M.A. IN PSYCHOLOGY (MAPC)

Term-End Examination

June, 2013

MPC-006 : STATISTICS IN PSYCHOLOGY

06283

Time : 2 hours *Maximum Marks : 50*

Note : (i) Answer *any five* questions.

(ii) Each question carries *10* marks.

(iii) Only simple calculator is *allowed.*

1. Differentiate between parametric and non-parametric statistics and discuss advantages to non-parametric statistics. **6+4**

2. What do you mean by inferential statistics ? **10** Dicuss advantages and disadvantages of descriptive statistics over inferential statistics.

3. Find the correlation between two sets of scores **10** from the following data :

Subjects	X	Y
A	15	40
B	18	42
C	22	50
D	17	45
E	19	43
F	20	46
G	16	41
H	21	41

4. Write importance of normal distribution. An IQ **4+6** test was conducted on 500 students of class X. The mean and SD was found 100 and 16 respectively. Find how many students of the class X having IQ below 80 and above 120 .

5. What do you mean by hypothesis testing ? **4+6** Discuss significance of One - Tailed and Two - Tailed hypothesis testing in research .

6. Define correlation. In four experiments, the **2+8** correlations between X and Y were as follows : .60, .20, .70 and .40. The N's were 26, 31, 42 and 35. What is the mean r : the weighted average of these 4r's ?

7. Write assumptions of Chi square and calculate **10** Chi square from following :

	Right	Wrong
f_o	80%	20%
f_e	50%	50%

8. Four groups of 8 students , each having an equal **10** number of boys and girls were randomly selected and assigned to four different conditions of an experiment. Use ANOVA to test the main effects due to conditions of sex, and the interaction of the two.

	Con.I	II	III	IV
Boys	7	9	12	12
	0	4	6	14
	5	5	10	9
	8	6	6	5
Girls	3	4	3	6
	3	7	7	7
	2	5	4	6
	0	2	6	5

9. Write short notes on *any two* of the following :   5+5

   (a) Characteristics of varience

   (b) Importance of alternative hypothesis

   (c) Importance of standard error of mean.

10. A group of 10 students was given four trials on a   **10**
    test of physical efficiency.   The scores on the
    I and IV trials are given below.   Test whether
    there was a significant gain from the first to the
    fourth trials.

Students	Trial - I	Trial -IV
1	15	20
2	16	22
3	17	22
4	20	25
5	25	35
6	30	30
7	17	21
8	18	23
9	10	17
10	12	20