

B.A. (Semester – V) Examination, October/November 2018

PSYCHOLOGY

Statistics (Paper – V)

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 :

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- Difference between descriptive and inferential statistics.
- Nominal and ordinal scales with examples.
- Uses of the median and mode.
- Define kurtosis and draw a mesokurtic distribution.
- Calculate the mean for the following scores.

1)

799.5	625.5	1021.5	552.5	2102.5	822.5	857.5	9102.5	456.5	345.5
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2)

7891	2964	3895	6582	5234	4455	1099	8758	9897	2501
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f) Find out the median for the following sets of data.

1)

70	60	75	90	65	80	42	65	72
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2)

587	693	595	780	840	760	805	907	763	865	768	894
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2. Write short notes on **any four** of the following :

16

- Steps in drawing up a histogram.
- Positive and negative skewness with the help of diagrams.
- Hypothesis testing.
- Testing the significance of difference between means.
- Compute the standard deviation for the following scores.

100	120	140	120	180	175	185	130	200	150
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f) A normal distribution of scores has a standard deviation of 10. Find the z-scores corresponding to each of the following values:

- A score of 60, where the mean score of the sample data value is 40.
- A score of 80, where the mean score of the sample data value is 30.

3. A) Plot a frequency polygon for the following frequency distribution.

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46	80	57	59	94	76
48	48	61	65	86	65
64	60	63	68	41	66
76	64	68	67	68	27
78	59	72	71	67	68
54	62	64	72	61	67
39	57	57	75	69	61

OR

B) Calculate the mean, median and mode for the following data.

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Class Intervals	Frequencies
181-190	1
171-180	3
161-170	11
151-160	29
141-150	37
131-140	49
121-130	30
111-120	20
101-110	13
91-100	5
81-90	2

4. A) Compute assumed mean and median for the following scores.

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Class Intervals	Frequencies
70-79	44
60-69	86
50-59	164
40-49	180
30-39	106
20-29	56
10-19	32
0-9	7

OR

B) Calculate the standard deviation for the following distribution.

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Class Intervals	Frequencies
50-54	2
45-49	5
40-44	7
35-39	12
30-34	15
25-29	9
20-24	6
15-19	5
10-14	2
5-9	1

5. A) Compute the quartile deviation for the following scores.

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Class Intervals	Frequencies
80-84	1
75-79	1
70-74	1
65-69	4
60-64	4
55-59	7
50-54	6
45-49	6
40-44	6
35-39	3
30-34	0
25-29	1

OR



- B) Find out P_{10} , P_{20} and PR of the scores 24 and 34 from scores in below mentioned scores.

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Class Intervals	Frequencies
60-63	2
56-59	12
52-55	18
48-51	36
44-47	38
40-43	20
36-39	18
32-35	10
28-31	8
24-27	6
20-23	4
16-19	2
12-15	0
8-11	0
4-7	1

6. A) Compute the coefficient of correlation using the rank difference method for the following data.

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Students	Rating by Judge 1	Rating by Judge 2
1	50	48
2	60	65
3	58	50
4	47	48
5	49	55
6	33	58
7	65	63
8	43	48
9	46	50
10	68	70

OR



B) Calculate Pearson's product moment coefficient of correlation for the following scores.

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Individuals	Set I	Set II
1	105	62
2	111	64
3	104	53
4	112	60
5	118	72
6	98	56
7	116	68
8	103	60
9	116	69
10	112	65
