



THE OPEN UNIVERSITY OF SRI LANKA
 MASTER OF ARTS DEGREE IN DEVELOPMENT STUDIES AND PUBLIC
 POLICY
 FINAL EXAMINATION – 2008
 SSP 2106 – ADVANCED RESEARCH METHODOLOGY IN SOCIAL SCIENCES

DURATION – THREE (03) HOURS

Date: 13th July 2008

Time: 1.30 p.m. – 4.30 p.m.

Answer four (04) questions only. Select at least (02) questions from each Part.
 Please use the Z table attached herewith to answer questions No. 5 and 7.

PART I

1. “Any research into a development problem must be designed within a multi-disciplinary analytical framework”. Discuss and illustrate with specific examples, identifying the links between the social, political and economic variables. What are the indicators you would use in your analysis?
2. Why is it important to “understand” the data before beginning the analysis? Give examples.
3. A group of 220 students were asked how much time they spent watching television each week. The results are tabulated below. Using this information,
 - (a) Calculate the mean and standard deviation of hours spent watching television by the 220 students.

No. of Hours	Number of students
10-14	2
15-19	12
20-24	23
25-29	60
30-34	77
35-39	38
40-44	8

- (b) Calculate the interval within which 95% of observations would be expected to occur.
 - (c) Comment on the spread of the data in relation to the mean.
4. “Qualitative Research is not an ultimate pathway to truth, but it is useful, and can reach areas that other forms of research cannot”. Discuss.

PART II

5. (a) What are the characteristics of the normal distribution?
(b) For questions (i) through (iv), find the area under the normal distribution curve.
(i) Between $Z = 0$ and $Z = 1.97$
(ii) Between $Z = 0$ and $Z = -0.84$
(iii) To the left of $Z = -1.43$
(iv) To the right of $Z = -0.18$
(c) The mean number of hours a Sri Lankan worker spends on the computer is 3.2 hours per working day. Assume that the standard deviation is 0.6 hours. Find the percentage of workers who spend less than 3.6 hours on the computer. Assume that the variable is normally distributed.
6. Discuss the concepts of statistical inference, estimation and hypothesis testing. Use examples to elaborate your answer.
7. (a) Explain the difference between a one-tailed and a two-tailed test, and give an example of each.
(b) A researcher reports that the average salary of assistant managers is more than Rs. 42,000. A sample of 30 assistant managers has a mean salary of Rs. 43,260. At $\alpha = 0.05$, test the claim that assistant managers earn more than Rs. 42,000 a year. The standard deviation of the population is Rs. 5230.
8. Write short notes on any **four (04)** of the following.
(i) Grounded theory research
(ii) Ethnographic research
(iii) Focus group discussions
(iv) Systematic sampling
(v) Sample statistics
(vi) Discrete random variables

Standard Normal (Z) Table

	0.00	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09
0.0	0.0000	0.0040	0.0080	0.0120	0.0160	0.0199	0.0239	0.0279	0.0319	0.0359
0.1	0.0398	0.0438	0.0478	0.0517	0.0557	0.0596	0.0636	0.0675	0.0714	0.0753
0.2	0.0793	0.0832	0.0871	0.0910	0.0948	0.0987	0.1026	0.1064	0.1103	0.1141
0.3	0.1179	0.1217	0.1255	0.1293	0.1331	0.1368	0.1406	0.1443	0.1480	0.1517
0.4	0.1554	0.1591	0.1628	0.1664	0.1700	0.1736	0.1772	0.1808	0.1844	0.1879
0.5	0.1915	0.1950	0.1985	0.2019	0.2054	0.2088	0.2123	0.2157	0.2190	0.2224
0.6	0.2257	0.2291	0.2324	0.2357	0.2389	0.2422	0.2454	0.2486	0.2517	0.2549
0.7	0.2580	0.2611	0.2642	0.2673	0.2704	0.2734	0.2764	0.2794	0.2823	0.2852
0.8	0.2881	0.2910	0.2939	0.2967	0.2995	0.3023	0.3051	0.3078	0.3106	0.3133
0.9	0.3159	0.3186	0.3212	0.3238	0.3264	0.3289	0.3315	0.3340	0.3365	0.3389
1.0	0.3413	0.3438	0.3461	0.3485	0.3508	0.3531	0.3554	0.3577	0.3599	0.3621
1.1	0.3643	0.3665	0.3686	0.3708	0.3729	0.3749	0.3770	0.3790	0.3810	0.3830
1.2	0.3849	0.3869	0.3888	0.3907	0.3925	0.3944	0.3962	0.3980	0.3997	0.4015
1.3	0.4032	0.4049	0.4066	0.4082	0.4099	0.4115	0.4131	0.4147	0.4162	0.4177
1.4	0.4192	0.4207	0.4222	0.4236	0.4251	0.4265	0.4279	0.4292	0.4306	0.4319
1.5	0.4332	0.4345	0.4357	0.4370	0.4382	0.4394	0.4406	0.4418	0.4429	0.4441
1.6	0.4452	0.4463	0.4474	0.4484	0.4495	0.4505	0.4515	0.4525	0.4535	0.4545
1.7	0.4554	0.4564	0.4573	0.4582	0.4591	0.4599	0.4608	0.4616	0.4625	0.4633
1.8	0.4641	0.4649	0.4656	0.4664	0.4671	0.4678	0.4686	0.4693	0.4699	0.4706
1.9	0.4713	0.4719	0.4726	0.4732	0.4738	0.4744	0.4750	0.4756	0.4761	0.4767
2.0	0.4772	0.4778	0.4783	0.4788	0.4793	0.4798	0.4803	0.4808	0.4812	0.4817
2.1	0.4821	0.4826	0.4830	0.4834	0.4838	0.4842	0.4846	0.4850	0.4854	0.4857
2.2	0.4861	0.4864	0.4868	0.4871	0.4875	0.4878	0.4881	0.4884	0.4887	0.4890
2.3	0.4893	0.4896	0.4898	0.4901	0.4904	0.4906	0.4909	0.4911	0.4913	0.4916
2.4	0.4918	0.4920	0.4922	0.4925	0.4927	0.4929	0.4931	0.4932	0.4934	0.4936
2.5	0.4938	0.4940	0.4941	0.4943	0.4945	0.4946	0.4948	0.4949	0.4951	0.4952
2.6	0.4953	0.4955	0.4956	0.4957	0.4959	0.4960	0.4961	0.4962	0.4963	0.4964
2.7	0.4965	0.4966	0.4967	0.4968	0.4969	0.4970	0.4971	0.4972	0.4973	0.4974
2.8	0.4974	0.4975	0.4976	0.4977	0.4977	0.4978	0.4979	0.4979	0.4980	0.4981
2.9	0.4981	0.4982	0.4982	0.4983	0.4984	0.4984	0.4985	0.4985	0.4986	0.4986
3.0	0.4987	0.4987	0.4987	0.4988	0.4988	0.4989	0.4989	0.4989	0.4990	0.4990