

Supdt: Sign:

D.B.A Part – I (New Revised Course)

Roll No: _____

Annual Examination 2015

Sign of Cand: _____

Paper: Statistics

Time Allowed: 03 Hours

Total Marks: 100

Note: Section – A is compulsory. It should be attempted on the question paper and returned after 20 minutes. Cutting, overwriting and use of pencil is not allowed.

Time: 20 Minutes

(Section -A)

Marks: 20

Q.No.1:- Write the correct option a,b,c,d in the space provided against each part.

- i) Weight of students in a class make _____.
a) discrete data b) continuous data c) qualitative data d) none of these
- ii) Census returns are _____ data.
a) primary b) secondary c) qualitative d) none of a,b,c
- iii) Statistics deals with _____ of facts.
a) addition b) aggregate c) approximation d) exact value
- iv) The difference between the estimated and the true value of estimate is called _____.
a) error b) absolute error c) relative error d) none of these
- v) The data collected through investigator is called _____.
a) grouped b) ungrouped c) secondary d) primary
- vi) If A.M of 7,5,13,X and 9 is 10. The value of X is _____.
a) 12 b) 14 c) 16 d) 18
- vii) $P_{50} =$ _____.
a) Q_3 b) Q_1 c) D_9 d) D_5
- viii) Median = _____.
a) Q_3 b) Mean c) P_{50} d) Q_1
- ix) Semi inter quartile range is an _____ measure of dispersion.
a) relative b) absolute c) commutative d) none of these
- x) $C.V = \frac{S.D}{?} \times 100$ _____.
a) median b) H.M c) A.M d) M.D
- xi) Co-efficient of Skewness = $\frac{? - Median}{M.D}$ _____.
a) mean b) SD c) Mode d) $Q_3 - Q_1$
- xii) $-1 \leq \gamma \leq$ _____.
a) -1 b) +1 c) zero d) $-\gamma$
- xiii) The number of independent constraints in a set of data known as degree of _____.
a) dependent b) constraints c) freedom d) independent
- xiv) When length, breadth and thickness are taken into account the diagrams are _____.
a) one dimension b) two dimension c) three dimension d) none of a,b, c
- xv) Diagram give an _____ result.
a) actual b) accurate c) approximate d) none of these
- xvi) Index number for the current year = $\frac{\Sigma P_1 q_0}{?} \times 100$
a) $\Sigma P_0 q_0$ b) $\Sigma P_0 q_1$ c) $\Sigma P_1 q_1$ d) $\Sigma P_1 q_0$
- xvii) A graph of commulative frequency is called _____.
a) histogram b) frequency curve c) frequency polygon d) cumulative frequency curve
- xviii) Laspeyer's formula for weighted index number are $P_{01} = \frac{?}{\Sigma P_0 q_0} \times 100$
a) $\Sigma P_0 q_0$ b) $\Sigma P_0 q_1$ c) $\Sigma P_1 q_1$ d) $\Sigma P_1 q_0$
- xix) A _____ variable is limited to a certain numerical value.
a) discrete b) continuous c) individual d) none of these
- xx) Law for independent events A and B _____.
a) $P(A)+P(B)$ b) $\frac{P(A)}{P(B)}$ c) $P(A)P(B)$ d) $P(A)P(\frac{B}{A})$

Time Allowed: - 02 Hrs & 40 minutes.

Marks: - 80

Section – B (Marks: - 40)

Q.No.2: - Attempt only eight parts. Each part carries 05 marks.

- i. Write a note on collection of statistical data.
- ii. Explain what is meant by the term Statistics.
- iii. Calculate the H.M of the following data. 25, 35 45 55 65 75
- iv. Calculate range and co efficient of range of the following data.

Marks:	10	11	12	13	14	15	16
No of Candidates:	24	201	303	763	509	605	80

- v. Write short note on mean deviation and standard deviation.
- vi. Write the important properties of the correlation co-efficient.
- vii. Find regression equation of x on y:

x:	1	2	3	4	5
y:	2	5	3	8	7

- viii. Calculate the G.M of the data given below.
171 175 180 185 190 195
- ix. Define Chi-square test, degrees of freedom and levels of significance.
- x. What is a trend and how it is measured.

Section – C (Marks: - 40)

Note: - Attempt any 04 questions from this section. Each question carry 10 marks.

Q.3: - The following data represents the charges billed by a plumber for his 25 home services calls:
39,62,37,44,57,64,48,67,48,67,40,59,38,56,44,52,40,60,41,49,36,46,41,67,46,64,62
Taking 4 as class interval construct a frequency distribution.

Q.4: - Calculate the mean and median from the following distribution.

Marks	10-19	20-29	30-39	40-49	50-59
No of students	3	10	15	20	30

Q.5:- Calculate the co-efficient of Skewness of the following series.

Size of item:	2	3	4	5	6	7	8	9
Frequency:	3	8	10	12	16	14	10	8

Q.6: - From the following index numbers prepare the news ones by using chain base method.

Year :	1950	1951	1952	1953	1954	1955
Index number:	94	98	102	95	98	100

Q.7: - A pair of dice are thrown. Find the probability of getting a total of either 5 or 11.