General Instructions:
i)   All questions in both the sections are compulsory.
ii)   Marks for questions are indicated against each question.
iii)   Question numbers 1-4 and 13-16 are very short answer questions carrying
        1 mark each. They are required to be answered in one sentence / write the
        correct option on your answer sheet.
iv)   Question numbers 5-6 and 17-18 are short answer questions carrying
        3 marks each. Answers to them should not normally exceed 60 words each.
v)   Question numbers 7-9 and 19-21 are also short answer questions carrying
        4 marks each. Answers to them should not normally exceed 70 words each.
vi)   Question numbers 10-12 and 22-24 are long answer questions carrying
        6 marks each. Answers to them should not normally exceed 100 words each.

SECTION - A   (Statistics for Economics)

1.   Define statistics in the plural sense.   (1)

2.   If the sum of squares of deviations between ranks given to 6 contestants by
     2 judges is zero, the value of coefficient of rank correlation is-
     a)   1   b)   0   c)   6   d)   -1   (1)

3.   State any two uses of statistics.   (1)

4.   What do you mean by index of industrial production? Write the formula used in
     its calculation.   (1)

5.   Calculate mean deviation from median and its coefficient :   (3)

Marks (X) (more than)	0	5	10	15	20
No: of students	30	26	19	11	6

(OR)
Calculate mean deviation from mean and its coefficient:

Marks (X) (less than)	10	20	30	40	50
No: of students	10	26	56	88	100

6.   a)   State any two advantages of classification of data.
     b)   What do you mean by spatial classification? Give an example.
     c)   In a table, what are column headings called?   (1+1+1)

7.   Distinguish between stratified and quota sampling giving examples.
                              (OR)
     What do mean by primary data? Explain in brief any two methods of
     collecting primary data.   (4)

8.   In 2016, out of a total of 1250 workers in an organization, 750 were members of
     a trade union. The number of women workers employed was 125 out of which 50
     did not belong to any trade union. In 2017, the number of workers was 1400, of
     which 820 were men. The number of non-union workers was 270 among which
     170 were women. Tabulate the given information and give it a suitable title.   (4)

9.   Compute the mode for the following data using grouping and analysis tables-   (4)

Marks (X)	0-10	10-20	20-30	30-40	40-50
No: of students	10	20	18	32	21

10. Calculate standard deviation and coefficient of variation for the following data:

Marks (X)	0-10	10-20	20-30	30-40	40-50
No: of students	4	3	6	5	2

(OR)

The prices of shares of company X and company Y are given below. Which company's shares are more stable? Justify your answer.   (6)

| X | 25 | 85 | 40 | 80 | 120 |
| Y | 50 | 70 | 65 | 45 | 80 |

11. a)   Calculate the coefficient of rank correlation between X and Y and comment on your answer:

| X | 180 | 178 | 175 | 175 | 158 | 167 | 160 | 159 |
| Y | 22 | 23 | 24 | 24 | 24 | 26 | 25 | 27 |

b)   Calculate the number of items when standard deviation of the series X is 6 and coefficient of correlation is 0.75.It is also given that the sum of the product of deviations of X and Y from actual means is 180 and the sum of squares of deviations of Y from actual mean is 160.   (3+3)

12. a)   Construct the price index numbers for 2016 taking 2008 as the base year using Laspayre's and Paasche's methods and compare the results-

Commodity	Price in 2016	Quantity in 2008	Quantity in 2016	Price in 2008
A	52	10	12	50
B	9	3	4	7
C	5	7	8	3

b)   Calculate weighted index number for 2017 taking 2016 as the base year using weighted average of price relatives method-   (4+2)

Item	Weight (%)	Price in 2016	Price in 2017
A	40	2	4
B	30	5	6
C	20	4	5
D	10	2	3

Section – B   (Indian Economic Development)

13. State any two challenges faced by the power sector in India.   (1)

14. Define 'Global Burden of Diseases.'   (1)

15. How is golden revolution different from green revolution?   (1)

16. Name the apex body that co-ordinates the activities of all institutions involved in the rural financing system. When was it formed?   (1)

17. 'Information technology plays a major role in achieving sustainable development and food security.' Give three reasons to support your answer.
                                    (OR)
What is organic farming?   State any five of its benefits.   (3)

18. Define sustainable development. State any five steps that can be taken to achieve the same.   (3)

19. a)   Differentiate between the concepts of Human Development and Human Capital Formation.
     b)   What are the two ways of expressing expenditure made by the government on education?   (3+1)
                                    (OR)
Discuss how investments in health and on-the-job training become sources of human capital formation? Name an organization that controls institutions of education sector in India.   (3+1)

20. a) Compare and contrast the industrial sector reforms followed by India and China.
    b) Write a short note on the Great Leap Forward campaign introduced by China in 1958. (2+2)

21. a) Giving reasons draw relevant conclusions from the given table-

Select Demographic Indicators, 2013

Country	Estimated population in millions	Annual growth rate of population	Density (per sq km)	Sex Ratio	Fertility Rate
India	1252	1.24	421	934	2.6
China	1357	0.49	145	929	1.6
Pakistan	182	1.65	236	947	3.3

   b) State any one of the 'Liberty indicators' that may be included in the construction of the human development index to make it more comprehensive. (3+1)

22. a) 'The traditional handicrafts industries were ruined under the British rule.' Justify giving reasons.
    b) Explain why and how were the private sector industries in India regulated by the industrial licensing policy. (4+2)

23. State and explain the conditions of the Indian economy that necessitated the introduction of economic reforms in the year 1991. (6)
    (OR)
    a) Discuss economic reforms in the light of social justice.
    b) What do you mean by tariff and non-tariff barriers? Explain their impact on foreign trade. (3+3)

24. a) State any two shortcomings of using poverty line to identify the poor.
    b) Describe how the government creates employment directly and indirectly. Define casualization of workforce. (2+4)

-x-x-x-x-x-x-x-