



**B.A. (Semester – V) Examination, October/November 2016**  
**PSYCHOLOGY**  
**Statistics (Paper – V)**  
**(New Course)**

Duration : 2 Hours

Max. Marks : 80

**Instructions :** 1) *All questions are compulsory.*  
2) *Figures to the right indicate marks.*  
3) *Graph paper will be provided on request.*

1. Write short notes on **any four** of the following : 16
- a) Inferential statistics.
  - b) Nominal and interval scales of measurement.
  - c) Tabulate the following scores into a histogram :  
53 46 53 43 44  
49 56 49 58 51  
50 48 54 50 56  
57 41 47 49 52
  - d) Uses of median.
  - e) Uses of Quartile deviation.
  - f) Calculate standard deviation for the following set of scores.  
12, 10, 16, 28, 25, 22, 17, 30
2. Write short notes on **any four** of the following : 16
- a) Normal curve.
  - b) Significance of percentiles in a frequency distributions.
  - c) For a particular group of scores  $M = 40$ ,  $SD = 5$  calculate z score for
    - i) 30
    - ii) 15.
  - d) Type I and Type II Errors.
  - e) Meaning of correlation.
  - f) Concept of Null hypothesis.

P.T.O.





3. A) Tabulate the following scores into a frequency distribution and plot a frequency polygon :

12

101	77	67	88	81
48	97	39	47	52
51	59	43	68	110
67	73	83	61	90
58	55	54	62	87
74	39	64	31	88
61	96	91	100	25
73	48	51	70	65
62	88	79	43	34
74	41	82	64	73

OR

- B) Compute Mean by the long method, Median and Mode for the following distribution.

12

CI	f
72 - 74	3
69 - 71	7
66 - 68	8
63 - 65	11
60 - 62	14
57 - 59	12
54 - 56	9
51 - 53	7
48 - 50	5
45 - 47	4

4. A) Compute Quartile Deviation for the following distribution :

12

CI	f
97 - 99	2
94 - 96	7
91 - 93	9
88 - 90	15
85 - 87	19
82 - 84	16
79 - 81	10
76 - 78	8
73 - 75	3
70 - 72	1

OR





B) Compute Mean by the Assumed Mean method for the following distribution : 12

CI	f
50 - 54	2
45 - 49	3
40 - 44	2
35 - 39	17
30 - 34	30
25 - 29	25
20 - 24	15
15 - 19	3
10 - 14	2
5 - 9	1

5. A) Compute Standard Deviation for the following distribution : 12

CI	f
130 - 134	1
125 - 129	2
120 - 124	2
115 - 119	5
110 - 114	4
105 - 109	9
100 - 104	7
95 - 99	6
90 - 94	5
85 - 89	1
80 - 84	2
75 - 79	1

OR

B) Compute  $P_{45}$ ,  $P_{79}$  and PR of scores 18 and 87 for the following distribution : 12

CI	f
100 - 109	3
90 - 99	5
80 - 89	1
70 - 79	15
60 - 69	14
50 - 59	11
40 - 49	9
30 - 39	7
20 - 29	4
10 - 19	6
0 - 9	1





6. A) Compute the Rank Difference coefficient of correlation for the following data : 12

Scores A	Scores B
50	40
62	54
71	63
50	69
64	76
82	85
71	40
64	76
80	63
49	69

OR

- B) Calculate the Product moment coefficient of correlation for the following set of scores : 12

Individuals	Test X	Test Y
P	15	70
Q	25	50
R	30	60
S	35	40
T	20	30
U	48	80
V	42	30
W	40	25
X	55	70
Y	50	60