxite, manganese, uranium among others.
2. Tropical regions- consists of i) Tropical Monsoon region, ii) Tropical Grassland region, iii) Tropical desert region, and iv) Tropical rain forest region.
Cctics:- Seasonal or periodical winds and rainfall occurs in summers and winters are dry. Rainfall is uncertain and unevenly distributed depending on relief features, some areas have heavy rainfall, some have moderate and others have scanty rainfall. Summers are hot and winters are warm to hot. Temperature varies bw 27 and 32 deg. Centigrade and from place to place. Vegetation varies from place to place, though similar to that of the equatorial region, though forests are not so dense as those found in the equatorial region. Lions, elephants, etc are present along with cattle, horses, sheep, goats, buffaloes are present.
3. Warm Temperate Regions – consists of i) Warm temperate west marginal region, ii) warm temperate east marginal region, and iii) Temperate desert region.
Cctics:- Bw arid and humid climate, associated with winter rainfall and drought in summer, rainfall is moderate and summers are hot with temps over 21 and 27 deg centigrade. Vegetation consists of trees such as cedar, cork oak, mulberry, cypress, grapes, oranges, lemons, carrots, etc. pigs, cattle, sheep, monkeys, goats, etc are common.
4. Cool Temperate Regions – consists of -i) Temperate oceanic region, ii) Cool temperate east marginal region, and iii) Cool temperate grassland region.
Cctics:- Has warm summers below 16 deg C and cool winters of around 7 deg.C. Rainfall occurs throughout the year, average annual rainfall being 50cm and 75cm. Vegetation is forest, and deciduous forests grow in the warm lowlands. Trees like pine oak, elm, beech are found. Coniferous forests inhabited by many fur-bearing animals. Grass is short soft and juicy and makes good feed for domestic animals such as cattle, sheep, goat, pigs are reared.
5. Cool Temperate and Polar regions- consists of - i) Coniferous forests regions, and ii) Cold deserts or Tundra Type.
Cctics:- winters are long and severe and summers are short and warm. Rainfall is scanty as that of desert region. Trees have needle shaped and hanging leaves, very coarse and tough like leather. The trees yield soft light timber of great commercial value. Fur-bearing animals such as arctic foxes, wolves, squirrels, deer, silver fox among others are found in this region.

iii). Usefulness and criticisms of DT Theory (10 marks)

Usefulness- i. It does not lay emphasis on food supply nor develops a pessimistic outlook towards population growth.ii) It is based on the actual population growth trends of the developed countries of Europe.

Its criticisms

1. Sequences of stages not uniform of DT stages have not been uniform. Examples in some east and south European countries, Spain in particular the fertility rates declined even when mortality rates were high. Even in America, the growth rate of population was higher than in the second and third stage of demographic transition.
2. Birth rate not declined initially in urban areas note steins assertion that the birth rate in Europe has not been supported by empirical evidence. Countries like Sweden and France with predominantly rural populations experienced decline in birth rates to the same extent as countries like Great Britain with predominantly urban populations.

3. Explanation of birth rate decline vary- the theory fails to give the fundamental explanations of decline in birth rates in western countries. In fact the causes of decline in birth rate are so diverse that differ from country to country.

2a) Essence of census trial exercise (10 marks).

Trial census is an exercise to evaluate the state of readiness and hiccups wrt the main census exercise. It is done in only designated local govt areas and states of the federation. The essence entails:- creates awareness about the main exercise, to perfect the instrument, EADs, test if time allocation is alright, boost enlightenment campaign, examine the level of coop from the masses, examine the various sensitization and mobilization efforts of both the local and state govts respectively, to size the overall state of readiness of the exercise. Successful trial census strengthens the commitment of donor agencies and boosts the confidence of international community on the main exercise.

b). Discuss the procedure for the conduct of census(10 marks)

1. The planning stage – this is the planning and preparation phase, very critical to the success of the whole exercise. The purpose and methodology of the census are determined along the main strategic decisions made. Here enumeration area demarcation/delineation of the country into enumeration areas is agreed, the scope, census instrument-questionnaire is developed taking into account past experience, several fora of all stakeholders are arranged. Also included in this phase are recruitment and training of enumerators, supervisors and other personnel, house listing and numbering, pretest and trial census.

2. Logistic and Publicity stage- complex logistic preparation (i.e procurement, mgt and deployment of equipment, materials and personnel) is ensured and public enlightenment campaign effected to ensure awareness cooperation of the public.

3. Collecting the Data

Identification of respondents, methods of enumeration- canvasser/direct interview or householder/self-examination, special groups- people living in inaccessible jungles/mountains/riverine areas.

4. Result Stage-producing the results including, receipt, processing, estimation, analysis, publication and dissemination/distribution of the census data/results. This is a long and complex. Some of the activities at this stage are (i) preparation of the final file of the census data (including receipt of the information, identification and correction of errors, editing of the data collected, imputation of missing data and calculation of estimates; (ii) production/publishing and distribution of census results and finally (iii) conducting activities of data assessment and extent of coverage of the population and the quality of the information produced.

3a) Resource exploitation (10 marks)-Capital intensive nature of resource exploration, low technology, lack of skilled manpower, lack of equipment, Poverty status, level of development, government policy, etc

b) Candidate should state 5 countries in each region of Africa (10 marks): - Northern Africa, Western Africa, Eastern Africa, Middle Africa and Southern Africa.

4a). Implications of rapid pop growth on forest resources (10 marks)- acceleration of depletion of forests, more fuel wood increase consumption of non-renewable minerals resources, deplete agric land and food productivity, affects environmental conditions, leads to severe land fragmentation, increase water demand leading to chronic water shortages, leads to deforestation and loss of biodiversity, endangers plant species, global warming, increase CO₂ in atmosphere, leads to soil erosion, flooding, loss of habitat, leads land degradation, over-utilization of forest resources, etc

b). Dumont's Theory (10 marks) Arsene Dumont (1849-1902) has propounded the theory of social capillarity. This is a sociological theory based on physical rise of water in a tube. The theory was an attempt at offering an explanation for the decline in fertility during a period of social and economic development. Dumont studied the growth of population in France in the late part of the 19th century and found that the reason for low fertility in France was high intellectual and aesthetic development. According to him, the development of number in a nation is in inverse ratio to the development of individual from the lower to the upper class or the urge to rise in social scale. The individual tends to rise to higher levels in his social environment in process similar to physical capillarity. He compared this urge to the inevitable physical law of nature -the force of capillarity. It is known that under this force, a liquid rises faster in a very thin tube than in a wide tube. The liquid in a narrow tube has an advantage over the liquid in a wide tube, in the sense that it can rise higher. Similarly, in the matter of rising in the social scale, a person least burdened with unnecessary burdens that is a person with a small family will rise faster in the social scale. Just as a column of liquid has to be thin in order to rise under the force of capillarity, so a family must be small in order to rise in the social scale. In other words, every individual wants to achieve higher economic and social status. For this, a small family is imperative, because one cannot climb high on the social ladder with the burden of more children on its back. When an individual earns more income and wealth, his ambition for better position and higher social prestige goes up and consequently the number of children decreases. Therefore, in a civilized society due to social capillarity, fertility goes down. When people migrate to cities from rural, their fertility declines. Thus social capillarity has direct relation with social development, and their birth rate and social capillarity are inversely related to each other. According to him, the birth rate in rural areas is high while it is low in urban areas. The reasons for high birth rate in rural areas are poverty, illiteracy,

orthodoxy and lack of vigour. Whereas the reasons for low birth rate in urban areas are peoples' ambition for vertical mobility, liberal environment, high standard of living, more income and wealth, capacity of rational thinking, high socio-economic status of women, progressive ideals, high cost of living, the desire of middle class to move into the upper class.

Criticisms:

1. Dumont's view that low birth rate leads to high position in the society is not true because besides birth rate, other factors like social, economic, political, etc are responsible for moving upward in society. 2. It cannot be accepted as a universal truth as the number of children or the size of family has no direct relation to the low or high position in the society. 3. The theory is not applicable to underdeveloped societies. 4. Dumont's principle is not a complete population theory because social capillarity is one of the motives that can lead to reduction in birth rate. 5. Dumont's assertion that socialism leads to the destruction of social capillarity has been proved wrong. This is because even in a socialist community like China people are following the social Capillarity principle on the social ladder and are reducing fertility.

5a) Explain Malthusian Theory (10 marks) Malthus talked about population growth and agricultural production which were at variance. Born on February 14 or 17, 1766 in Surrey, England, Thomas Malthus was educated at home and entered Jesus College at Cambridge at the age of 18. In 1793, he became a fellow of this College and in 1797 took the holy orders. In 1804, the year of his marriage, he was appointed professor of History and political Economy at the Haileybury College of the East India Company. He was father of three children He died in 1834. Thomas Malthus argued that because of the natural human urge to reproduce human population increases geometrically (1, 2, 4, 16, 32, 64, 128, etc.) and food supply increases arithmetically (1, 2, 3, 4, 5, 6, 7, etc.). Therefore, since food is an essential component to human life, population growth if unchecked, would lead to starvation. Malthus also recognized that there are powerful checks which were constantly in operation to obstruct population growth, and classified them as preventative checks and positive checks. The preventive checks- late marriage, chastity, moral restraint, etc.- prevention of birth of children and positive checks are vice, misery, war, plague famine, floods, etc. These are factors which tended to shorten human life, brought about by both natural causes and mankind.

Invariably, Malthus population theory is based on 3 postulations, namely
 i. Food is essential for man's existence,
 ii. Passion for high procreation, and

iii law of diminishing returns in agriculture.

1. Population increases in geometrical progression- 1,2,4,8,16,32,64, 128, etc
2. Food supply increases in arithmetical progression, 1,2,3,4,5,6,7, etc.

2. The scenario create imbalance as population tends to outrun food supply, leading to overpopulation.
3. To be corrected:
 - a. Preventive checks- late marriage, chastity, moral restraint, etc.- prevention of birth of children.
 - b. Positive checks- vice, misery, war, plague famine, floods, etc. These are factors which tended to shorten human life, brought about by both natural causes and mankind.

Criticisms

1. Placed undue emphasis on the limitation of the supply of land without envisaging the increase in technological advances-precision agriculture, development of new resistant crops, etc., expansion of the market economy.
2. Under estimated the importance of industrial development, transportation and new markets for manufactured goods.
3. Failed to grasped the possibility of the widespread use of contraceptives

b). Stemming pop growth in Africa (10 marks) -Enhance female education, raising of status of women, increase age at marriage and curbing of early marriage practice, adoption of family planning, policy on immigration, liberalize abortion laws, improve health services, reduction in poverty, banning of child labour, improve living standards, active population policy, etc

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COLLEGE: BUSINESS AND SOCIAL SCIENCES

SCHOOL: SOCIAL SCIENCES

DEPARTMENT: ECONOMICS & DEV'T STUDIES

SESSION: 2014/2015

SEMESTER: ALPHA

COURSE CODE: DSS 318

CREDIT UNIT: 2

COURSE TITLE: POPULATION GEOGRAPHY 1

COURSE COORDINATOR: DR AZUH DOMINIC

COURSE LECTURERS: DR AZUH DOMINIC

MARKING GUIDE

1i). Causes of Population growth in Africa (10 marks): Poverty, Poor or non-health education, growth and expansion of med services, Low status of women, Lack of social security, High value of children, Cultural tenets, High population size and population growth rate, Unfavorable age/young structure of population and population momentum, High TFR, contraception use, Improvement in mortality decline, Low age at marriage/early marriage.

ii). World major resource regions and characteristics (10 marks):-

6. Equatorial Regions- consists of i) Equatorial lowland region, and ii) Equatorial highland region.
Cctics- temp. is high and heavy rainfall, trees grow close together and creepers and parasitic plants exist, thick forests with trees such as ebony, mahogany, teak, oil palm, rubber, monkeys, apes, snakes, tiger, leopards, elephants are common. Some parts of equatorial region have tin, bauxite, manganese, uranium among others.
7. Tropical regions- consists of i) Tropical Monsoon region, ii) Tropical Grassland region, iii) Tropical desert region, and iv) Tropical rain forest region.
Cctics:- Seasonal or periodical winds and rainfall occurs in summers and winters are dry. Rainfall is uncertain and unevenly distributed depending on relief features, some areas have heavy rainfall, some have moderate and others have scanty rainfall. Summers are hot and winters are warm to hot. Temperature varies bw 27 and 32 deg. Centigrade and from place to place. Vegetation varies from place to place, though similar to that of the equatorial region, though forests are not so dense as those found in the equatorial region. Lions, elephants, etc are present along with cattle, horses, sheep, goats, buffaloes are present.
8. Warm Temperate Regions – consists of i) Warm temperate west marginal region, ii) warm temperate east marginal region, and iii) Temperate desert region.
Cctics:- Bw arid and humid climate, associated with winter rainfall and drought in summer, rainfall is moderate and summers are hot with temps over 21 and 27 deg centigrade. Vegetation consists of trees such as cedar, cork oak, mulberry, cypress, grapes, oranges, lemons, carrots, etc. pigs, cattle, sheep, monkeys, goats, etc are common.
9. Cool Temperate Regions – consists of -i) Temperate oceanic region, ii) Cool temperate east marginal region, and iii) Cool temperate grassland region.
Cctics:- Has warm summers below 16 deg C and cool winters of around 7 deg.C. Rainfall occurs throughout the year, average annual rainfall being 50cm and 75cm. Vegetation is forest, and deciduous forests grow in the warm lowlands. Trees like pine oak, elm, beech are found. Coniferous forests inhabited by many fur-bearing animals. Grass is short soft and juicy and makes good feed for domestic animals such as cattle, sheep, goat, pigs are reared.
10. Cool Temperate and Polar regions- consists of - i) Coniferous forests regions, and ii) Cold deserts or Tundra Type.
Cctics:- winters are long and severe and summers are short and warm. Rainfall is scanty as that of desert region. Trees have needle shaped and hanging leaves, very coarse and tough like leather. The trees yield soft light timber of great commercial value. Fur-bearing animals such as arctic foxes, wolves, squirrels, deer, silver fox among others are found in this region.

iii). Usefulness and criticisms of DT Theory (10 marks)

Usefulness- i. It does not lay emphasis on food supply nor develops a pessimistic outlook towards population growth.ii) It is based on the actual population growth trends of the developed countries of Europe.

Its criticisms

1. Sequences of stages not uniform of DT stages have not been uniform. Examples in some east and south European countries, Spain in particular the fertility rates declined even when mortality rates were high. Even in America, the growth rate of population was higher than in the second and third stage of demographic transition.
2. Birth rate not declined initially in urban areas note Steins assertion that the birth rate in Europe has not been supported by empirical evidence. Countries like Sweden and France with predominantly rural populations experienced decline in birth rates to the same extent as countries like Great Britain with predominantly urban populations.
3. Explanation of birth rate decline vary- the theory fails to give the fundamental explanations of decline in birth rates in western countries. In fact the causes of decline in birth rate are so diverse that differ from country to country.

2a) Essence of census trial exercise (10 marks).

Trial census is an exercise to evaluate the state of readiness and hiccups wrt the main census exercise. It is done in only designated local govt areas and states of the federation. The essence entails:- creates awareness about the main exercise, to perfect the instrument, EADs, test if time allocation is alright, boost enlightenment campaign, examine the level of coop from the masses, examine the various sensitization and mobilization efforts of both the local and state govts respectively, to size the overall state of readiness of the exercise. Successful trial census strengthens the commitment of donor agencies and boosts the confidence of international community on the main exercise.

b). Discuss the procedure for the conduct of census(10 marks)

1. The planning stage – this is the planning and preparation phase, very critical to the success of the whole exercise. The purpose and methodology of the census are determined along the main strategic decisions made. Here enumeration area demarcation/delineation of the country into enumeration areas is agreed, the scope, census instrument-questionnaire is developed taking into account past experience, several fora of all stakeholders are arranged. Also included in this phase are recruitment and training of enumerators, supervisors and other personnel, house listing and numbering, pretest and trial census.

2. Logistic and Publicity stage- complex logistic preparation (i.e procurement, mgt and deployment of equipment, materials and personnel) is ensured and public enlightenment campaign effected to ensure awareness cooperation of the public.

3. Collecting the Data

Identification of respondents, methods of enumeration- canvasser/direct interview or householder/self-examination, special groups- people living in inaccessible jungles/mountains/riverine areas.

4. Result Stage-producing the results including, receipt, processing, estimation, analysis, publication and dissemination/distribution of the census data/results. This is a long and complex. Some of the activities at this stage are (i) preparation of the final file of the census data (including receipt of the information, identification and correction of errors, editing of the data collected, imputation of missing data and calculation of estimates; (ii) production/publishing and distribution of census results and finally (iii) conducting activities of data assessment and extent of coverage of the population and the quality of the information produced.

3a) Resource exploitation (10 marks)-Capital intensive nature of resource exploration, low technology, lack of skilled manpower, lack of equipment, Poverty status, level of development, government policy, etc

b) Candidate should state 5 countries in each region of Africa (10 marks): - Northern Africa, Western Africa, Eastern Africa, Middle Africa and Southern Africa.

4a). Implications of rapid pop growth on forest resources (10 marks)- acceleration of depletion of forests, more fuel wood increase consumption of non-renewable minerals resources, deplete agric land and food productivity, affects environmental conditions, leads to severe land fragmentation, increase water demand leading to chronic water shortages, leads to deforestation and loss of biodiversity, endangers plant species, global warming, increase CO₂ in atmosphere, leads to soil erosion, flooding, loss of habitat, leads land degradation, over-utilization of forest resources, etc

b). Dumont's Theory (10 marks) Arsene Dumont (1849-1902) has propounded the theory of social capillarity. This is a sociological theory based on physical rise of water in a tube. The theory was an attempt at offering an explanation for the decline in fertility during a period of social and economic development. Dumont studied the growth of population in France in the late part of the 19th century and found that the reason for low fertility in France was high intellectual and aesthetic development. According to him, the development of number in a nation is in inverse ratio to the development of individual from the lower to the upper class or the urge to rise in social scale. The individual tends to rise to higher levels in his social environment in process similar to physical capillarity. He compared this urge to the inevitable physical law of nature -the force of capillarity. It is known that under this force, a liquid rises faster in a very thin tube than in a wide tube. The liquid in a narrow tube has an advantage over the liquid in a wide tube, in the sense that it can rise higher. Similarly, in the matter of rising in the social scale, a person least burdened with unnecessary burdens that is a person with a small family will rise faster

in the social scale. Just as a column of liquid has to be thin in order to rise under the force of capillarity, so a family must be small in order to rise in the social scale. In other words, every individual wants to achieve higher economic and social status. For this, a small family is imperative, because one cannot climb high on the social ladder with the burden of more children on its back. When an individual earns more income and wealth, his ambition for better position and higher social prestige goes up and consequently the number of children decreases. Therefore, in a civilized society due to social capillarity, fertility goes down. When people migrate to cities from rural, their fertility declines. Thus social capillarity has direct relation with social development, and their birth rate and social capillarity are inversely related to each other. According to him, the birth rate in rural areas is high while it is low in urban areas. The reasons for high birth rate in rural areas are poverty, illiteracy, orthodoxy and lack of vigour. Whereas the reasons for low birth rate in urban areas are peoples' ambition for vertical mobility, liberal environment, high standard of living, more income and wealth, capacity of rational thinking, high socio-economic status of women, progressive ideals, high cost of living, the desire of middle class to move into the upper class.

Criticisms:

1. Dumont's view that low birth rate leads to high position in the society is not true because besides birth rate, other factors like social, economic, political, etc are responsible for moving upward in society. 2. It cannot be accepted as a universal truth as the number of children or the size of family has no direct relation to the low or high position in the society. 3. The theory is not applicable to underdeveloped societies. 4. Dumont's principle is not a complete population theory because social capillarity is one of the motives that can lead to reduction in birth rate. 5. Dumont's assertion that socialism leads to the destruction of social capillarity has been proved wrong. This is because even in a socialist community like China people are following the social Capillarity principle on the social ladder and are reducing fertility.

5a) Explain Malthusian Theory (10 marks) Malthus talked about population growth and agricultural production which were at variance. Born on February 14 or 17, 1766 in Surrey, England, Thomas Malthus was educated at home and entered Jesus College at Cambridge at the age of 18. In 1793, he became a fellow of this College and in 1797 took the holy orders. In 1804, the year of his marriage, he was appointed professor of History and political Economy at the Haileybury College of the East India Company. He was father of three children He died in 1834. Thomas Malthus argued that because of the natural human urge to reproduce human population increases geometrically (1, 2, 4, 16, 32, 64, 128, etc.) and food supply increases arithmetically (1, 2, 3, 4, 5, 6, 7, etc.). Therefore, since food is an essential component to human life, population growth if unchecked, would lead to starvation. Malthus also recognized that there are powerful checks which were constantly in operation to obstruct population growth, and classified them as preventative checks and positive checks. The preventive checks- late marriage, chastity, moral restraint, etc.- prevention of birth of children and positive checks are vice, misery, war, plague famine, floods, etc. These are factors which tended to shorten human life, brought about by both natural causes and mankind.

In variably, Malthus population theory is based on 3 postulations, namely
i. Food is essential for man's existence,
ii. Passion for high procreation, and

iii law of diminishing returns in agriculture.

4. Population increases in geometrical progression- 1,2,4,8,16,32,64, 128, etc
2. Food supply increases in arithmetical progression, 1,2,3,4,5,6,7, etc.

5. The scenario create imbalance as population tends to outrun food supply, leading to overpopulation.

6. To be corrected:
a. Preventive checks- late marriage, chastity, moral restraint, etc.- prevention of birth of children.
b. Positive checks- vice, misery, war, plague famine, floods, etc. These are factors which tended to shorten human life, brought about by both natural causes and mankind.

Criticisms

4. Placed undue emphasis on the limitation of the supply of land without envisaging the increase in technological advances-precision agriculture, development of new resistant crops, etc., expansion of the market economy.

5. Under estimated the importance of industrial development, transportation and new markets for manufactured goods.

6. Failed to grasped the possibility of the widespread use of contraceptives

b). Stemming pop growth in Africa (10 marks) -Enhance female education, raising of status of women, increase age at marriage and curbing of early marriage practice, adoption of family planning, policy on immigration, liberalize abortion laws, improve health services, reduction in poverty, banning of child labour, improve living standards, active population policy, etc

COVENANT UNIVERSITY

CANAANLAND, KM 10, IDIROKO ROAD
P.M.B. 1023, OTA, OGUN STATE, NIGERIA

TITLE OF EXAMINATION: B. SC DEGREE EXAMINATION

COLLEGE: BUSINESS AND SOCIAL SCIENCES

SCHOOL: SOCIAL SCIENCES

DEPARTMENT: ECONOMICS & DEV'T STUDIES

SESSION: 2014/2015

SEMESTER: ALPHA

COURSE CODE: DSS 319

CREDIT UNIT: 2

COURSE TITLE: SOCIAL PSYCHOLOGY

COURSE COORDINATOR: DR AZUH DOMINIC

COURSE LECTURERS: DR AZUH DOMINIC

MARKING GUIDE

1. Explain:

- a. Components of culture (10 marks)- Values, norms, folkways, mores, laws, and roles.
- b. Components of attitudes (10 marks):
Katz (1960) propounded three components of attitude, namely- Cognitive component, affective component and conative component.
- c. Types of learning (10 marks): There are many types of learning, but some are selected here:
Verbal learning, motor learning, concepts learning, problem solving, serial learning and - paired associates learning.

2. a) 2a. Define Social Psychology in 2 views and state why it is scientific in nature (10 marks).

Social Psychology –i) scientific study of how individuals think, feel, and behavior in regard to other people and how individuals' thoughts, feelings, and behaviors are affected by other people.

ii) the scientific field that seeks to understand the nature and causes of individual behavior and thought in social situations.

It is scientific in nature because it employs the values and methods used in other fields of science as common sense provides an unreliable guide to social behavior and in addition our thoughts are influenced by numerous potential sources of bias.

b. Explain the core interest of Social psychology and state the specific areas of study in the discipline (10 marks).

Social psychology is interested in studying scientifically how people influence one another, and how they are influenced by the environment. Specific areas of study in social psychology include attitudes, behavior, values and how these are organized and changed through phenomena such as social influence, social knowledge construction and social interaction.

3a. Explain the evolution of Social Psychology (10 marks)

Evolution of Social Psychology- The emergence of social psychology is considered to be a relatively young discipline, about 100 years old in 1997 according to McGarty and Haslam (1997). The development of the discipline is represented within 4 major periods:

The Early years between 1885-1934 - this period was the era of empirical study of social psychology. According to Franzoi (2000), Triplett conducted a research on social facilitation in 1895 at Indiana University and reported that the presence of others actually influenced task performance and social behavior. Triplett's efforts could not earn him the glory as he did nothing to establish social psychology as a distinct scientific endeavor. This initiative was taken by William McDougall and Edward Ross when they published different texts on social psychology in 1908. McDougall made the individual the focus of analysis, while Ross was concerned with groups thereby making social psychology enmeshed in both psychology and sociology at the same time. The controversy was resolved by Floyd Allport in 1924 when he published a text and concluded that social psychology belongs to the realm of mainstream psychology and making the individual the unit of analysis.

The second period 1935-1945- During the period two major events facilitated the growth of the young discipline, the great depression in USA and the upheaval in Europe, which caused World War II. Occasioned by the great depression, young social scientists came together to form an organization known as the Society for the Psychological Study of Social Issues (SPSSI). This society focused on the scientific study and intervention in social problems using psychological theories and principles. According to Franzoi (2000) one significant contribution of this society was the practical introduction of ethics and values into the discussion of social life.

The Third period 1946-1969 – This was a period of rapid expansion for the discipline in terms of theoretical foundations and research endeavor. Researchers actively engaged in the studying various phenomena in the society. The most prominent research and theory at this period was the Leon Festinger's theory of cognitive dissonance (Festinger, 1957). The period set the stage for diversity and prolific research in this discipline.

The Fourth period 1970-till date- This the period of great expansion of the discipline. Emphasis was placed on high ethical standards in research and experimental methods to the study of social phenomena were embraced as a research tools. Areas like racism, gender and ethnic bias as well as cross-cultural issues. The application of knowledge of social psychology find expression in every spectrum of our daily life like law, health, education, politics, sports, business and the likes (Ellsworth and Mauro, 1998; Kinder, 1998; Salovey et al.,1998).

b. Explain the methods used in psychological study (10 marks).

Three major methods employed by social psychologists, namely- experiments, field research and surveys.

1. Experiments:

This is the most frequently used methods by social psychologists. An experiment is a study in which the investigator manipulates one or more variables within a given situation and measures subsequent changes in other variables. Two types exist namely i. laboratory experiments, where the researcher was allowed to control conditions and to take measurements more precisely than in the real world settings,

ii. Field experiment, where the real world is used as a laboratory. While these methods can be control outside the influences of and arrive at causal relations especially the laboratory variety; bias is very much possible as knowledge of subjects that they are part of an experiment in addition to negativistic subjects who would try to sabotage the experiments. Bias associated with experimenter effects, where distortions in experimental outcomes resulting from the behavior or characteristics of the researcher. Bias may also result from experimenter's misinterpretation of the data collected

2. Field Research

Field research concerns with intensive observation and recording of people's behavior in natural setting. Here instead of concerning on cause and effect relationships among a limited number of factors, field researchers attempt to maximize their depth of understanding a particular social interaction to capture the details of people's behavior as it spontaneously occurs and to measure the understanding that participants have of the interaction. The approach often entails participant observation, a procedure in which the researcher spends a good deal of time actually interacting with the people under investigation. The approach increases the researcher's access to information especially sensitive information and the researcher is not confined by questions on a questionnaire. The approach also allows the investigator the flexibility to pursue the leads of the moment. Also the presence of the observer may modify the behavior of the subjects. In the course of being part and parcel of the subject setting may influence the interpretations of the observer making them different from those of non-participatory observers.

3. Surveys

Social survey is another method of obtaining information using questions in an interview or a written questionnaire using a representative proportion of the population. For instance drug use within a population, the impact of an advertising campaign, the incidence of abortion, political attitudes, the process whereby a new fad is diffused or public reactions to an assassination. Survey questionnaire may be open-ended questions which ask the respondent to provide his/her own answer or closed-ended questions which entails the respondent to select an answer from among a list provided the researcher. Survey data can be gathered in several ways such as face-to-face or by telephone, computer or mail. Each of these methods has its merits and limitations.

4a. What is Socialization? Explain the agents of Socialization (10 marks).

Socialization is a process by which we learn through interaction with other people, the ways of thinking, feeling, and acting that are essential for effective participation within a particular group of people or social context or the process by which individuals learn the culture of their society or a process whereby, through contact with other human beings, the helpless infant gradually becomes a self-aware, knowledgeable human being, skilled in the ways of the given culture and environment.

The agents of socialization are:-

- i. Family- first and perhaps the most important institution of socialization of a child, takes place during infancy and usually within the family.
- ii. Schools- institution which transmit certain kinds of knowledge
- iii. Religion-church- morals, iv. Organizations/factories, v. Society/community/village
- vi. Peer groups/age grade groups- a group whose members share similar circumstances and are often of a similar age, vii. Relatives, viii. Friends
- vii. Mass Media-Newspapers/TV- influential even though it does not exist for the sole purpose of transmitting knowledge about culture to younger generation

b. State the ways of Attitude formation you have studied (10 marks).
Basic ways of acquiring attitudes according to Coon (1995) are:

- i. Direct contact with the object of attitude- from the experience an individual acquired when in direct contact with the object or people concerned
- ii. Interaction with others- based on information we acquired from friends, neighbors; which may influence our thoughts and feelings leading to positive or negative responses.
- iii) Child rearing style
- iv) Group membership
- v) Mass media

5a. What is Stereotype? Explain the functions of Stereotypes (10 marks).

beliefs about groups that influence our judgments of individuals. May also be defined as a schema that attributes a set of characteristics to most or all members of a social identity.

The functions of stereotypes:

- i. Aids to simplify the world by generalization
- ii. Makes our thinking to become fast and quicken our action in uncertain circumstances.
- iii. Enable us to take shortcuts and form impression about individuals we do not personally know.

b. Define the term learning and explain Pavlov Experiment (10 marks).

Learning may be defined according to Kehinde Saba (2005) as a relatively permanent change in behavior as a result of experience or a process through which experience results in relatively permanent changes in the individual's responses.

1. Classical-conditioning

Classical conditioning is usually called Pavlovian conditioning because of the Russian physiologist who developed this method of measuring and analyzing the secretion of saliva of dogs. In his experiment, he implanted a tube to the dog's salivary gland and connected it to a measuring device for recording. He found that the dog salivated at the sight of food, attendants who fed the dog as well as the stimuli of bell and tuning fork. He then came up with the following observations:

- i. Unconditioned stimulus (US)- the stimulus that elicits a voluntary or reflexive response, without prior conditioning taking place eg. food which naturally elicits salivation.
- ii. Unconditioned response (UR) –a natural response to something, a reflexive or voluntary response, salivation.
- iii. Conditioned stimulus (CS) –a stimulus that does not naturally elicit a particular response but now elicits it as a result of pairing with the unconditioned stimulus. Eg pairing of bell, a natural stimulus with food, a natural stimulus (US) will make the bell, (CS) alone to elicit salivation.
- iv. Conditioned response (CR)- the response produced by the conditioned stimulus (CS) when the unconditioned stimulus (US) has been removed. It is exactly the same as the unconditioned response (UR) eg salivation; but it is given to the conditioned stimulus alone.