

**2020**  
**GEOGRAPHY-HONOURS-PRACTICAL**

Eighth Paper  
(Group A)  
Module 15  
**[Statistical Techniques]**

Full Marks: 50  
*The figures in the margin indicate full marks*

**Answer any two questions**

1. The following table shows the frequency distribution of secondary enrolment ratios for 35 countries with medium and low human development.
- |   |       |
|---|-------|
| i. Draw a histogram                     | 5     |
| ii. Calculate the mean, median and mode | 5+5+5 |
| iii. Draw a less than ogive             | 5     |

Table 1

Secondary Enrolment Ratio [%]	Number of Countries
20 – 34.9	6
35 – 49.9	8
50 – 64.9	9
65 – 79.9	8
80 – 94.9	4

2. On the basis of data (Table 2) provided below:
- |   |     |
|---|-----|
| i. Draw a scatter diagram.  | 8   |
| ii. Compute and draw the linear trend for regression of child population on the percentage of urban population. | 7+3 |
| iii. Calculate the correlation coefficient after Karl Pearson and comment on the nature of the relationship.    | 5+2 |

Table 2

State	Percentage of urban Population to total Population 2011	Proportion of Child Population (0 – 6 years) % 2011
Bihar	11.3	18.4
Uttar Pradesh	22.3	15.4
Rajasthan	24.9	15.5
West Bengal	31.9	11.6
Jharkhand	24.0	16.3
Chhattisgarh	23.2	14.3
Kerala	47.7	10.4
Tamil Nadu	48.4	10.3

*Continued....page 2*

3. a) On the basis of data (Table 3) provided below:
- i. Draw a time series graph to show the growth in the number of High and Higher Secondary schools in West Bengal. 7
  - ii. Compute and draw the trend by three years moving averages 5+3
  - iii. Comment on the nature of the trend. 2

Table 3

Year	Number of High and Higher Secondary Schools in West Bengal
2004-05	7971
2005-06	8640
2006-07	8841
2007-08	8892
2008-09	8952
2009-10	8952
2010-11	9225

3. b) The following table (Table 4) shows the frequency distribution of sex ratios in the States and Union Territories of India, 2011. Calculate the standard deviation. 8

Table 4

Sex Ratio, 2011 (Females per thousand males)	Number of States and Union Territories
600 - 700	1
700 - 800	1
800 - 900	7
900 - 1000	24
1000 - 1100	2