

## Solution

### INTRODUCTION TO STATISTICS WS 1

#### Class 11 - Economics

##### Section A

1. **(a)** Marshall  
**Explanation:** Adam Smith maintains that wealth is the subject matter of economics. He fails to define the purpose of wealth. So, Marshall succeeded to maintain that man earns wealth to gain material welfare. So, there is a shift of wealth to welfare.
2. **(b)** Not all wants can be satisfied.  
**Explanation:** When wants are greater than the means to satisfy them, many of them remain unsatisfied.
3. **(b)** Consumption  
**Explanation:** Consumption refers to satisfying wants using final goods and services.
4. **(d)** It deals with the properties of an economic man.  
**Explanation:** Economics does not deal with the properties of an economic man.
5. **(d)** Scarcity  
**Explanation:** Rush, crowd, etc at such places is due to the inability of absorbing the wants which are due to scarcity.
6. **(d)** Limited resources and unlimited wants.  
**Explanation:** Had wants being limited, resources would have been abundant. But, it is the infinitude of wants which makes resources scarce.
7. **(a)** A devotee visiting a pilgrimage  
**Explanation:** Economic activities are ones that are undertaken for monetary gain. The one who produces goods or provides services is a producer (farmer, doctor). When we buy goods or products for personal needs or for gifting, we become a consumer. In all these cases people are gainfully employed in economic activity. While a devotee goes to a temple or a pilgrimage out of devotion, there is no monetary gain involved in it.
8. **(b)** service - provider  
**Explanation:** He is a service provider as he is providing his expert services in marketing the product.
9. **(c)** Consumer  
**Explanation:** He doesn't require goods and services for manufacture or resale, but for satisfying wants only.
10. **(b)** She is misusing the statistics  
**Explanation:** She has not used any statistical tool to make her claim valid. She cannot generalise her claim without using data. So, she is misusing statistics.
11. **(d)** Production  
**Explanation:** It is in the process of production that the raw materials are processed and made into finished products suitable for consumption.
12. **(b)** Scarcity  
**Explanation:** Had scarcity of resources not been there, the questions: what to produce, how to produce and for whom to produce (economic problems) were all absurd as, all was available in abundance.
13. **(d)** Wealth Definition

**Explanation:** His book 'An enquiry into the nature and causes of wealth of nations' implies his definition of economics based on wealth. So, as per Adam Smith wealth comprises the subject matter of economics.

14. (c) Consumption  
**Explanation:** Consumption is the base of all production activities because the main motive of production is consumption. When consumption occurs, then the money goes back to the producers and they produce more and thus the cycle continues. Without consumption, all the produce will go waste.
15. (a) Implies that consumer's wants will never be completely satisfied.  
**Explanation:** Implies that consumer's wants will never be completely satisfied. As wants are greater than the means to satisfy them.
16. (a) Both A and R are true and R is the correct explanation of A.  
**Explanation:** New science has evolved nowadays which is called Econometrics as there is a vital relationship between economics, mathematics, and statistics due to the importance of mathematics and statistics in economics.
17. (c) A is true but R is false.  
**Explanation:** A producer can study the competition and demand of a commodity in the market because a producer needs statistics for deciding the cost of production and selling price in the market.
18. (a) Both A and R are true and R is the correct explanation of A.  
**Explanation:** A person has to forecast when the demands would be great and accordingly decide what amounts of reserves he must have because the banker plays an important role in commerce and industry. He provides finance to the producer and the trader.
19. (a) Both A and R are true and R is the correct explanation of A.  
**Explanation:** Both A and R are true and R is the correct explanation of A.
20. (b) Both A and R are true but R is not the correct explanation of A.  
**Explanation:** Both A and R are true but R is not the correct explanation of A.
21. (c) A is true but R is false.  
**Explanation:** A is true but R is false.
22. (b) a(i), b(iii), c(ii)  
**Explanation:** Same as defined in economics .
23. (a) people and society  
**Explanation:** Economics has emerged due to scarcity of resources amid infinite wants. But, these scarce resources have alternative uses which are discussed in economic theories.
24. (b) Means, wants  
**Explanation:** It's a fact from the real-world where wants exceed the means or resources.
25. (a) activity i is economic activity and ii is non-economic activity  
**Explanation:** Activity i is an economic activity and ii is non-economic activity. Activities which are undertaken to satisfy social, religious cultural and sentimental requirements are called non-economic activities. A mother cooking for her family is an example of non-economic activities. Same father singing song at his daughter's birthday party is non-economic activity.
26. (b) Distribution of goods as charity  
**Explanation:** A non economic activity is undertaken without taking into account any monetary reward.
27. Microeconomics studies economic relationship or economic problems at a level of an individual - an individual firm, an individual house or an individual consumer.
28. Normative economics deals with what ought to be based on value judgments. It is used to judge whether the economic events are desirable or not.

29. Positive economics deals with actual facts without making any value judgments. It deals with "what is" and it doesn't deal with "what ought to be".

**Section B**

30. Yes, I agree with the statement. Human activities are classified into economic and non-economic activities. Economic activities are those which are performed for some economic consideration and they are undertaken to earn a living, whereas non-economic activities are performed for psychological satisfaction and out of love, sympathy, patriotism, etc. Economic activities are concerned with all those activities which are concerned with the production, consumption and distribution of goods and services which are not available for free. But, there is no expectation of any kind of monetary reward or benefit in non economic activities. For example, when a doctor treats a patient at a hospital or a clinic, he charges a fee for that, thus it becomes an economic activity. However, when the same doctor treats his son/daughter at home, it becomes a non-economic activity. The same can be applied to a teacher teaching students in a school for which she takes the salary and hence becomes an economic activity whereas teaching her own children at home is a non economic activity.

31. Economics is both art as well as science. Following are the reasons:

Reasons for being science.

1. Economics like scienc is based on facts and figures, e.g prices, income, cost etc.
2. Economics like science establishes relationship between cause and effect, e.g law of demand.
3. Economics like science has its own methodology as both inductive and deductive methods are used to derive it's laws.
4. Economics like science is able to forecast. For instance, if price of cars will go up , their quantity demanded would decrease in the future.
5. Economics like science is capable of measurement, E.g we compute price elasticity of demand.

Reasons for being an art.

1. Economics like art is applied to the solution of many economic problems.
2. Economics like art is a practice of knowledge e.g we practise principles of public finance to solve economic problems of government.

32. Had there been no scarcity, there would have been no need for optimizing the resources. But the fact is that resources are scarce in relation to unlimited human wants and therefore, we need to optimize their utilization so as to maximize our utility level. It is used for decisions at individual as well as society level. Had there been no scarcity, there would have been no problem of making a choice. We need not make choice in case of abundant things. Therefore, it is right to say that scarcity and choice go together.

33. Economic activities refer to those activities which are undertaken to earn living. Every economy undertakes 3 main economic activities:

Consumption: It is an economic activity as it deals with the use of goods and services for the satisfaction of human wants.

Production: it is an economic activity as it is undertaken to produce goods and services for generation of income and satisfying human wants.

Distribution: it is an economic activity which studies how income generated is distributed among the factors of production.

Basis	Economic Activities	Non-Economic Activities
Meaning	Activities which are undertaken to earn money are called economic activities.	Activities which are undertaken because of love, care, religious factors, emotional reasons, hygienic reasons etc are non-economic activities.
National Income	These activities are included in national income.	These activities are not included in National Income.
Example	A teacher teaching in a school; A doctor treating a patient; A farmer working in his farm; A lady performing on stage as a paid artist etc.	A student preparing for IAS and being taught by his father; a father dropping his child to school; a person brushing his teeth; a person offering prayers in the morning etc.

35. Economics is a positive discipline as it aims to document and analyse individual and collective behaviours. It is also, and more importantly, a normative discipline as its main goal is to better the world through economic policies and recommendations. For example if price of a commodity increases ,it's quantity demanded would decrease, is a positive statement. The statement that government expenditure should increase by 10% is a normative statement.

36. Scarcity Definition was given by Robbins. According to him, "Economics is the science which studies human behavior as a relationship between ends and scarce means which have alternative uses."

**Critical Evaluation of Scarcity Definition:**

1. Robbins' defined economics as neutral between ends and declaring economists to be least bothered about values and welfare.
2. Robbins' definition of economics does not cover the aspects of economic growth and economic development.

3. Problem of unemployment is not a problem of scarcity but a problem of abundance of manpower.
  4. It has reduced the scope of economics only to allocation of resources.
37. Human wants to refer to our desire for goods and services and for which we have the ability to buy. Human wants are unlimited, whereas the means to satisfy these wants are not only limited but have alternate uses also. The Scarcity of resources is one of the main reasons for all economic problems. Since the resources to satisfy our wants are limited, i.e. the supply of these resources are less as compared to their demand, we have to choose the best alternative to which these resources can be put. In other words, we have to decide which wants are to be fulfilled by utilising the given resources for choosing, we can rank the wants according to our priorities. The want which appears high on the priority list and for which we have the ability to pay will be first chosen to be satisfied.
38. I refute this statement. Any activity concerned with production, distribution or investment is said to be associated with Economics. Many activities which involve money but are not a part of Economics include donations, pocket money gambling etc. On the other hand, many activities are a part of Economics but are not involving money. It includes prize, gift, production for self-consumption, national income, investment in own business, barter system etc.
39. Some recent definitions have been called growth definitions.
1. According to Professor Henry Smith, "Economics is the study of how in a civilized society one obtains the share of what other people have produced and of how the total product of society changes and is determined."
  2. According to Jacob Viner, "Economics is what economists do."
  3. According to Paul A Samuelson, "Economics is the study of how men and society choose, with or without the use of money, to employ scarce productive resources which could have alternative uses, to produce various commodities over time and distribute them for consumption now and in future amongst various people and groups of society."

### Section C

40. Problems of choice is unavoidable in the ordinary business of life because of following reasons:
1. **Unlimited Wants:** Human wants are unlimited. The moment want is satisfied other one creeps up. It is a never-ending phenomenon both in quantitative and qualitative terms. An important thing to note is that however, wants are unlimited but they vary in their intensity. It is because of this variation in intensity that people are able to allocate the resources to satisfy their some wants.
  2. **Scarce Means:** Means to satisfy human wants are scarce. Had means been unlimited, there would have been no economic problem at all. Resources being limited, all wants cannot be satisfied; then the problem of prioritizing the wants arises.
  3. **Means have alternative uses:** Economic resources can be put to various uses. Like a piece of land can be used for agriculture, school, hospital or residential building. It is because of alternative uses of resources that we have to decide about best allocation of resources.
41. Following are the vital economic activities in an economy:
1. **Consumption:** Consumption deals with satisfaction of human wants. It is an economic activity which deals with the use of goods and services for the satisfaction of human wants. For example, if you are feeling hot and when you use fan, it gives you satisfaction in the form of comfort, you are consuming electricity.
  2. **Production:** Production includes all those activities which are undertaken to produce goods and services for generation of income by enhancing utility of goods and services. It is the process which adds to the level of utility. For example, when wood is converted into furniture, it increases the worth of wood. Similarly, transport creates place utility by taking goods or persons from place where their utility is less to places where their utility is more. For the production of any goods and services, a person needs land, labor, capital and entrepreneur.
  3. **Distribution:** Distribution is that economic activity which studies how income generated is distributed amongst different factors of production of land, labour, capital and entrepreneur in the form of rent, wages, interest and profits. It studies if income is distributed equally or unequally.
42. No, I do not agree. Economics is a positive as well as a normative science.
- a. It is also concerned with welfare aspects, policy formulation and non monetary issues.
  - b. At micro level, it does talk about maximization aspects but, when it is applied at macro level, it is concerned with socio-economic problems. In those cases, it thinks beyond money as well.
  - c. Many public sector undertakings are not getting any profits but they are continuing because of welfare motive that they fulfill.
43. Marshall pointed out that wealth is not an end in itself; but it is only a means to an end; end being promotion of human welfare. Thus, according to Marshall, wealth is only a secondary thing; it is man and his ordinary business of life which is the primary object of economic study. According to Alfred Marshall, Economics is the study of mankind in the ordinary business of life. It examines that part of individual and social action which is most closely connected with the attainment and with the use of the

material requisites of wellbeing. Thus, it is one side of the study of wealth and more important side is a part of study of the man. According to A. C. Pigou "The range of our enquiry becomes restricted to that part of social welfare that can be brought directly or indirectly into relation with the measuring rod of money." According to Cannan, "The aim of political Economy is the explanation of the general causes on which the material welfare of the human being depends." Critical Evaluation of the Welfare Definition: Economics studies not only material things but also non-material things.

1. Welfare is a subjective thing and varies from person to person.
  2. Goods like liquor, opium and cigarettes etc are harmful to health but are studied in economics as they are scarce in relation to demand for them.
44. Economics helps an individual to solve economic problems. An economic problem arises because of unlimited wants, scarce resources and alternative uses of these resources. Economics helps to make intelligent choices in the backdrop of scarcity. Thus helping to solve the economic problem. It helps a consumer to maximise his satisfaction and it helps a producer to maximise profits. Economics tells us how society achieves social welfare. Economics helps in studying the current problems of the economy. It analyses the costs and benefits of improving patterns of resources allocation. It is a branch of knowledge where various facts have been systematically collected, classified and analysed. It is because of these reasons that I am studying economics.
45. When we apply the principle of scarcity on our life, we realize that time is our scarce most resource and is non-renewable. I can't increase my life by one second by spending my entire wealth. Therefore, I must make best possible use of my time. It teaches us efficiency, optimum utilization, no wastage, rationality and decision making by cost-benefit analysis.
46. Pioneers of the science of economics defined it as a science of wealth. Adam Smith who is known as father of economics in his famous book on economics "An Enquiry into the Nature and Causes of Wealth of Nations", defined economics as. "Economics enquires into the causes that determine the wealth of a country and its growth." According to J B Say, "Economics is a science which treats of wealth." According to FA Walker, "Economics is the name of that part of knowledge which relates to wealth."
- Critical Evaluation of the wealth definition:**
- (a) It ignored immaterial things such as education, health etc outside the definition of wealth and therefore beyond the bounds of economic wealth.
  - (b) It ignored many aspects of economics like welfare and social justification.
  - (c) They also showed a biased attitude by regarding rights to private property or wealth as natural and moral rights.
47. Economics is required in all spheres of life.
- a. **As a Consumer:** All of us have a limited income and we wish to satisfy our unlimited wants from it. Economics helps us to take optimum decisions regarding consumption and allocation of income to different goods and services.
  - b. **As a Producer:** A producer wants to produce his goods and services in such a way that his cost is least and profits are most. Economics gives such principles which help him to attain such a combination.
  - c. **As an Investor:** As an investor, we need to invest our funds in such a venture which give us maximum returns with minimum risk. Once again Economics gives such principles which help him to attain such a combination.
  - d. **As a Citizen:** As a citizen, Economics helps us to understand the impact of Government policies on our society and economy. Accordingly, we can say if government is working efficiently or not.
  - e. **As a human being:** When we apply the principle of scarcity on our life, we realize that time is our scarce most resource and is non-renewable. We can't increase our life by one second by spending our entire wealth. Therefore, we must make best possible use of our time.

#### Section D

48. (c) Art  
**Explanation:** Art
49. (a) Ramesh has a rupees hundred note in his pocket  
**Explanation:** Ramesh has a rupee hundred note in his pocket
50. (a) All of these  
**Explanation:** All of these
51. (a) Production  
**Explanation:** Production
52. 1. Macro economics

#### Section E

53. Fill in the blanks:

- (i) 1. Non-Economic
- (ii) 1. Adam Smith
- (iii) 1. Good, services
- (iv) 1. Economic activities
- (v) 1. Economic
- (vi) 1. Normative

54.

<b>Basis</b>	<b>Positive Economics</b>	<b>Normative Economics</b>
Meaning	It deals with laws, Principles, theories and facts of economics.	It deals with opinions, policy evaluation and idealistic part of economics.
Reality vs. Idealism	It deals with reality, i.e. 'what is'.	It deals with idealistic situation, i.e. 'What ought to be'
Value Judgments	No value judgments are associated with positive economics.	value judgments are associated with normative economics.
Example	(a) There is inverse relation between price and quantity demanded, other things being equal. (b) In India, 34 % marginal farmers are living below poverty line. (c) MGNREGA was launched in 2005.	(a) Globalization is widening the gap between the rich and the poor. (b) Poverty is worse than unemployment. (c) Price rise is disastrous for the economy. (d) We should not give subsidies on fertilizers.