

Sample Paper-02 (2016-17)
Economics
Class - XI

Answer
Section A

1. Sample is a group of items taken from the population for investigation and representative of all the items or universe.
2. When the sum of all items is divided by their number is known as arithmetic average.
3. It is a measure of deviation of actual distribution from the line of equal distribution.
4. Microeconomics deals with economic issue or economic problems related to microeconomic units like a household, a firm, or an industry. These issues and problems are studied and addressed like largely with a view to maximizing individual welfare.
Macroeconomics deals with economic issues or economic problems at the level of economy as a whole. These issues are studied keeping in mind the goals of social welfare.
5. Difference between Bar Diagram and Histogram:
 - (i) The spacing and the width or the area of bars are all arbitrary. It is the height and not the width or the area of the bar that really matters. But the width in a histogram is as important as its height.
 - (ii) Bar diagram can drawn both for discrete and continuous variables but histogram is drawn only for a continuous variables.
 - (iii) In bar Diagram some space must be left between consecutive bars; but in histogram no space is left between two rectangles.

6. $\sigma_y = \sqrt{\frac{\sum y^2}{N}}$

$8 = \sqrt{\frac{\sum y^2}{N}}$

By squaring both sides, we get

$64 = \sum \frac{y^2}{n} \Rightarrow \sum Y^2 = 64N$

Now $r = \frac{\sum xy}{\sqrt{\sum x^2 \times \sum y^2}} \Rightarrow 0.5 = \frac{120}{\sqrt{90 \times 64N}}$

Squaring both sides

$0.25 = \frac{14400}{5760N} \Rightarrow 1440N = 14400$

$N = \frac{14400}{1440} = 10$

7.

Size	Mid-value	Frequency
5-10	7.5	4
10-15	12.5	9
15-20	17.5	15
20-25	22.5	30
25-30	27.5	40

Range = H - L $\Rightarrow 27.5 - 7.5 = 20$

$$\text{Coefficient of range} = \frac{H-L}{H+L} \Rightarrow \frac{27.5-7.5}{27.5+7.5}$$

$$= \frac{20}{35} = 0.57$$

8. Merits: (i) Simple.

(ii) Based on all values.

Demerits: (i) Inaccuracy.

(ii) Not capable of algebraic treatment.

9. (a) $Z = 3M - 2\bar{X}$

$$26.6 = 3M - 56.2$$

$$3M = 26.6 + 56.2 = 82.8$$

$$M = \frac{82.8}{3} = 27.6$$

(b) (i) Mean and median can always be estimated with certainty but not the mode.

(ii) It is difficult to calculate mode as compared to mean and median.

(iii) Median and mode can be graphically located but not the mean unless it is a situation of normal distribution.

10. Random Sampling:

(a) Free from personal bias.

(b) Very simple and straight forward method.

(c) Each and every item of the universe stands equal chance of being selected.

Systematic Sampling:

(a) Every item does not get equal chance of being selected.

(b) Sample is easily determined.

(c) Hardly any possibility of personal bias.

11.

Commodity	Base Year (1999)		Current Year (2008)		p_0q_0	p_0q_1	p_1q_0	p_1q_1
	Price (Rs) (p_0)	Quantity (q_0)	Price (Rs) (p_1)	quantity (q_1)				
A	2	100	3	100	200	200	300	300
B	8	9	10	10	72	80	90	100
C	12	5	15	6	60	72	75	90
D	7	7	10	8	49	56	70	80
					$\Sigma = 381$	$\Sigma = 408$	$\Sigma = 535$	$\Sigma = 570$

(i) Laspeyre's method:

$$P_{01} = \frac{\sum p_1q_0}{\sum p_0q_0} \times 100$$

$$= \frac{535}{381} \times 100 = 140.42$$

(ii) Paasche's method:

$$P_{01} = \frac{\sum p_1q_1}{\sum p_0q_1} \times 100$$

$$= \frac{570}{408} \times 100 = 139.70$$

(iii) Fisher's method

$$p_{01} = \sqrt{\frac{\sum p_1 q_0}{\sum p_0 q_0} \times \frac{\sum p_1 q_1}{\sum p_0 q_1}} \times 100$$

$$= \sqrt{\frac{535}{381} \times \frac{570}{408}} \times 100 = 140.05$$

12.

(X_A)	Team A $X_A - \bar{X}(X_A)$	X_A^2	(X_B)	Team B $X_B - \bar{X}(X_B)$	X_B^2
15	8	64	20	13	169
10	3	9	10	3	9
7	0	0	5	-2	4
5	-2	4	4	-3	9
3	-4	16	2	-5	25
2	-5	25	1	-6	36
$\Sigma = 42$		$\Sigma = 118$	$\Sigma = 42$		$\Sigma = 252$

Team A	Team B
$X_A = \frac{\sum X_A}{N} = \frac{42}{6} = 7$	$X_B = \frac{\sum X_B}{N} = \frac{42}{6} = 7$
$\sigma_A = \sqrt{\frac{\sum X_A^2}{N}} = \sqrt{\frac{118}{6}} = 4.43$	$\sigma_B = \sqrt{\frac{\sum X_B^2}{N}} = \sqrt{\frac{256}{6}} = 6.48$
C.V. (Team A) = $\frac{\sigma}{X_A} \times 100$	C.V. (Team B) = $\frac{\sigma}{X_B} \times 100$
= $\frac{4.43}{7} \times 100 = 63.29\%$	= $\frac{6.48}{7} \times 100 = 92.57\%$

C.V. of Team A is less, so Team A is more consistent.

Section B

13. Three central problems are:

- what to produce and in what quantities.
- How to produce.
- For whom to produce.

14. Quantitative restrictions are non tariff barriers imposed on the amount of imports and exports.

15. Need for economic reforms are following:

- Poor performance of public sector:** Public sector was assigned an important role to work for the economic development of India. Except few public enterprises, the overall performance was very disappointing.
- Deficit in balance of payments:** Deficit in balance of payments arises when foreign payments for imports are in excess of foreign receipts from exports. There was slow growth of exports due to low quality and high prices of Indian goods in the international markets. Balance of payments deficit was estimated as Rs 2214 Cr in 1980-81 which rose to a high level of 17367 Cr in 1990-91.
- Inflationary pressure:** There was a consistent rise in the general price level in the economy. The rate of inflation rose from 6.7% to 16.7%. Such a high level of inflation affected the demand for the Indian products in domestic as well as foreign markets.

16. (a) Indian remained an agricultural country throughout the British period and its agricultural sector remained totally backward. There was commercialization of agriculture, to serve the interest of Great Britain.
- (b) British rulers never permitted to modernize the prevailing industrial structure on India. There was large scale destruction of world famous handicrafts and cottage industries of the country.
- (c) The British rulers thoroughly exploited the Indian economy through economic drain.
- (d) By following the policy of discriminating protection, Britishers gained complete control over the entire Indian markets.
17. (a) Countries now almost self sufficient in food.
- (b) With growth of Iron and steel, machine tools and heavy engineering industries, India has made considerable advancement towards self-reliance in capital equipments.
- The Objective of social justice as three principal dimensions:
- (1) To improve standard of living of weaker sections of the population.
- (2) To reduce income inequalities.
- (3) To reduce regional or state inequalities.
18. (1) Pakistan has failed to bring about stable institutional reforms in agriculture. Accordingly performance in agricultural sector has remained volatile depending on climatic condition.
- (2) For its foreign exchange requirements, Pakistan has relied largely on remittances from abroad and agricultural exports. A setback to these sources of foreign exchange has caused a corresponding setback to the process of growth.
- (3) Lack of political stability in Pakistan has involved huge public expenditure on the maintenance of law and order.
- (4) Pakistan is incurring huge expenditure on building a competitive defence- system, slashing its resources for growth and development.
19. A small scale industry is presently defined as the one whose investment does not exceed Rs 5 Cr. Three typical characteristics of SSI are:
- (1) **SSI is labour intensive and therefore employment oriented:** To produce a given output, SSI is expected to use more of labour than capital.
- (2) **SSI shows locational flexibility and is therefore equality oriented:** It contributes to the equality of growth and development across different regions of the country.
- (3) **SSI needs small investment and is therefore equity oriented:** SSI needs much smaller investment. It does not cause concentration of economic power. It promotes inter personal equality.
20. Fiscal reforms are mainly consists of tax reforms:
1. Reduction in taxes.
 2. Reforms in indirect taxes.
 3. Simplification of process.
21. Population – China (1303.7 M) is the most populous country in the world and India (1103.6 M) is the second most populous country. Population of Pakistan is very less (162.4 M people).
Growth Rate of Population: China's growth rate of population is lowest (1%) as compared to India (1.7 %) and Pakistan (2.5 %).
Density of Population: Density of Population of China is the lowest (138 persons per sq km) as compared to India (358 persons per sq km) and Pakistan (193 persons per sq km).
Sex Ratio: Sex ratio is lowest in Pakistan with 922 females per 1000 males. In India and China, the corresponding figures are 933 and 937.
Organisation: Organisation is high in both Pakistan (33.4 %) and China (36.1 %). In India, only 28 % of its people live in Urban Area.

22. The stagnation in the agriculture sector was caused due to the following reasons :
1. Land settlement system.
 2. Commercialisation of agriculture.
 3. Low level of productivity.
 4. Adverse affects of partition.
23. (a) 1. In 2003, secondary sector contributed highest to China's GDP at 53 %, whereas in India and Pakistan, the share of secondary sector was 26 % and 23 % respectively.
2. China had been shifting their employment and output from agriculture to manufacturing and then to services. In India and Pakistan, the shift was taking place directly to the service sector.
3. The proportion of workforce engaged in manufacturing in India and Pakistan in 2000 was low at 16 % and 18 % where as 27 % of population was engaged in China.
- (b) The per capita income is coupled with better health, education and social justice is the key measure of human development.