1. All points on or below a budget constraint
   A. are attainable with the given income.
   B. are equally desirable.
   C. represent market basket combinations that exhaust the income available.
   D. are described, in part, by a, b, and c above.

2. Which one of the following is/are the limitation/s of the cardinal utility theory?
   A. The assumption of constant marginal utility of money
   B. Measuring utility using arbitrary numbers
   C. The principle of diminishing marginal utility
   D. All of the above

3. Which one of the following is correct about the concept of utility?
   A. Utility is subjective
   B. Utility is the same as usefulness
   C. Utility cannot be ranked
   D. Utility from the same good never varies across place and time
   E. All of the above

When answering questions 4&5, consider the following graph of a person's consumption indifference curves.
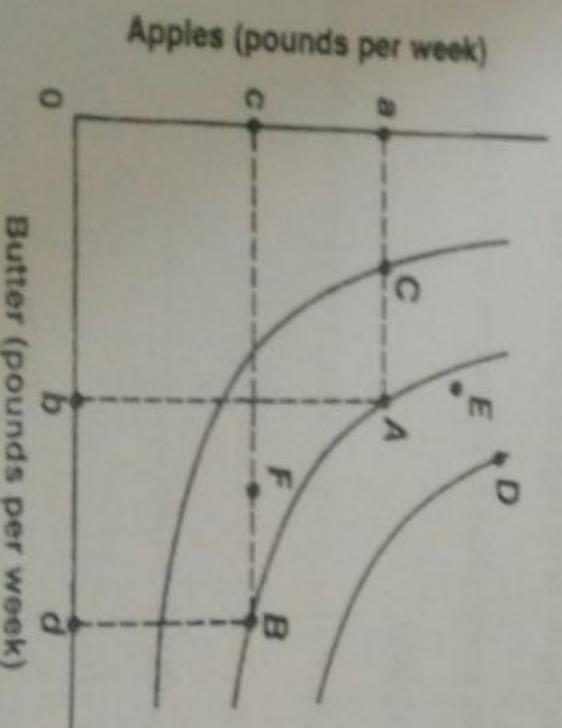
4. This graph indicates that the consumer
   A. at A is indifferent between 0a of apples and 0b of butter.
   B. at A is consuming either 0a of apples or 0b of butter.
   C. is indifferent between 0a of apples plus 0b of butter on the one hand and 0c of apples plus 0d of butter on the other.
   D. is correctly described by all of the above.

This graph also shows the consumer's marginal rate of substitution in the *AB* range to be

   A. 0*a* of apples for 0*d* of butter.
   B. 0*a* of apples for 0*b* of butter.
   C. 0*c* of apples for 0*d* of butter.
   D. *ac* of apples for *bd* of butter

6. Suppose the consumer's utility function is given as U (X, Y) = X^3Y^5, what is the Marginal Rate of Substitution of X for Y (MRS_{XY})?

   A. 5X/3Y
   B. 3Y/5X
   C. $3X^2Y^5/5Y$
   D. $3X^2/5Y^4$
   E. None of the above

7. If A, B, C, and D are any four market baskets, and if the consumer has ranked them so that D is preferred to C, A is *not* preferred to B, and B is *not* preferred to C, then

   A. A is preferred to C.
   B. A is preferred to D.
   C. B is preferred to D.
   D. D is preferred to A.
   E. D is not preferred to B.

8. Which one of the following is not correct about a well-behaved indifference curves (ICs)?

   A. ICs cannot cross each other
   B. ICs are downward sloping to the right
   C. A higher IC is always preferred to a lower one
   D. ICs are concave to the origin
   E. None of the above

9. If average total cost is 100 for a given output and marginal cost is 70, we then know that average fixed cost is

   A. 30.   C. 70
   B. 170.   D. not possible to determine with the information given.

10. A curve that can never be "U" shaped is the:

   A. Average variable cost curve.
   B. Marginal cost curve.
   C. Average fixed cost curve.
   D. Average total cost curve.

11. A firm operating in a perfect market maximizes its profit by adjusting

   A. its output price until it exceeds average total cost as much as possible.
   B. its output price until it exceeds marginal cost as much as possible.
   C. its output until its marginal cost equals output price.
   D. its output until its average total cost is minimized.

12. Changing the level of government spending is an example of:

   A. fiscal policy.
   B. interest rate policy.
   C. monetary policy.
   D. exchange rate policy.

13. During inflation
   A. All prices are necessarily rising
   B. Some prices may rise, while others are falling but the overall price level rises
   C. Some prices are rising, others may remain constant
   D. A and B
   E. B and C

14. The existence of underground economies,
   A. Does not affect unemployment rate.
   B. Understates the official national unemployment level.
   C. Overstates the official unemployment rate.
   D. None of the above.

15. Indifference curves are convex to the origin because we assume that
   A. Two consumption goods are perfect substitutes
   B. Two consumption goods are perfect complements
   C. Two consumption goods are unrelated
   D. Two consumption goods are imperfect substitutes
   E. None

16. Being a price taker in a market means that the seller
   A. charges each consumer the maximum that she will be able to pay for the product.
   B. has no choice but to charge the equilibrium price that results from the market supply and demand curves.
   C. takes her price from her average total cost curve.
   D. sells her products at different prices to different customers

17. An example of the frictionally unemployed is a(n):
   A. autoworker who is temporarily laid off because of a decline in sales.
   B. geologist who is permanently laid off from an oil company due to a new technological advance.
   C. worker at a fast-food restaurant who quits work and attends college.
   D. real estate agent who leaves a job in Awassa and searches for a similar, higher paying job in Addis Ababa.

Use the following information to answer questions 18 to 19. The short run production function of a textile firm is given by $Q = 18L^2 - L^3$, where Q is output and L is labor used for production.

18. The range of labor that the firm has to hire in the second stage of production is
   A. 0 to 3
   B. 3 to 18
   C. 6 to 12

   D. 9 to 12
   E. None

19. The value of L that maximizes output (assuming that the cost of labor is zero) is
   A. 0   B. 18   C. 12   D. 36   E. None

20. Double counting arises _____
   A. Because statisticians are careless in computing national income
   B. Only in developed nations
   C. Because the outputs of some firms are the inputs of other firms
   D. Only during inflation
   E. None of the above

21. An oligopolistic industry can be characterized by all of the following except
A. many sellers.
B. mutual interdependence.
C. economies of scale.
D. a homogenous product
E. A & B

22. One of the primary issues covered within macroeconomics is
A. The behavior of households
B. The pricing decisions of a firm
C. The purchasing decisions of a consumer
D. Inflation
E. Price discrimination

23. The Consumer Price Index (CPI) differs from the GDP deflator in one of the following ways?
A. The GDP deflator measures the prices of a much narrower group of goods than the CPI does.
B. The CPI includes the prices of imported goods whereas the GDP deflator does not.
C. The CPI excludes the prices of exported goods.
D. The GDP deflator includes the prices of exported goods whereas the CPI does not.
E. B and D

24. A firm in a perfectly competitive industry is producing 50 units at its profit maximizing quantity. Industry price is Birr 2 and the average total cost of the firm at profit-maximizing level is Birr 1.50. What is the firm's economic profit?
A. 25   B. 50   C. 100   D. 0   E. None of the above

Answer question 25& through 26 based on the following information on national income accounts of hypothetical economy:

GDP	$12,000
Gross investment	1,000
Net investment	600
Net Export	3,000
Government expenditure	1,000
Government budget balance	2,000
Net factor payment from abroad	-2,000
Indirect Business Tax	2,000

25. The gross private consumption expenditure of the economy is
A. 4000   B. 6000   C. 7000   D. 3000   E. None of the above

26. The GNP and NI respectively equals to
A. 10,000 & 600
B. 10,000& 7,600
C. 10,000& 9600
D. 5400 & 5800
E. None of the above

27. Real GDP is nominal GDP adjusted for:
   A. double counting.
   B. changes in prices.
   C. population
   D. Imports

28. All of the following terms are types of macroeconomics data except:
   A. The budget deficit
   B. The growth rate of real GDP
   C. The exchange rate
   D. The level of the production in the steel industry
   E. The unemployment rate

29. Which one of the following is not true about expansion phase of the business cycle?
   A. The economy starts to grow or recover
   B. Businesses flourish and employment increases
   C. Production and national income start to decline while unemployment rises
   D. Inflation and employment increases

30. A situation when the workers are willing to work under any conditions and at the going wage rate but they fail to get employment, it is called mainly
   A. Voluntary Unemployment
   B. Involuntary Unemployment
   C. Cyclical Unemployment
   D. Frictional Unemployment

PART II: Workout questions: Attempt all of the following questions with all necessary steps and explanations (20 marks)

1. Suppose the short – run cost function of a firm is given by: $C = 2Q^3 - 2Q^2 + Q + 10$, Find:
   i.   The expressions for TFC & TVC *(1 mark)*

   ii. The expressions for AFC, AVC & AC and MC *(2 marks)*

iii.   The minimum value of AVC. *(3 marks)*

2. Suppose that you are given the following information about a particular perfectly competitive industry.
    Market Demand: $QD = 6500 - 100P$
    Market Supply: $Qs = 1200P$

    Firm total cost function: $C(q) = 722 + \dfrac{q^2}{200}$

    Assume that all firms are identical and that the market is characterized by perfect competition.
    A) What level of output should the firm produce to maximize its profit? *(4 marks)*

B) Determine the level of profit at equilibrium.(*2 marks*)

C) What minimum price is required by the firm to stay in the market?(*4 marks*)

3. Bety's beauty salon service is a profit-maximizing, competitive firm. Bety gives beauty service for $27 each. Her total cost each day is $280, of which $30 is a fixed cost. She works 10 women a day. What can you say about Bety's short-run decision regarding shut down? Explain your answer.(*4 marks*)