## Entrance Examination - 2020

M.A. Financial Economics

Time: 2 Hours
Part A: 25 Marks
Max. Marks: 100
Part B: 75 Marks

## HALL TICKET NUMBER

## INSTRUCTIONS

1. Please read these instructions carefully before marking your answers on the OMR answer sheet.
2. Write your Hall Ticket Number on the OMR sheet given to you. Also write your Hall Ticket Number in the space provided above.
3. Answers are to be marked on the OMR answer sheet following the instructions provided thereon.
4. Handover the OMR answer shcet at the end of the examination to the invigilator.
5. No extra sheets will be given. Plain sheets are given in the booklet for rough work.
6. There are 100 questions in this paper. The Question Paper has two parts - Part-A and Part-B. The Part-A contains 25 questions and the Part-B contains 75 questions. Marks obtained in Part-A will determine the merit rank in case of a tie in the total number of marks obtained.
7. There is negative marking. For each question, the correct answer gets 1 (one) mark and a wrong answer gets -0.33 marks. Each question has only one correct option.
8. The appropriate answer should be coloured with either a blue or a black pen or a sketch pen on the OMR sheet. DO NOT USE A PENCIL.
9. This question paper contains 25 pages including the cover page and pages for rough work (pages 24 to 25 ).
10. This question paper booklet can be taken by the candidates at the end of the examination.

## Part-A

1. Following four statements are based on Diagram-1 and Diagram-2
I. Indifference curves in Diagrạm-1 violate assumptions of transitivity \& more is better.
II. Indiflerence curve IC2 gives higher utility than IC1 to the consumer in Diagram-1 III. Indifference curves in Diagram-2 show that Good $X$ and $Y$ are perfect complements. IV. Indifference curves in Diagram-2 show that Good $X$ and $Y$ arc perfect substitutes.


Which one of the following is correct?
A. Only I and III are correct
B. Only II and III are correct
C. Only I and IV are correct

- D. Only I, II and III are correct

2. In a price discriminating monopoly, the clasticity of demand in sub-market $I$ is 2 and it is $1 / 2$ in sub-market II (elasticity values being in absolute terms). Then, the price behaviour of the discriminating monopolist will be
A. to charge a higher price in sub-market I than in sub-market II
B. to charge a higher price in sub-market II than in sub-market I
C. to charge the same price in both markets
D. to charge double (in sub-market I) the price charged in sub-market II
3. For a country it is given that X is exports, M is imports, T is net taxcs, G is government purchases, C is consumption expenditure, S is saving, and I is investment. Which of the following equations represents the private sector surplus or deficit?
A. Private sector balance $=\mathrm{S}-\mathrm{I}$
B. Private sector balance $=T-G$
C. Private sector balance $X, M$
D. Private sector balance $-\mathrm{C} \| \mathrm{S}+\mathrm{T}$
4. Consider the following popular revolutions in Indian agriculture and allied sector.
I. White revolution
II. Yellow revolution
III. Green revolution
IV. Evergreen revolution

As per the time period of inception or launching, these revolutions have been arranged in ascending order (oldest to the most recent year). Which one of the following is correct?
A. I, II, III, IV
B. II, I, IV, III
C. III, IV, I, II
D. III, I, II, IV
5. Following four statements are from Diagram-3 given below:
I. Point D is technologically more efficient than point B
II. Point C is technologically more efficient than point A
III. Point $B$ is technologically more efficient than point $D$
IV. Point A is technologically more efficient than point C
V. Points A, B, C and D show technologically feasible production plans

Which one of the following is correct?
A. Only V is correct
B. Only I, II and V are correct
C. Only II, III and V are correct
D. Only II and III are correct


Diagram 3: Production set for production function $Q=f(L)$ where Q is the total output and L is the labour input
6. A risk-averse or risk-avoiding consumer
A. values an incremental increase in wealth less highly than an incremental decrease in wealth and will reject a fair gamble
B. values an incremental increase in wealth more highly than an incremental decrease in wealth and will see a fair gamble, may even accept some unfair gambles
C. will give same importance to each additional unit of increased money or wealth
D. will face a convex utility function
7. If the annual inflation rate is 5 percent, an item costing rupees 100 today, would cost rupees $\qquad$ after two years.
A. 105
B. 105.25
C. 110.25
D. 121
8. From the information in BOX-1 given below, select the correct pair.
A. Only $(I, b)$ is correct
B. Only (II, d) is correct
C. Only (III, a) is correct
D. Only (IV, c) is correct

| BOX-1 |  |
| :--- | :--- |
| The velocity of money is defined as | Which of the following is true when the <br> velocity of money falls? |
| I. real GDP divided by money supply | a. A change in the money supply will <br> affect output only. |
| II. nominal GDP divided by money <br> supply. | b. The central bank will decrease the <br> money supply. |
| III. real GDP times money supply. | c. Output will be greater for a given <br> money supply. |
| IV. nominal GDP times money <br> supply. | d. An increase in money supply will have <br> less effect on nominal gross national <br> product |

9. Subsidised low-cost housing and free education are examples of
A. Social wants
B. Collective wants
C. Merit wants
D. Both social wants and growth motivating wants
10. Consider the following utility functions $\mathrm{U}(\mathrm{x}, \mathrm{y})$ of two commodities, x and y , and absolute values of marginal rate of substitution (MRSxy)

Utility functions Value of MRSxy
I. $\quad U(x, y)=x+y$
a. ratio of y to x
II. $U(x, y)=\min (x, y)$
b. one
III. $U(x, y)=x y$
c. zero

Then, which of the following combinations of $\mathrm{U}(\mathrm{x}, \mathrm{y})$ and MRSxy is correct?
A. (I, a), (II, c), (III, b)
B. (I, b), (II, a), (III, c)
C. (I, a), (II, b), (III, c)
D. (I, b), (II, c), (III, a)
11. If K is an $m \times n$ matrix, and X is a $n \times 1$ vector. Then, the null space of K is defined by the subspace of all the solutions of
A. $K X=1$
B. $K X=0$
C. $K X=\lambda X$
D. $\mathrm{KX}=\mathrm{K}$
12. The problem of asymmetric information may lead to problems) of
I. adverse-selection
II. dead-weight losses
III. self-selection
IV. moral hazard

Which one of the following is correct?
A. I and II
B. I and IV
C. II and III
D. II and IV
13. Four sectors in the Mahalanobis 4 -sector growth model are,
A. Capital goods, labour goods, services goods and manufacturing goods
B. Capital, agricultural goods, household consumer and services producing goods
C. Capital goods, factory produced consumer goods, household produced consumer goods and services producing goods
D. Investment goods, factory produced consumer goods, household produced consumer goods and foreign traded goods
14. An increasing returns to scale in production implies
A. An equi-proportional increase in all inputs leads to more than equi-proportional increase in output
B. Large firms can always undercut smaller firm
C. For a free market to be efficient, increasing returns to scale within the firm must be exhausted before equilibrium level of output can be realized
D. All of the above
15. Consider following four statements:

Total surplus (defined as the sum total of consumer's surplus and producer's surplus) can be calculated in the following way.
I. the consumer's surplus minus the producer's surplus.
II. (the area under the demand curve) minus (the area under the supply curve)
III. (the area under the supply curve) minus (the area under the demand curve)
IV. adding the deadweight loss to the consumer's surplus plus producer's surplus.

Which statement is true?
A. Only 1 is true
B. Both I and III are true
C. Only II is true
D. Both III and IV are true
16. The assumption of 'free entry and free exit of firms' in the industry may be valid if which of following statements is true?
A. There are no legal restrictions or licenses on how many firms can be in the industry.
B. Irrecoverable cost is not there.
C. There is no initial fixed cost or a very negligible amount of fixed cost
D. All of the above
17. Consider following two statements.
I. According to Keynes, as income rises, lower share of income is spent on consumption.
II. According Kuznets, as income rises, the average propensity to save remains fairly stable and constant.

Of the above, which statement(s) is/are correct?
A. Only I is true
B. Only II is true

- C. Neither I nor II is true
D. Both I and II are true

18. The standard deviation of a standard normal distribution
A. is equal to 3Median - 2 Mean
B. is always equal to zero
C. is always equal to one
D. can be any positive value but greater than one :
19. If a coin is tossed three times, the likelihood of obtaining three heads in a row is
A. zero
B. 0.250
C. 0.875
D. 0.125
20. Which group, among four commodity groups, is subject to the highest taxation in India?
A. Petrol and diesel
B. Steel and steel products
C. Cement
D. Gold
21. According to the 'Report of the Committee on Unorganised Sector Statistics' of the National Statistical Commission (NSC), 2012, the share of organised sector in Indian workforce is placed at around
A. 10 percent
B. 30 percent
C. 40 percent
D. 90 percent
22. Which one of the following is not a feature of the Solow-Swan growth model?,
A. Neutral technical progress
B. Flexible factor prices
C. Constant capital-labour ratio
D. Full employment of labour
23. Consider following four statements.
I. The Reserve Bank of India (RBI) was set up on April 1, 1935.
II. The Hilton Young Commission 1926 recommended the setting up of the RBI.
III. Legislation to set up the RBI was first introduced in January 1927.
IV. The enactment of the RBI became an accomplished fact in March 1934.

Which one of the following is true?
A. Only I is true
B. Both Il and IV are true
C. Only I, II and III are true
D. All four statements (I, II, III and IV) are true.

## Answer following two questions (24 and 25) from information in BOX-2

## BOX-2

The total cost function of a producer is given by $Q^{3}-4 Q^{2}+214 Q$, where $Q$ is the positive level of output.
24. In Box-2, at what level of $Q$, the average cost ( AC ) is minimum and what is the $A C$ amount at this $Q$ output level ?
A. $\mathrm{Q}=2$ units and $\mathrm{AC}=214$ units
B. $Q=3$ units and $A C=218$ units
C. $Q=2$ units and $A C=210$ units
D. $Q=4$ units and $A C=210$ units
25. From information in Box-2, which of the following statements is true?
A. Average fixed cost amount is approximately equal to 214 units
B. Total variable cost amount is 425 units when average variable cost is the minimum
C. Slope of average cost and slope of marginal cost are equal only at $\mathrm{Q}=2$ units
D. Slope of average cost and slope of marginal cost are equal only at $Q=1$ unit

## Part - B

26. Capital flight in economics refers to a situation of
A. high capital stock accumulation by poor countries from rich countries
B. gradual increase of demand for capital assets from a nation by other nations
C. sudden and large-scale increase of financial assets and capital within a nation
D. sudden and large-scale exodus of financial assets and capital from a nation
27. Marginal cost of supplying a pure public good to an extra person is .....
A. zero
B. one
C. between one and infinity
D. equal to total fixed cost but higher than average variable cost

The next three questions ( 28 to 30 ) are based on the information in BOX-3

## BOX-3

Consider a random experiment where two fair dice (one Green and one Red) are rolled. All outcomes are equally likely. Let $n 1$ be number that came up on the Green die and let $n 2$ be the number that came up on the Red die. Define the random variables ( $X, Y, Z$ ) as below:
$X=(n 1+n 2) ; Y=(n 2-n 1+7) ; Z=(n 2-n 1 \mid+7)$.
28. Consider following statements from Box-3
I. Distribution of $X$ is skewed.
II. Distribution of Y is skewed.
III. Distribution of $Z$ is skewed.
and identify which one is true among the following?
A. Only I is true
B. Only III is true
C. Only I and II are true
D. I, II and III all are true
29. In Box-3, Which is true about distributions of random variables, X and Y ?
A. They are i.i.d. (independently and identically distributed).
B. They are independently but not identically distributed.
C. They are not independently but identically distributed.
D. They are neither independently nor identically distributed.
30. In Box-3, what is expected value, $\mathrm{E}[\mathrm{Y}]$ ?
A. 7
B. 6.5
C. 7.5
D. 6
31. If propensity of people to hold money as currency goes down and all other factors (such as required reserve ratio) remain unchanged, the value of money multiplier will
A. become smaller.
B. become larger
C. remain the same.
D. may move either way.
32. Arrange the following sectors of India in decreasing order of their contribution to Gross Domestic Savings, from the highest to the lowest value, in the five years ending 2018-19 (Source: Economic Survey 2019-20 Statistical Appendix, Table 1.9)

1. Household sector; II. Public sector; III. Private corporate sector
A. I, II, III
B. I, III, II
C. II, III, I
D. III, II, I
2. A person is faced with a choice set containing exactly two elements. Then any binary relation defining her/his preferences necessarily satisfies:
A. reflexivity if it is transitive
B. completeness if reflexive
C. transitivity, if it is reflexive
D. asymmetry if complete
3. What is approximate per capita per day foodgrain consumption in India in recent years? (Source: Economic Survey 2019-20, Table 1.19)

- A. $440-470$ grams
B. $480-495$ grams
C. 515-525 grams
D. $530 \cdots 545$ grams

35. In a class of 100 students, the students appeared in examinations for two subjects: economics and statistics. 80 students passed in statistics; and 75 students passed in economics. 10 students did not pass in either of the two subjects. How many students passed in exactly one subject?
A. 10
B. 15
C. 25
D. 30
36. Following topics in welfare economics appeared one after another:
I. Pigou's welfare economics
II. Arrow's social welfare function
III. Kaldor's compensation principle
IV. Mill's utilitarianism

Which one is correct chronological order of their appearances (oldest to the latest topic)?
A. IV, I, III, II
B. IV, III, I, II
C. IV, III, II, I
D. I, IV, II, III
37. A bin contains 2 black (B), 2 red (R) and 2 white (W) balls, which are identical in all other aspects. Now, two balls are drawn in succession at random without replacement.

Consider the probability of the following events:
I. Probability that the two balls are of different colours (denoted, $\mathrm{P}[\mathrm{A}]$ ).
II. Probability that the two balls are of the same colours (denoted, $\mathrm{P}[\mathrm{B}$ )).
III. Probability that the two balls are either both black or both red (denoted, $\mathrm{P}[\mathrm{C}]$ ).
IV. Probability that one ball is black and one ball is red (denoted, $P[D]$ ).
V. Probability that the two balls are both non-white (denoted, $\mathrm{P}[\mathrm{E}]$ ).

Now, arrange the above statements in increasing order of the probability value of the event described therein:
A. III, II, IV, V, I
B. II, IV, III, I, V
C. IV, II, III, V, I
D. V, IV, II, III, I
38. In a simple Keynesian model, consumption function for an economy is given by : $\mathrm{C}=750+0.9 \mathrm{Y}^{\mathrm{d}}$, where C is consumption and $\mathrm{Y}^{\mathrm{d}}$ is disposable income given as : $\mathrm{Y}^{\mathrm{d}}=(1-\mathrm{t}) \mathrm{Y}$, since tax at the rate of t is imposed on income $(\mathrm{Y})$. Given that $\mathrm{t}=1 / 3$, the expenditure multiplier is:
A. 10.0
B. 2.5
C. 5.0
D. 1.33
39. The perfect complements production function $\mathrm{F}(\mathrm{L}, \mathrm{K})=\{\min (\mathrm{L}, \mathrm{K})\}^{1 / 3}$ exhibits:
A. Constant returns to scale
B. Increasing returns to scale
C. Decreasing returns to scale
D. Difficult to say due to lack to enough information
40. Who is credited for developing the modern system of Flow of Funds Accounts?
A. Wassily Leontief
B. Jan Tinbergen
C. Luca Pacioli
D. Morris Copeland
41. A Leontief Input Output Model is considered an 'open model' if it takes into consideration
A. export and import sector
B. input demand of industries
C. a nonzero final demand vector
D. a zero final demand vector
42. In W. W. Rostow's historical approach to the process of economic development, which is the highest stage of development?
A. Drive to maturity
B. The age of high mass consumption
C. The age of environmental degradation
D. The drive for high industrialization and efficiency
43. In the Harrod -Domar growth model, the natural rate of growth is determined by
A. Incremental capital-output ratio
B. Marginal propensity to save
C. Growth rate of labour and technology
D. The warranted rate of growth
44. According to Keynesian theory if money supply is increased, then,

- I. bond price falls
II. rate of interest falls
III. bond price rises
IV. rate of interest rises

Which of the following statements is true?
A. Both I and II are true
B. Both I and IV are true
C. Both II and IV are true
D. Both II and III are true
45. Which is true for the convergence hypothesis in economic growth?

Convergence indicates a
A. strong negative relationship between growth rates of capital and labour inputs
B. strong negative relationship betwéen growth rates of per capita income and initial value of per capita income
C. strong positive relationship between growth rates of per capita income and initial value of per capita income
D. strong positive relationship between growth of labour income and capital stock
46. Match the following concepts and corresponding economic growth models.

Concept
I. Rural to urban migration
a. Herod model
II. Golden age growth path
b. Todaro model
III. Actual and warranted growth rates
c. Joan Robinson model
d. Solow model
e. Kaldor model

Then, which one of the following combination sets is correct?
A. (I, a), (II, d), (III, e)
B. ( $\mathrm{l}, \mathrm{b}$ ), (II, c), (III, d)
C. (I, a), (II, b), (III, c)
D. $(\mathrm{I}, \mathrm{b}),(\mathrm{II}, \mathrm{c}),(\mathrm{II}, \mathrm{a})$
47. If the marginal cost of a producer is $M C=3 q^{2}-2 q$, with fixed cost of rupees 10000 , what is the total cost of producing 25 units of output?
A. Rupees 10148
B. Rupees 15000
C. Rupees 25000
D. Rupees 11825
48. The monopoly power of a firm is the ability of a firm to sect price above marginal cost. Then, which statement is correct?
A. The less elastic its demand curve, the more monopoly power a firm has
B. The more clastic its demand curve, the more monopoly power a firm has
C. The less elastic its demand curve, the less monopoly power a firm has
-D. The more elastic its demand curve, the less monopoly power a firm has
49. According to the theory of comparative advantage, which of the following is not a reason why countries trade?
A. Comparative advantage.
B. Costs are higher in one country than in another.
C. Prices are lower in one country than in another.
D. Exports give a country a political advantage over other countries that export less
50. Quantitative and tariff protections are given to domestic firms in
A. an infant-industry model of development
B. the big push growth model of Rosenstein Rodan
C. an input substitution model of growth
D. the Hirschman's balanced growth model
51. Consider following three statements related to international trade:

According to the Heckscher-Ohlin theorem,
I. in a two-commodity-two-country model, free trade can be mutually beneficial if they export commodities according to their relative factor endowment advantage
II. a country will export goods that use its abundant factors intensively, and import goods that use its scarce factors intensively
III. a country will import goods that use its abundant factors intensively, and export goods that use its scarce factors intensively.
IV. a country will export goods that which are produced largely, and import those goods that use its abundant factors intensively

Which one of the following is correct?
A. Both I and II are correct
B. Both II and III are correct
C. Both III and IV are correct
D. Only IV is correct
52. In the context of Indian economy, "purchase and sale of government's securities by the Reserve Bank of India in the open market" is known as the
A. Statutory liquidity ratio (SLR)
B. Open cash reserve ratio (CRR) operations
C. Open market operations
D. Open priority sector lending by RBI
53. Which of the following is not a property of a binomial experiment?
A. The probability of success does not change from trial to trial
B. The trials are independent
C. Two outcomes are possible in each trial
D. The probability of failure increases with each trial.
54. Consider following statements:

According to Karl Marx, 'Absolute Surplus Value' is obtained by
I. reducing cost of wage-goods by various means so that wage increase can be curbed II. increasing the amount of time worked per worker in an accounting period
III. reducing the overall total cost of production of variable inputs
IV. increasing the total sales profit and reducing cost of production

Which is the correct answer?
A. Only I is correct
B. Only II is correct
C. Both I and III are correct
D. Only IV is correct
55. Consider following three statements based on information in Diagram-4
I. Other states and union territories (which are not mentioned in Diagrm-4) together contributed only $2 \%$ of India's total tea output
II. West Bengal, Tamil Nadu and Kerala together contributed a share which is less than what Assam contributed to India's total tea output
III. Kerala and Tamil Nadu together contributed about $23 \%$ to all India total tea output and this share is less by about 20 percentage points compared to Assam's share in all India total tea output.

Which of the following is correct?
A. Only I is correct
B. Only II is correct
C. Only III is correct
D. Only I and II are correct


Diagram-4: Share of tea production of states in all India total, 1990-91 to 1999-2000
Source: Compiled from www.teaboard.gov.in
56. Which of the following is considered to be the most suitable option for an investor with low risk appetite?
A. Fixed deposits
B. Derivatives
C. Equities
D. All of the above
57. Which is true for the forward and spot exchange rates?
A. They do move closely together, but are not necessarily equal
B. They are always such that forward exchange rate is higher than spot exchange rate
C. They are unrelated to the value data
D. They are necessarily equal

## BOX-4

Assume the exchange rate between U.S. dollar (USD) and British pound sterling (GBP) was $1.75 \mathrm{GBP}=1.00 \mathrm{USD}$ on Monday. On Saturday the exchange rate was $0.85 \mathrm{USD}=1.00$ GBP. Following statements are given on what happened between Monday and Saturday.
I. The U.S. dollar appreciated against the British pound sterling.
II. The U.S. dollar depreciated against the British pound sterling
III. The British pound sterling appreciated against the U.S. dollar.
IV. The British pound sterling depreciated against the U.S. dollar.
58. In BOX-4, which of the above statements, best describes what happened between Monday and Saturday?
A. Only I is true
B. Only IV is true
C. Both I and IV are true
D. Both II and III are true
59. Consider following four statements:
I. According to the Lucas aggregate supply function, output responds to change in unanticipated inflation.
II. According to the Lucas aggregate supply function, output responds to change in expected inflation.
III. Rational expectation model implies that systematic policy changes will be ineffective.
IV. Rational expectation model implies that systematic policy changes will be more effective

Which one of the following is correct?
A. Only II is correct
B. Only IV is correct
C. Both I and III are correct

- D. Both II and IV are correct

60. From the information in BOX- 5 given below, select the correct pair.
A. Only ( $\mathrm{I}, \mathrm{b}$ ) is correct
B. Only (II, d) is correct
C. Only (III, a) is correct
D. Only (IV, c) is correct

| BOX-5 |  |
| :--- | :--- |
| In the context of Indian economy, <br> high-powered money is held by | The liabilities of central bank, currency in <br> circulation plus bank reserves is known as |
| I. public and commercial banks | a. Narrow money <br> II. public and government |
| b. Broad money <br> II. Reserve Bank of India only <br> IV. public \& Reserve Bank of India | c. High powered money <br> d. Quasi money, |

61. In case of inferior goods,
A. both income consumption curve and Engel curve are positively sloped.
B. both income consumption curve and Engel curve are negatively sloped
C. income consumption curve is negatively sloped and Engel curve is positively sloped
D. income consumption curve is positively sloped and Engel curve is negatively sloped
62. Which of the following statements can be described as the "direct finance"?
A. I have taken out a mortgage from a local bank.
B. I have borrowed rupees 1505 from a friend
C. I have bought shares of common stock in the secondary market.
D. I have bought shares in a mutual fund.
63. The simple deposit multiplier can be expressed as the ratio expressed by the
A. change in reserves in the banking system divided by the change in deposits.
B. change in deposits divided by the required reserve ratio.
C. required reserve ratio divided by the change in reserves in the banking system.
D. change in deposits divided by the change in reserves in the banking system.
64. The type of monetary policy that is used in India, New Zealand and the U.K. is
A. monetary targeting
B. inflation targeting.
C. targeting with an implicit nominal anchor.
D. interest-rate targeting.
65. Which of the following is not an assumption of the perfect competition model?
A. Homogenous products
B. Unrestricted mobility of resources from one place to another
C. Economics of scale by every producer
D. Possession of all relevant information by all agents
66. In the Keynesian cross diagram, a decline in autonomous consumer expenditure causes the aggregate demand function to shift $\qquad$ , the equilibrium level of aggregate output to fall, and the IS curve to shift to the $\qquad$ , everything else held constant.
A. up, left
B. up, right
C. down, left
D. down, right.
67. The difference between 'Gross' and 'Net' concepts of national income is about provisioning
A. depreciation amount
B. inflation rate
C. taxation
D. monetisation
68. Marginal Efficiency of Capital, according to Keynes, depends on
A. Level of effective demand
B. Expectations of capitalists over profitability
C. Nominal interest rate
D. Real interest rate
69. For an equality constraint optimization of $n$ choice variables, the second-order sufficient condition for a maximum given by the bordered Hessian Determinant is (after the firstorder necessary condition has been satisfied)
A. $\left|\bar{H}_{2}\right|,\left|\bar{H}_{3}\right|, \ldots\left|\bar{H}_{n}\right|<0$
B. $\left|\bar{H}_{2}\right|,\left|\bar{H}_{3}\right|, \ldots\left|\bar{H}_{n}\right|>0$
C. $\left|\bar{H}_{2}\right|<0 ;\left|\bar{H}_{3}\right|>0 ;\left|\bar{H}_{4}\right|<0 ; \ldots(-1)^{n}\left|\bar{H}_{n}\right|<0$
D. $\left|\bar{H}_{2}\right|>0 ;\left|\bar{H}_{3}\right|<0 ;\left|\bar{H}_{4}\right|>0 ; \ldots(-1)^{n}\left|\bar{H}_{n}\right|>0$
70. Consider following four statements:

The limit pricing is a pricing strategy
I. which destroys the existence of smaller firms in a market by selling limited amount.
II. which helps the entry of smaller firms in the industry by encouraging liberal pricing.
III. where products are sold by a supplier at a price low enough to make it unprofitable for other players to enter the market
IV. where products are sold by a supplier at a price which is lower than the average cost of production and it is not profitable for outside firms to enter the market
Which of the above statements is true?
A. Only I is true
B. Only II is true
C. Both II and III are true
D. Both III and IV are true
71. Following are items covered under the Union Budget of India.
I. Defense expenditure
II. Interest payments
III. Wage and salary payments to government employees
IV. Subsidies to farmers

Which of the above items) is/are covered under the 'Non-Plan Expenditure'?
A. Only I
B. Only II and IV
C. All of I, II, III and IV
D. Only IV
72. From the information in BOX-6 given below, select the correct pairs).
A. Only ( $\mathrm{l}, \mathrm{b}$ ) is correct
B. Both (II, d) and (I, b) are correct
C. Only (III, b) is correct
D. Only (IV, d) is correct

| BOX-6 |  |
| :--- | :--- |
| Now, the monthly Wholesale Price <br> Index (WPI) of India is compiled and <br> released by the | At present, the Consumer Price Index (CPI) <br> of India is estimated and published by the |
| I. NSSO and CSO | a. NSSO |
| II. CMIE | b. RBI |
| III. Ministry of Finance | c. Ministry of Finance |
| IV. Office of the Economic Adviser, <br> Ministry of Commerce and Industry | d. Ministry of Statistics and Program <br> Implementation (MOSPI) |

73. The Shanta Kumar Committee Report submitted in January 2015 was set up to give recommendations for restructuring
A. Food Corporation of India
B. Public Sector Banks
C. Public Sector Fertilizer Units
D. NABARD
74. Consider following statements of Oligopoly market models.

The equilibrium point of the
I. Cournot model is at the intersection of output reaction functions of two firms
II. Cournot model is at the intersection of price reaction functions of two firms.
III. Bertrand model is at the intersection of output reaction functions of two firms.
IV. Stakelberg leader-follower model is at the tangency of the iso-profit curve of leader and output reaction function of the follower
V. Stakelberg leader-follower model is at the tangency of the iso-profit curve of follower and price reaction function of the leader
VI. Stakelberg leader-follower model is at the tangency of the iso-profit curves of leader and follower

Then, which one of the following is correct ?
A. Only I and III are correct
B. Only I and IV are correct
C. Only III and VI are correct
D. Only II, III and VI are correct
75. Which of the following is the recommendation of J.C. Kumarappa Committee of 1949 ?
A. Cooperative farming
B. Irrigation development
C. HYV seeds
D. Land Reforms
76. Which of the following ceilings of fiscal deficit, does the FRBM Act 2003 suggest for the Central Government?
A. $2 \%$
B. $3 \%$
C. $4 \%$
D. $6 \%$
77. Which of the following factors, aided India's dream run in achieving the highest economic growth rate during 2003-09?
A. Public sector investment
B. Small scale industrial growth
C. Faster growth of global trade
D. Faster growth of India's agriculture
78. Which one of the following is a structural determinant of poverty in India?
A. Low food stocks
B. High inflation
C. Low savings
D. Low productivity of labour
79. When the country is in a recession, it is possible for the economy to self-correct through
A. an increase in wages with a corresponding decrease in the price level
B. an increase in wages and a corresponding increase in the price level
C. a decrease in wages with a corresponding increase in the price level
D. a decrease in wages and a corresponding decrease in the price level
80. From the information in BOX-7 given below, select the correct pair.
A. Only ( $I, a$ ) is correct
B. Only (II, c) is correct
C. Both (III, b) and (IV, a) are correct
D. Both (IV, d) and (II, c) are correct

| BOX-7 |  |
| :--- | :--- |
| Which one of the following <br> statements corresponds to the <br> Rawlsian concept of equity? | A firm that is making zero economic profits <br> in the long run will have incentives to |
| I. All members of the society receive <br> equal amount of goods. <br> II. Maximise the utility of the least <br> well off people. | b. Shut down |
| III. Market outcomes are most <br> equitable. <br> IV. Maximise the total utility of all another industry <br> members of the society. | c. Continue to operate as it is |

81. The idea of indicative planning was first adopted in which Five-Year Plan of India?
A. Second Five-Year Plan
B. Fifth Five-Year Plan
C. Seventh Five-Year Plan
D. Eighth Five-Year Plan
82. From the information in BOX-8 given below, select the correct pair.
A. Only $(l, a)$ is correct
B. Only (II, d) is correct
C. Only (III, b) is correct
D. Only (IV, c) is correct

| BOX-8 |  |
| :--- | :--- |
| In India's Union Budget 2020-21,, <br> the largest item of expenditure in <br> terms of percentage share is on | The overall theme of the Union Budget <br> 2020-21 of India is |
| I. interest payments <br> II. State's share of taxes and duties <br> III. defence expenditure | a. Sabka sath, sabka vikas <br> b. Rural development and poverty removal <br> c. Works for all, peace of life <br> IV. urban infrastructure expenditure |

83. The Economic Survey 2019-20 of India made an attempt to understand
A. Behavioural Economics of Nudge
B. Late Converger Stall
C. The "Other Indians"
D. Thalinomics
84. The homogeneity of three or more population correlation coefficients can be tested by:
A. $t$-test
B. F-test
C. Z-test
D. $\chi^{2}$-test
85. For a country, if nominal gross domestic product fell but real gross domestic product rose during 2018 to 2019 , which of the following must be true during that period?
A. Unemployment rate increased to a large extent.
B. The inflation rate was negative
C. Net exports were declining and witnessed a negative growth rate
D. The average of stock prices rose while bond prices fell drastically.
86. The regression coefficients are independent of
A. the change of scale, but not of the origin
B. the change of origin, but not of the scale
C. the change of both origin and scale
D. the change of neither origin nor scale
87. Given two sets $P$ and $Q$, set $P$ has 25 elements and set $Q$ has 15 elements. The new set $P \cup Q$ will have
A. 40 elements
B. 25 elements
C. between 25 and 40 elements
D. 10 elements
88. From the information in BOX-9 given below, select the correct pair.
A. Only ( $\mathrm{I}, \mathrm{b}$ ) is correct
B. Only (II, a) is correct
C. Only (III, d) is correct
D. Only (IV, c) is correct

| BOX-9 |  |
| :--- | :--- |
| The Type I crror occurs when | The Type II error occurs when |
| I. we reject a true null hypothesis <br> II. we reject a false null hypothesis <br> III. we do not reject a false null <br> hypothesis | a. a good lot is rejected <br> b. a bad lot is accepted <br> c. the number of defectives is very large |
| IV. we do not reject a true null <br> hypothesis | d. the proportion of defectives is very small |

89. Consider following four statements:
I. Discount to students \& senior citizens in train fares is an example of pst degree price discrimination
II. Discount to students \& senior citizens in train fares is an example of 3rd degree price discrimination
III. Public grazing land is rival but not exclusive
IV. Public grazing land is both rival and exclusive

Which of the following is correct?
A. Only I is correct
B. Only IV is correct
C. Only I and IV are correct
D. Only II and III are correct
90. Indian farmers may be worse off when there is a good harvest of their crop as
A. Demand for farmers' produce is elastic
B. Demand for farmers' produce is inelastic
C. Supply of agrarian goods is elastic
D. It is an inferior good
91. The matrix $Y=\frac{1}{6}\left[\begin{array}{ccc}1 & -2 & 1 \\ -2 & 4 & -2 \\ 1 & -2 & 1\end{array}\right]$ is an example of
A. Diagonal matrix
B. Identity matrix
C. Idempotent matrix
D. Triangular matrix
92. Consider two individuals ( $M$ and $N$ ), and two goods $x$ and $y$. Individual ' $M$ ' is willing to sacrifice 2 units of ' $y$ ' for an extra unit of ' $x$ ' and individual ' $N$ ' is willing to sacrifice 1 unit of ' $y$ ' for an extra unit of ' $x$ '. If individual ' $M$ ' offers an exchange rate of 2 units of ' $y$ ' for an extra unit of ' $x$ ', then
A. Individual ' M ' is better off after the exchange
B. Individual ' N ' is better off after the exchange
C. Both individual are better off after the exchange
D. Both are not better off after the exchange
93. From the information in BOX-10 given below, select the correct pair.
A. Only (IV, a) is correct
B. Only (III, b) is correct
C. Only (II, c) is correct
D. Only (I, d) is correct

| BOX-10 |  |
| :--- | :--- |
| The book entitled "I do what I do" is <br> authored by | The originator of the idea of rational <br> expectations is |
| I. Urjït Patel | a. John Muth <br> II. C. Rangarajan <br> III. Amartya Sen <br> IV. Raghuram G Rajan |
| b. Robert Lucas <br> c. Yon Hayek <br> d. Thomas Sargent |  |

94. Consider following five statements:
I. According to classical economic system, saving is a function of the real interest rate II. According to classical economic system, saving is a function of income.
III. According to classical economic system, saving is a function of real wage.
IV. Process of raising revenue through money creation by the government is minting. V. Process of raising revenue through money creation by the government is both inflation tax and seigniorage.

Which of the following is correct?
A. Only II is correct
B. Only III is correct
C. Only I and V are correct
D. Only II and IV are correct
95. Consider the following short paragraph.
"For a rational consumer whose consumption is based on lifetime income, taxation and government debt are equivalent. The underlying idea is that no matter how a government chooses to increase spending, whether through borrowing more or taxing less, the outcome is the same and demand remains unchanged."

Which of the following subscribes to the idca contained in above paragraph?
A. Ricardian equivalence proposition
B. Laffer curve equivalence theorem
C. Pigou effect of taxation and government spending
D. Coase theorem of constant demand.
96. Non accelerating inflation rate of unemployment is the
A. rate of unemployment at $2 \%$

B, rate of unemployment consistent with zero inflation
C. rate of unemployment consistent with increasing inflation
D. rate of unemployment between $3 \%$ and $5 \%$
97. Suppose duopolists face the following market demand function $\mathrm{P}=30-\mathrm{Q}$, where total output $\mathrm{Q}=\mathrm{Q}_{1}+\mathrm{Q}_{2}$ and P is the output price. Also, suppose both firms have zero marginal cost. Then the total output produced in a Cournot equilibrium is
A. 10 units
B. 15 units
C. 20 units
D. 25 units
98. BOX-11 provides three measures of budget deficit. The correct set of combinations is
A. Only ( $\mathrm{l}, \mathrm{b}, \mathrm{iii}$ ) is correct
B. Only (II, b, ii) is correct
C. Only (III, c, i) is correct
D. Only $(\mathrm{l}, \mathrm{a}, \mathrm{i})$ is correct

| BOX-11 |  |  |
| :--- | :--- | :--- |
| Revenue deficit is | Fiscal deficit is | Primary deficit is |
| I. Total revenue expenditure <br> minus total revenue receipts | a. Total budget expenditure <br> minus total budget receipts <br> including borrowings | i. Fiscal deficit minus <br> interest payments and <br> subsidies to farmers |
| II. Total revenue <br> expenditure minus total tax <br> receipts \& net exports | b. Total budget expenditure <br> minus total budget receipts <br> excluding borrowings | ii. Revenue deficit minus <br> fiscal deficit including <br> primary interest amount |
| III. Total revenue receipts <br> minus total revenue <br> expenditure | c. Revenue deficit minus <br> primary deficit including <br> borrowings and subsidies | iii. Fiscal deficit minus <br> interest payments by the <br> government |

## Read the following paragraphs in BOX-12 and answer two questions 99 and 100.

## BOX-12:

The concept is best explained by an example. Suppose, you have decided to lease an office for a year. The monthly rent that you have committed to pay is the $\mathbf{X}$ cost, since you are obligated to pay it regardless of the amount of output you produce. Now suppose that you decide to refurbish the office by painting it and buying furniture. The cost for paint is a $\mathbf{X}$ cost, but it is also a $\mathbf{Y}$ cost since it is a payment that is made and cannot be recovered. The cost of buying the furniture, on the other hand, is not entirely $\mathbf{Y}$, since you can resell the furniture when you are done with it.
To spell this out in more detail, suppose that you borrow rupees 20000 at the beginning of the year at 10 percent interest per year. You sign a lease to rent an office room and pay rupees 12000 in advance rent for next year. You spend rupees 6000 on office furniture and rupees 2000 to paint the office. At the end of the year, you pay back the loan amount of rupees 20000 plus the rupees 2000 interest payment and sell the used office furniture for rupecs 5000 . So the total $\mathbf{Y}$ cost is rupees ......
Source: Compiled from "Intermediate Microeconomics: A Modern Approach", 8/E, by Hal R Varian, P. 373.
99. In BOX-12, what are names of economic terms for X and Y ?
A. $X$ is fixed cost and $Y$ is opportunity cost
B. X is accounting cost and Y is fixed cost
C. $X$ is fixed cost and $Y$ is variable cost
D. X is fixed cost and Y is sunk cost
100. How much is the amount of Y cost in BOX-12 information?
A. Rupees 17000
B. Rupees 22000
C. Rupees 26000
D. Rupees 27000

