# Second Year Examination of the Three -Year Degree Course, 2001 

(Faculty of Arts)

## PSYCHOLOGY

Paper-I
(Research Methodology and Statistics)
Time : 3 Hours
[ Maximum Marks :70]
Attempt five questions in all. selecting at least one question from each unit All questions carry equal marks.

## UNIT-I

1. (a) Define Problem. Explain sources of Problem. $4+10$
OR
(b) Explain in brief criteria of good hypthesis. Formulate hypothesis of the following concepts: 6+8
(i) Learning.
(ii) Anxiety
(iii) Intelligence
(iv) Adjustment

## UNIT-II

2. (a) What is Variable? Name different types of variables. Explain them with the help of suitable example. $3+5+6$

## OR

(b) What is an Experiment? Define. Explain about techniques of experimental control. 4+10

## UNIT-III

3. (a) Calculate mean for the following frequency distribution and explain under what conditions mean is used:

| Score <br> s | Freque <br> ncy |
| :--- | :--- |
| $71-80$ | 4 |
| $61-70$ | 6 |
| $51-60$ | 8 |
| $41-50$ | 5 |
| $31-40$ | 3 |
| $21-30$ | 2 |
| $11-20$ | 6 |
| $1-10$ | 8 |
|  | $\mathrm{~N}=42$ |

OR
(b) Construct histogram of the frequency distribution given in Q. No. 3(a).

## UNIT-IV

4.(A) Calculate Standard Deviation for the following frequency distribution:

| Score <br> $S$ | Freque <br> ncy |
| :--- | :--- |
| $100-109$ | 3 |
| $90-99$ | 4 |
| $80-89$ | 5 |
| $70-79$ | 18 |
| $60-69$ | 6 |
| $50-59$ | 1 |
| $40-49$ | 2 |
|  | $\mathrm{~N}=39$ |

## OR

(b) Describe the properties of normal distribution.
5.(a) Calculate Rank order co-relation for the following series:

| Marks in English | Marks in Hindi |
| :--- | :--- |
| 10 | 15 |
| 12 | 16 |
| 15 | 8 |
| 8 | 10 |
| 5 | 11 |
| 16 | 12 |

OR
(b) Calculate the Chi-square for the following data:

|  | Pass | Fail | Total |
| :--- | :--- | :--- | :--- |
| (Boys) | 12 | 13 | 25 |
| (Girls) | 10 | 5 | 15 |
|  | 22 | 18 | 40 |

