

Standard XI. Economics

II Term Worksheets 2009.

Part A Statistics for Economics

Chapter 6. Measures of Dispersion.

1 mark Questions

- (1) what do you mean by measures of dispersion?
- (2) what objective does a measure of dispersion serve?
- (3) what is range?
- (4) what is Quartile deviation?
- (5) what do you mean by Mean deviation?
- (6) what do you mean by Standard deviation?
- (7) what is absolute measure of dispersion?
- (8) what is relative measure of dispersion?
- (9) Define Lorenz curve.
- (10) If in a series the lowest value is 285 and the largest value is 300, find out coefficient of Range.
- (11) If $Q_1 = 41$, $Q_3 = 49$, find the value of Coefficient of Quartile deviation.

3-4 marks:

1. what are the properties of a good measure of dispersion?
2. Distinguish between Absolute and relative measures of dispersion.
3. why standard deviation is regarded as the best measure of dispersion?
4. what is Mean deviation? write merits and demerits of Mean Deviation.

- (5) Give the formula of Range, Quartile Deviation, Mean Deviation and Standard deviation (Both absolute and relative measures).
- (6) Write the procedure of drawing Lorenz curve. What are its merits and demerits.

Numericals

- (1) Find out range and coefficient of range of the following series:

Size	0-10	10-20	20-30	30-40	40-50
freq.	4	9	15	30	40

- (2) Find range and coefficient of range.

20, 50, 75, 25, 80, 40, 60.

- (3) From the following data, calculate range and coefficient of range.

Marks	10	20	30	40	50	60
freq.	12	15	7	2	3	5

- (4) Find the value of the smallest item of the data if the coefficient of range is 0.6 and the largest value is 60.

- (5) Calculate quartile deviation and coefficient of quartile deviation from the data given below:

250, 700, 325, 400, 150, 600, 580, 630, 450, 300, 125

- (6) Calculate quartile deviation and its coefficient from the following data:

121, 117, 118, 120, 131, 141, 131, 121, 123, 124, 111, 110

- (7) Find out quartile deviation of the following data

Wages	70	120	150	180	200	220	240
freq.	5	7	12	10	8	6	7

- (8) From the following data, calculate coefficient of quartile deviation

Wages less than	10	20	30	40	50	60	70
No. of workers	5	8	15	20	30	33	35

9. Calculate quartile deviation and coefficient of quartile deviation. (2)

Wages	0-10	10-20	20-30	30-40	40-50	50-60	60-70
f	20	45	85	160	30	35	55

10. Find the range which covers middle 50% of the items and coefficient of Quartile deviation from the following data.

X	11-20	21-30	31-40	41-50	51-60
fre.	14	62	99	18	7

11. Calculate Mean Deviation and its coefficient from Mean and Median with the following data:

Marks :	40	50	60	70	90	100	150
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12. Calculate Mean Deviation and its coefficient from Mean and Median with the following data:

X	5	10	15	20	25
f	4	6	8	10	12

13. Calculate Mean Deviation from Mean and Median. Find coefficient of Median deviation.

Income	40-50	50-60	60-70	70-80	80-90	90-100
f	5	10	20	25	15	5

14. Calculate Mean deviation from Mean.

class	11-20	21-30	31-40	41-50	51-60
f	14	62	99	18	7

15. Calculate Standard deviation and coefficient of variation. (Step deviation method)

100, 90, 120, 110, 80, 70, 150, 130, 50, 100

16. Calculate Standard deviation and coefficient of variation.

60, 70, 65, 80, 85, 90, 95, 100, 115, 120

(17) Calculate Standard Deviation and coefficient of variation.

Size	5	15	25	35	45	55	65
f	185	77	34	180	136	23	50

(18) Calculate Standard Deviation and its coefficient from the following data.

Size	0.5-1.5	1.5-4.5	4.5-5.5	5.5-8.5	8.5-13.5
f	1	2	3	4	5

19. Calculate the standard Deviation of the following data:

wages	0-10	10-20	20-30	30-40	40-50	50-60	60-70
No. of workers	10	15	20	25	15	10	5

20. Calculate coefficient of variation and variance from the following series showing population in different age group:

Age group (Year)	Population
less than 10	10
" 20	26
" 30	51
" 40	81
" 50	107
" 60	120
" 70	125

21. Draw a Lorenz curve with the help of following data.

Weekly wages (Rs)	No. of workers	
	Factory A	Factory B
6	6	2
25	11	38
60	13	52
84	14	28
105	15	38
150	17	26
170	10	12
400	14	4

22. From the following data find out which factory may be considered more uniform: ⁽³⁾

Wages	No. of Workers	
	Factory A	Factory B
20	30	45
60	25	35
100	30	25
140	45	40
180	25	25
220	13	20
260	24	5
300	8	5

23. Lives of two models of refrigerators in a recent survey are:

Life No. of Years	No. of Refrigerators	
	Model A	Model B
0-2	5	2
2-4	16	7
4-6	13	12
6-8	7	19
8-10	5	9
10-12	4	1

24. Show inequality in wages in two different firms using Lorenz Curve from the following data:

Wages (Rs)	No. of workers	
	Firm A	Firm B
50-70	20	150
70-90	15	100
90-110	20	90
110-130	25	110
130-150	20	50

Chapter 8 Index Number.

1. What is Index number?
2. What are the characteristics of Index numbers?
3. Write the uses or importance of index numbers.
4. What are the problems in the construction of Index number?
5. What is Consumer Price Index? What are its uses?
6. What do you mean by Wholesale price Index? What are its uses?
7. Write the formulas related to Index numbers.
8. What is Sensic?
9. What is Agricultural Price Index?
10. Distinguish between Laspeyres' and Paasche's Index.

Numericals

1. With the help of the following data calculate index-number for 2007 taking 2006 as base year.

Commodity	Price 2006 (RS)	Price 2007 (RS)
A	100	145
B	90	130
C	145	200
D	180	275
E	85	150

2. Calculate Price relatives for different years taking the price of 2007 as base year from the following data

Year	2002	2003	2004	2005	2006	2007
Price (RS)	60	78	102	120	90	84

3. Calculate price relatives taking average price for 6 years as base from the following data: (4)

Year	2002	2003	2004	2005	2006	2007
Price (Rs)	60	100	72	88	64	96

4. The price
4. Calculate index numbers from the following:
- (i) 2003 as the base year
- (ii) 2006 as the base year
5. Construct index number by simple average of price relatives method for 2007 taking the price of 2006 as base from the data given below:

Commodities	Price (Rs)	
	2006	2007
A	30	45
B	40	50
C	60	72
D	80	88
E	10	13

6. Construct index numbers from the data given below taking 2002 as base year.

Commodities	Price				
	2002	2003	2004	2005	2006
A	2	3	2.5	4	2.4
B	3	3.75	4.5	6	5.7
C	4	5	6	4.8	5.2
D	5	7.5	6.25	6.5	8

- (7) From the following data construct a weighted Index number for 2005 with 2000 as base year.

Commodity	Weights	Price (in Rs)	
		2000	2005
Wheat	15	10	15
Rice	10	8	16
Pulses	5	5	10
Milk	4	2	4
Oil	6	4	6
Sugar	7	3	6
Salt	3	1	2

8. Construct index numbers of prices from the data given below by applying
- (1) Laspeyres's formula
 - (2) Paasche's formula

Commodities	Base Year		Current Year	
	P	Q	P	Q
A	2	40	3	20
B	1.5	30	2.5	40
C	1	50	1.5	30
D	2.5	20	2	80

9. Construct the consumers Price Index Number for 2005 on the basis of 2004 from the following data using :
- (1) Aggregate Expenditure method.
 - (2) Family budget method.

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Articles	Quantity consumed (2004)	Price in Rs. 2004. (per unit)	Price in 2005 (Rs) (per unit)
wheat	2 Qtl	150	165
Gram	1 Qtl	80	100
Rice	1 Qtl	120	150
Bajra	1.5 Qtl	60	90
Ashar	1.5 Qtl	100	140
Oil	10 Kg	10	12
Gur	40 Kg	2	3

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INDIAN ECONOMIC DEVELOPMENT

CHAPTER # 6 : RURAL DEVELOPMENT

1. Why is it essential to develop rural areas for progress of the nation ?
2. What was the major reason for the decline of the growth rate of agriculture sector in the 1990s ?
3. Why do farmers need credit ?
4. Why have Self-Help Groups (SHGs) been set up ?
5. Why is diversification necessary ?
6. What are agro-processing industries ?
7. What do you mean by 'Operation Flood' ?
8. Why is Minimum Support Price (MSP) fixed by the government ?
9. Why are most of the rural households automatically out of the credit network ?
10. Why is state intervention necessary to regulate the activities of private traders in the rural agricultural sector ?
11. How is cooperative marketing beneficial to individual farmers ?
12. What is the role of NABARD in rural credit in India ?
13. Why has rural banking not been able to give adequate credit to farmers ?
14. Why is it important to develop proper storage facilities in rural areas ?
15. What is the need for organic farming ?
16. How have animal husbandry and fisheries emerged as an important source of diversification ?
17. Which are the areas that need fresh initiatives for development in India ?

CHAPTER # 7 : EMPLOYMENT – GROWTH, INFORMALISATION AND OTHER ISSUES

1. What is GDP ?
2. What is GNP ?
3. What constitutes the workforce ?
4. What is the share of rural workers in total workforce ?
5. Why is share of women in the workforce lower in urban areas ?
6. Define worker population ratio.
7. Define population.
8. Why are most of the activities done by women not recognized as productive work ?
9. Why is self employed workforce higher in rural areas ?
10. What change occurs in the employment structure with economic development ?
11. What is unemployment ?
12. What constitutes the informal sector ?
13. Why does rural workforce migrate to urban areas during some part of the year ?
14. Why is the worker population ratio in urban areas lower than in rural areas in India ?
15. Why is worker population ratio higher in males than in females in India ?

16. How does jobless growth happen ?
17. Why is it necessary to generate more employment in the formal sector ?
18. Which are the sources of data on employment in India ?
19. How is the workforce classified ?
20. How has the nature of workforce changed in India in recent times ?
21. How are the economic activities distributed into different industrial divisions ?
22. Give a brief note on the National Rural Employment Guarantee Act 2005 .
23. What are the various types of unemployment ?
24. What role does the government play in generating employment opportunities ?

CHAPTER # 8 : INFRASTRUCTURE

1. Explain the term `infrastructure .
2. What type of fuels are used by rural women in India ?
3. What is the share of nuclear energy of total energy consumption ?
4. Why do State Electricity Boards (SEBs) suffer losses ?
5. What does health infrastructure include ?
6. What do you mean by infant mortality rate ?
7. What are the indicators of health status of a country ?
8. What are the various commercial and non commercial sources of energy ?
9. How does agricultural and industrial progress depend upon infrastructure ?
10. comment on development of health services in India after independence .
11. Why do medical tourists come to India ?
12. How does the need for infrastructural facilities of low income countries differ from those of high income countries ?
13. List out the six systems of Indian medicine. What is the state of their infrastructure ?
14. Explain the two categories into which infrastructure is divided. How are both interdependent ?
15. Discuss the role of private sector in development of health infrastructure .
16. Why is it necessary to conserve energy ?

CHAPTER # 9 : ENVIRONMENT AND SUSTAINABLE DEVELOPMENT

1. What is meant by environment ?
2. What do you mean by the carrying capacity of environment ?
3. Why have some resources become extinct ?
4. What do you mean by the absorptive capacity of the environment ?
5. Why have environmental problems emerged in recent times ?
6. What is global warming ?
7. What has caused global warming ?

8. What do you mean by ozone depletion ?
9. What has led to depletion of ozone layer ?
10. How has the supply demand relationship led to degradation of environment ?
11. Why have the trees been excessively felled?
12. What has led to air pollution in urban areas ?
13. What do you mean by sustainable development ?
14. What are the sources of fuel in rural areas ?
15. What does the environment constitute ?
16. Which are the important mineral reserves in India ?
17. How has indiscriminate felling of trees led to environmental problems ?
18. What are some long term results of global warming ?
19. What are the factors responsible for land degradation ?
20. Give comparative benefits and limitations of solar and wind power.
21. What are the causes and remedies of soil erosion in India ?
22. How does population explosion contribute to the environmental crisis in India ?