# Gokhale Institute of Politics and Economics 

(Deemed to be University u/s 3 of the UGC Act, 1956)
Pune-411004

## Entrance Examination for M.Sc. Programmes

(2021)

Monday
June 28, 2021

## Time: $\mathbf{1 0 . 0 0}$ a.m. to 10.45 a.m.

Max. Marks: 60

## Section A

1. The sides of a triangle are in the ratio of $1 / 2: 1 / 3: 1 / 4$. If its perimeter is 52 cm , the length of the smallest side is:
A. 9 cm
B. 10 cm
C. 11 cm
D. 12 cm
2. Which number is missing in the following series?
$3,6,10,15,21,28,36$, ?
A. 45
B. 46
C. 47
D. 51
3. In a library having 400 members, every member reads 8 newspapers every day and every newspaper is read by 80 members. The number of newspapers $s$ required every day is
A. at least 50
B. at most 45
C. exactly 40
D. exactly 8
4. Insert the missing number: $8 / 62,17 / 66,36 / 72,75 / 80$,?
A. $176 / 86$
B. $154 / 90$
C. $153 / 88$
D. $151 / 86$
5. A scooter costing Rs 12,000 was sold for Rs 10,400 after two years. The percentage loss is
A. $13.33 \%$
B. $12 \%$
C. $12.33 \%$
D. $14 \%$
6. In an examination, $45 \%$ of the total students failed in Mathematics, $35 \%$ failed in English and $20 \%$ in both. The percentage of those who passed in both subjects is
A. 30
B. 20
C. 40
D. 10
7. A person borrows Rs 15,000 partly at $10 \%$ and remaining at $12 \%$. If at the end of 2 years 6 months, he pays a total simple interest of Rs 4,050 , how much did he borrow at each rate?
A. Rs $8000 @ 10 \%$ and $7,000 @ 12 \%$
B. Rs $10,000 @ 10 \%$ and $5000 @ 12 \%$
C. Rs $9000 @ 10 \%$ and $6,000 @ 12 \%$
D. none of the above
8. Three individuals $\mathrm{A}, \mathrm{B}, \mathrm{C}$ hired a car on a sharing basis and paid Rs. 1,040. They used it for $7,8,11$ hours, respectively. What are the charges paid by B?
A. Rs. 290
B. Rs. 440
C. Rs. 360
D. Rs. 320
9. Which method used to examine inflation rate anticipation, unemployment rate, and capacity utilisation to produce products?
A. Forecasting technique
B. Data importing technique
C. Data supplying technique
D. Data exporting technique
10. A numerical value used as a summary measure for a sample, is known as a
A. sample parameter
B. sample statistic
C. population mean
D. population parameter
11. In a week the prices of a bag of rice were $360,280,340,290,320,310,300$. The range is
A. 60
B. 100
C. 70
D. 80
12. The mean of a distribution is 14 and the standard deviation is 6 . What is the value of the coefficient of variation?
A. $27.8 \%$
B. $60.4 \%$
C. $35.7 \%$
D. $42.8 \%$
13. The sum of the percent of frequencies for all classes will always equal
A. 100
B. the number of classes
C. the number of items in the study
D. one
14. The middle value of an ordered array of numbers is the
A. Mode
B. MidPoint
C. Mean
D. Median
15. In statistics, a population is defined as,
A. All subjects or objects whose characteristics are being studied
B. All People living in a country
C. All People living in the area under study
D. None of the above
16. The three points that divides the set into 4 equal group are called
A. quartiles
B. deciles
C. percentiles
D. none of above
17. Cumulative frequency polygon is also called
A. ogive
B. sigma
C. histogram
D. absicca
18. If a constant value 25 is subtracted from each observation of a set, the variance is:
A. Reduced by 5
B. Unaltered
C. Reduced by 25
D. Increased by 25

## Section B

19. Which of the following statements are mutually contradictory?
(i) All flowers are not fragrant.
(ii) Most flowers are not fragrant.
(iii) None of the flowers is fragrant.
(iv) Most flowers are fragrant.

Choose the correct answer from the code given below:
Code:
A. (i) and (ii)
B. (i) and (iii)
C. (iii) and (iv)
D. (ii) and (iii)
20. If A stands for 4, B for 6, C for 8, D for 10 and so on, then the following alphabets stand for $28,32,40,16,26$ stands for
A. LPOSI
B. MORGl
C. NOPKL
D. MOSGL
21. The letters in the first set have certain relationship. On the basis of this relationship, what is the right choice for the second set?
AST : CUV : : NQV : ?
A. PSX
B. MPU
C. MRW
D. PRX
22. August 17, 1980 was Sunday, what day was August 17, 1979:
A. Friday
B. Sunday
C. Saturday
D. Thursday
23. Event A is sufficient but not necessary for Event B implies
A. None of the above
B. Event A implies Event B may or may not have taken place.
C. Event B implies Event A has taken place
D. Event A implies Event B has taken place
24. Assertion (A): Man is having assimilation capacity.

Reason (R): Man is a social being.
A. Both (A) and (R) are true and (R) is the correct explanation of (A)
B. (A) is true but (R) is false
C. Both $(A)$ and $(R)$ are true but $(R)$ is not the correct explanation of (A)
D. (A) is false but (R) is true
25. The statement: "All intelligent men are poet" implies
A. Some poets are intelligent men
B. All poets are intelligent men
C. A "not intelligent" man can't be a poet
D. None of the above
26. "All that glitters is not gold" implies
A. None of the above.
B. Glittering is sufficient to be recognized as gold.
C. None of the glittering objects are gold.
D. Some of the glittering objects are not gold.
27. "All those who have higher immunity practices yoga regularly" implies
A. Some of the people who practice yoga regularly have higher immunity.
B. Regular practice of Yoga is sufficient for higher immunity.
C. Those who have lower immunity do not practice yoga regularly.
D. None of the above
28. Five letters A, P, R, M, N have been arranged in the following rule, A\&R will not be side by side; A should not come first; N should not come at the end; A should not be the second last. How should they be written:
A. PRNAM
B. MARNP
C. RPANM
D. NPARM
29. The letters in the first set have a certain relationship. On the basis of this relationship mark the right choice for the second set:
AST : BRU : : NQV : ?
A. OPW
B. MPU
C. ORW
D. MRW
30. There are five books A, B, C, D and E. The book C lies above D, the book A is below D, the book E is below A and B is below E . Which is at the bottom?
A. E
B. B
C. A
D. C

## Section C

31. Goldie chooses the bundle $(6,6)$ when prices are $(6,7)$ and she chooses the bundle $(10,0)$ when prices are $(2,5)$. We can conclude that
A. The bundle $(10,0)$ is revealed preferred to $(6,6)$ and she violates WARP
B. Neither bundle is revealed preferred to the other.
C. Goldie violates WARP.
D. The bundle $(6,6)$ is revealed preferred to $(10,0)$ but there is no evidence that she violates WARP.
32. When the price of a product rises, consumers shift their purchases to other products whose prices are now relatively lower." This statement describes:
A. The substitution effect
B. An inferior good
C. The rationing function of prices
D. The income effect
33. Consumer surplus is the area
A. Below the supply curve and above the price.
B. Above the supply curve and below the price.
C. Above the demand curve and below the price.
D. Below the demand curve and above the price.
34. The average cost function is given as $\mathrm{AC}=1 / 3 \mathrm{x}^{2}-10 \mathrm{x}+9$.

The level of output at which average cost is equal to marginal cost is :
A. 12
B. 15
C. 18
D. 21
35. Suppose incomes double over a period of years. Which sorts of product will experience the biggest increases in price?
A. Those with a PES close to 0.0 and an IED well below 0.0
B. Those with a PES well above 1.0 and an IED well above 0.0
C. Those with a Price Elasticity of Supply(PES) close to 0.0 and an Income Elasticity of Demand (IED) well above 0.0.
D. Those with a PES well above 1.0 and an IED well below 0.0
36. Which of the following statements accurately describes relationship between AP and MP
A) MP intersects AP at the maximum of MP
B) AP and MP are always parallel to each other
C) AP is always increasing when MP is falling and vice versa
D) AP rises when MP is above it and falls when MP is below it
37. Labor supply curve becomes backward bending when:
A. Substitution effect exceeds Income effect
B. Leisure becomes luxury good.
C. Income effect exceeds substitution effect.
D. Any of the above situation
38. The price consumption curve will be down ward sloping if price elasticity of good $X$ is,
A. $<0$
B. $>0$
C. $=0$
D. Price elasticity of $X$ can't be predicted.
39. When consumer is neutral to good Y , the indifference curve will be,
A. Horizontal straight line
B. Vertical straight line,
C. downward sloping
D. A single point in the commodity space
40. When marginal cost (MC) is increasing,
A. None of the above
B. $\mathrm{AC}>\mathrm{MC}$
C. $\mathrm{MC}>\mathrm{Ac}$
D. $\mathrm{Ac}=\mathrm{MC}$
41. Suppose with the increase in consumer's income the demand for commodity X decreases, then which of the following is true,
A. X is an inferior good which may or may not be a Giffen good
B. X is a Giffen Good
C. X is not a Giffen good,
D. X is inferior as well as Giffen good.
42. L-shaped iso-quant implies
A. none of the above
B. Two factors are perfect substitutes
C. one factor is not necessary
D. Two factors are perfect complements
43. As per Keynesian theory Aggregate demand can be increased by:
A. selling bonds by RBI
B. decreasing cash reserve ratio
C. increasing bank rate
D. none of these
44. Charging a different price in different markets where price elasticities are different is called
A. third degree price discrimination
B. price discrimination
C. second degree price discrimination
D. perfect price discrimination
45. If $X_{1}=f\left(P_{1}, P_{2}\right)$ and $X_{2}=\phi\left(P_{1}, P_{2}\right)$, then the two commodities are substitutes if
A. $(\delta \mathrm{X} 1 / \delta \mathrm{P} 2)<0,(\delta \mathrm{X} 2 / \delta \mathrm{P} 1)>0$
B. $(\delta \mathrm{X} 1 / \delta \mathrm{P} 2)>0,(\delta \mathrm{X} 2 / \delta \mathrm{P} 1)<0$
C. $(\delta \mathrm{X} 1 / \delta \mathrm{P} 2)<0,(\delta \mathrm{X} 2 / \delta \mathrm{P} 1)<0$
D. $(\delta \mathrm{X} 1 / \delta \mathrm{P} 2)>0,(\delta \mathrm{X} 2 / \delta \mathrm{P} 1)>0$
46. In CES production function : $\mathrm{Q}=\mathrm{M}\left[\alpha \mathrm{X}_{1}^{-\mathrm{p}}+(1-\alpha) \mathrm{X}_{2}^{-\mathrm{p}}\right]^{-1 / \mathrm{p}}$ Where Q is output and $\mathrm{X}_{1}$ and $X_{2}$ are labour and capital. Elasticity of substitution is given by
A. $1 /(1+\mathrm{p})$
B. -p
C. $-1 / \mathrm{p}$
D. M
47. If an increase in the price of blue jeans leads to an increase in the demand for tennis shoes, then blue jeans and tennis shoes are
A. complements.
B. inferior goods.
C. Substitutes
D. normal goods.
48. All internationally traded services are covered under which of the following WTO agreements?
A. TRIMS
B. GATS
C. TRIPS
D. PTA
49. When interest payments are subtracted from gross fiscal deficit, we can get,
A. revenue deficit
B. capital deficit
C. gross primary deficit
D. none of the above
50. As per Rybczynski theorem, the growth of only one factor at constant relative commodity prices, leads to an absolute expansion in the output of
A. the commodity using the growing factor intensively
B. the commodity using the no growing factor intensively
C. All commodities
D. none of the above
51. The concept of vicious circle of poverty is associated with
A. J.M. Keynes
B. J.S. Mill
C. Karl Marx
D. Ragner Nurkse
52. Inverted 'U' shaped income distribution hypothesis is associated with
A. Simon Kuznets
B. David Ricardo
C. Adam Smith
D. Harrod
53. In whose growth model, entrepreneur's significance is crucial?
A. Solow
B. Domar
C. Harrod
D. Schumpeter
54. The imposition of an import tariff by a large nation
A. usually improves the nation's terms of trade and increases the volume of trade.
B. usually improves the nation's terms of trade but reduces the volume of trade.
C. worsens the nation's terms of trade but increases the volume of trade
D. worsens the nation's terms of trade and reduces the volume of trade.
55. Imposition of SPS measures by importing countries are sometimes considered as:
A. Non-tariff Barrier
B. Technical Barriers to Trade
C. Export Subsidy
D. Quota
56. Elasticity of substitution is
A. A measure of the responsiveness of input prices and the substitution of the cheaper inputs.
B. The rate at which the inputs (labour and capital) are substituted.
C. The substitution of cheaper inputs for dearer inputs.
D. A measure of the responsiveness of input ratio to a change in input-price ratio.
57. In liquidity trap,
A. both fiscal and monetary policy are fully effective
B. Fiscal policy is fully effective but monetary policy is not at all effective
C. Fiscal policy and monetary policy both are partly effective
D. None of the above
58. According to Census of India, 2011, current growth rate of Indian population is
A. Increasing
B. Unchanged
C. Decreasing
D. Sometimes increasing and sometimes decreasing
59. Share of elderly population in India according to Census of India, 2011, is
A. None of the above
B. $0-5 \%$
C. $5-10 \%$
D. $10-15 \%$
60. Classical Theory implies
A. No possibility of over-or under-production in the economy
B. Both (a) and (b)
C. State of full employment in the economy
D. None of the above

