

Summer Holidays' Home Work
(SESSION – 2019-20)
CLASS-XI Commerce

Subject: Economics

1. Students are supposed to complete the worksheet based on mean, median and mode and Microeconomics questions.

XI – ECONOMICS
TOPIC-MEAN, MEDIAN, MODE

1. Calculate mean using : a)direct method, b)assumed mean method, c)step deviation method.
(ans. 240)

WORKER	A	B	C	D	E	F	G	H	I	J
DAILY WAGES	120	150	180	200	250	300	220	350	370	260

2. Calculate average marks by: a)direct method, b)short cut method, c)step deviation method.
(ans. 35)

MARKS	10	20	30	40	50
NO. OF STUDENTS	5	10	40	20	25

3. Calculate mean by: a)direct method, b)short cut method, c)step deviation method.
(ans. 6)

MARKS	0-4	4-8	8-12	12-16
NO. OF STUDENTS	4	8	2	1

4. Calculate mean for the following:
a)

(ans. 146.25)

DAILY WAGES	Below 120	120-140	140-160	160-180	Above 180	Total
NO. OF WORKERS	10	20	30	15	5	80

- b) (ans. 116.33)

INCOME (MORE THAN)	75	85	95	105	115	125	135	145
NO. OF FAMILIES	150	140	11	95	70	60	40	25

- c) (ans. 30.2)

MARKS	Less than 10	Less than 20	Less than 30	Less than 40	Less than 50
NO. OF STUDENTS	4	10	20	40	50

d)

(ans. 29.60)

C-I	20-29	30-39	40-49	50-59	60-69
Frequency	12	8	4	6	10

e)

(ans. 34.5)

MARKS	0-10	10-20	20-40	40-70
NO. OF STUDENTS	5	10	15	20

5. Calculate missing frequency for the following cases:

a) Mean = 30

(ans. 28)

MARKS	5	15	25	35	45	55
NO. OF STUDENTS	5	7	12	?	5	3

b) Mean = 34

(ans. 30)

X	20	?	40	50	60
FREQUENCY	8	10	6	4	2

c) Mean = 29

(ans. 7)

C.I.	0-10	10-20	20-30	30-40	40-50	50-60
FREQUENCY	5	?	12	18	5	3

d) Mean = 62.

(ans. 3)

C.I.	0-40	40-80	80-120	120-160
FREQUENCY	6	9	?	2

6. Mean of a series of 10 items is 15. The values of 9 items are 5,30,20,12,15,3,10,2,18. Find 10th item.

(ans. 35)

7. The mean marks of 60 students in section A are 40 and mean marks of 40 students in section B are 35. Calculate the combined mean of all the students.

(ans. 38)

8. The mean marks of students of section A and B are 38. There are 60 and 40 students in section A and B respectively. If the mean marks obtained by students in section A are 40, find the mean marks obtained by the students of section B.

(ans. 35)

9. The mean marks of 100 students of combined section A and B are 38. If the marks obtained by the students of Section A are 40 and that of B are 35, Find the number of students in each section.

(ans. 60 and 40)

10. The average of a series of 40 items was calculated by a student as 265. But while calculating it, 115 was misread as 150. Find the correct mean.

(ans. 264.12)

11. Calculate the combined mean:

(ans. 63.125)

SECTION	MEAN MARKS	NO. OF STUDENTS
A	75	50
B	60	60
C	55	50

12. There are three types of workers- men, women and children, working on the construction of a building. Calculate average wage per day if a man is paid Rs.8, woman Rs.6 and a child Rs.4.

(ans. 6)

13. Calculate weighted mean for school A and B:

(ans. 73.75 and 73.76)

CLASS	Appeared in school A	Passed in school A	Appeared in school B	Passed in school B
IX	30	25	100	80
X	50	45	12	95
XI	200	150	100	70
XII	120	75	80	50
TOTAL	400	295	400	295

(Hint: Take appeared students column as weights.)

14. Batsman A,B,C and D played three matches. Calculate the average runs scored by each batsman.

(ans. A= 42.67, B = 56, C = 62.67, D = 47.33)

BATSMAN	Match I (1 st inning)	Match I (2 nd inning)	Match II (1 st inning)	Match II (2 nd inning)	Match III (3 rd inning)	Match III (3 rd inning)
A	60	20	26	10	100	40
B	40	50	60	36	70	80
C	100	10	8	18	100	140
D	20	40	46	84	42	52

15. Calculate mean:

(ans. 4.29)

Temp.	-40 to -30	-30 to -20	-20 to -10	-10 to 0	0 to 10	10 to 20	20 to 30	total
No. of days	10	28	30	42	65	180	10	365

16. Calculate median, Q1 and Q3:

a)

(ans. Median= 145, Q1= 142, Q3= 149)

Name of the student	Atul	Anurag	Deven	Satish	Mayur	Suresh	Arjun
Height	151	104	149	142	147	144	145

b)

(ans. Median= 146, Q1 = 142.5, Q3 = 150.5)

Name of students	Atul	Anurag	Raju	Amit	Aman	Satish	Deven	Mayur
Height	140	142	152	151	147	149	145	144

c) 17,41,114,32,32,15,35,11,35,33,18,23,15,20,38,21,22,12

(ans. M= 21.5, Q1 = 15, Q3= 32)

d)

(ans. M= 80, Q1= 70, Q3 = 100)

DAILY WAGES	100	50	70	110	80
NO. OF WORKERS	15	20	15	18	12

e)

(M= 45.4, Q1 = 38.43, Q3= 51.11)

MARKS	30-35	35-40	40-54	45-50	50-55	55-60	60-65
STUDENTS	14	16	18	23	18	8	3

f)

(ans. M= 59.35, Q1 = Q3= 68.25)

MARKS(BELOW)	10	20	30	40	50	60	70	80
No. of students	15	35	60	84	96	127	198	250

17. Calculate median from the following data:

(ans. 32.67)

SIZE	More than 50	More than 40	More than 30	More than 20	More than 10
FREQUENCY	0	40	98	123	165

18. If the arithmetic mean of the given data is 28. Find a) Missing frequency , b) Median.

(ans. 20,27.41)

Profits	0-10	10-20	20-30	30-40	40-50	50-60
No. of shops	12	18	27	?	17	6

19. Calculate median and Q3 using the following information:

(M= 27.05, Q3= 40.83)

MID VALUE	5	15	25	35	45	55	65	75
No. of students	3	10	17	7	6	4	2	1

20. The following series relates to the daily income of workers employed in a firm. Compute:

- Highest income of lowest 50%% workers,
- Maximum income earned by the lowest 75% workers,
- Maximum income earned by lowest 25% workers.

(ans. 25.125, 29.19, 19.92)

Daily income	10-14	15-19	20-24	25-29	30-34	35-39
No. of workers	5	10	15	20	10	5

21. Calculate median graphically using ‘less than and more than ogive technique’:

(ans. 20)

Marks	0-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40
Students	7	10	20	13	17	10	14	9

22. Find out mode using: a) inspection method, b) conversion into discrete series.

(ans. 7)

4,6,5,7,9,8,10,4,7,6,5,8,7,7,9.

23. Calculate mode by grouping method:

a)

(ans. 225)

Wages	125	175	225	275	325	375
No. of persons	3	8	21	6	4	2

b)

(ans. 5)

Mid values	1	2	3	4	5	6	7	8	9	10
Frequency	8	6	10	12	20	12	5	3	2	4

c)

(ans. 23.46)

Class(below)	15	20	25	30	35	40	45
Frequency	3	10	26	38	47	52	55

d)

(ans. 22)

Class	0-3	3-6	6-10	10-12	12-15	15-18	18-20	20-24	24-25	25-28	28-30	30-36
Freq.	4	8	10	14	16	20	24	14	16	11	10	6

24. Calculate mode graphically:

(ans. 23.33)

Marks	0-10	10-20	20-30	30-40	40-50	50-60
No. of students	5	12	14	10	8	6

25. Calculate the missing frequency, if median =50 and total number of families are 100.

(ans. 23,21)

Expenditure	0-20	20--40	40-60	60-80	80-100
No. of families	14	?	27	?	15

26. A) In an asymmetrical distribution mean is 58 and median is 61. Calculate mode.

(ans. 67)

B) If mode is 12 and median is 16, what will be the most probable value of mean?

(ans. 18)

27. Find the missing frequency, if median is 28 and N= 44:

(ans. 7,6)

Class	0-10	10-20	20-30	30-40	40-50	50-60
Frequency	3	?	15	9	?	4

28. Calculate mean, median and mode from the following information:

(ans. $X=67.9$, $M= 67.75$, $Z= 67.48$)

Mid values	59	61	63	65	67	69	71	73
No. of persons	1	2	9	48	131	102	40	17

MICROECONOMICS

Ch- 1 & 2

- Deepak is working as a sales manager at a salary of Rs.1,00,000per month. He received 2 more job offers. He got an offer of Rs.70,000 from Reliance Industry and offer of Rs.85,000 from Tata industry. What is his opportunity cost of working as a sales manager?
- A farmer produces 100 kg of wheat on a pc of land with the help of given resources. If this farmer can also produce 70 kg of rice with the same quantity of resources, then what is the opportunity cost of producing wheat?
- Calculate MOC and comment on the shape of PPC:

A)

Commodity A	0	1	2	3	4	5
Commodity B	15	14	12	9	5	0

B)

Good X	0	10	20	30	40
Good Y	200	180	140	80	0

C)

Good X	0	1	2	3	4	5
Good Y	100	95	85	70	50	25

D)

Good X	0	1	2	3	4
Good Y	16	12	8	4	0

- A country produces two commodities A and B5. Its production possibilities are shown in the following table:

Possibilities	A	B	C	D	E	F
Commodity X	20	14	9	5	2	0
Commodity Y	0	1	2	3	4	5

A) Calculate Marginal Rate of Transformation.

- B) Construct a PPF with the help of the various possibilities.
- C) Comment on the shape of PPC with reasons.
5. 'An economy always produces on, but not inside PPC.' Defend or refute with reason.
 6. A lot of people died and many factories were destroyed in an earthquake. How will this affect PPC of the economy?
 7. What will be the impact of massive unemployment on PPC?
 8. Production in an economy is below its potential due to unemployment. Govt. starts employment generation schemes. Explain its effect using PPC.
 9. What will be the impact of recently launched 'Clean India Mission'(Swachh Bharat Abhiyan) on the PPC of the economy and why?
 10. What will likely be the impact of large scale output of foreign capital of PPC of the economy and why?
 11. What is likely impact of 'Make in India' appeal to the foreign investors by the Prime Minister of India, on the PPC of India? Explain.
 12. What will be the impact of Sarv Shiksha Abhiyan on the PPC of the Indian economy and why?
 13. Explain the effects of floods in Jammu and Kashmir on its production possibility frontier.
 14. The government establishes large number of Institutes of Science and Technology. How will it affect the the production possibility frontier?
 15. The following news item was printed in the Indian Express: 'Centre increases number of work days under MGNREGA.' As per the news, the Central Government will increase the number of workdays under the rural job guarantee scheme from 100 to 150 in drought affected areas. How would it affect the PPC of the economy?
 16. Identify the following as Positive statements and Normative statements:
 - a) People should save more for their future.
 - b) In India, pollution is increasing at an alarming rate.
 - c) The government should impose heavy taxes on rich people.
 - d) Smoking should be discouraged in the world.
 - e) In India, tax rate slabs increase with the increase in income.
 - f) Higher interest rate induces people to save more out of their income.
 - g) High taxes on cigarettes discourage smoking.
 - h) Government should put more efforts to reduce pollution.
 17. What do you mean by Production Possibility Frontier. Give its assumptions. Explain with the help of its schedule and diagram. Explain its properties in detail.
 18. What do you mean by MOC or MRT? Explain with the help of a schedule. Why does MOC tends to rise? Differentiate between Marginal Opportunity Cost and opportunity cost.