

# QB365 Question Bank Software Study Materials

## Mathematical Methods for Economics 50 Important 1 Marks Questions With Answers (Book Back and Creative)

11th Standard

Economics

Total Marks : 50

### Multiple Choice Question

50 x 1 = 50

- 1) Mathematical Economics is the integration of  
**(a) Mathematics and Economics** (b) Economics and Statistics (c) Economics and Equations  
(d) Graphs and Economics
- 2) The construction of demand line or supply line is the result of using  
(a) Matrices (b) Calculus (c) Algebra **(d) Analytical Geometry**
- 3) The first person used the mathematics in Economics is  
(a) Sir William Petty **(b) Giovanni Ceva** (c) Adam Smith (d) Irving Fisher
- 4) Function with single independent variable is known as  
(a) Multivariate Function (b) Bivariate Function **(c) Univariate Function** (d) Polynomial Function
- 5) A statement of equality between two quantities is called  
(a) Inequality (b) Equality **(c) Equations** (d) Functions
- 6) An incremental change in dependent variable with respect to change in independent variable is known as  
**(a) slope** (b) Intercept (c) Variant (d) Constant
- 7)  $(y - y_1) = m(x - x_1)$  gives the  
(a) Slope **(b) Straight line** (c) Constant (d) Curve
- 8) Suppose  $D = 50 - 5P$ . When D is zero then  
**(a) P is 10** (b) P is 20 (c) P is 5 (d) P is -10
- 9) Suppose  $D = 150 - 50P$ . Then, the slope is  
(a) -5 (b) 50 (c) 5 **(d) -50**
- 10) Suppose determinant of a matrix  $\Delta = 0$ , then the solution  
(a) Exists **(b) Does not exist** (c) is infinity (d) is zero
- 11) State of rest is a point termed as  
**(a) Equilibrium** (b) Non-Equilibrium (c) Minimum point (d) Maximum point
- 12) Differentiation of constant term gives  
(a) one **(b) zero** (c) infinity (d) non-infinity
- 13) Differentiation of  $x^n$  is  
**(a)  $nx^{(n-1)}$**  (b)  $nx^{(n+1)}$  (c) zero (d) one
- 14) Fixed cost is the \_\_\_\_\_ term in cost function represented in mathematical form  
(a) Middle (b) Price (c) Quantity **(d) Constant**

(a) income (b) price (c) quantity (d) constant

- 15) The first differentiation of Total Revenue function gives  
(a) Average Revenue (b) Profit (c) **Marginal Revenue** (d) Zero
- 16) The elasticity of demand is the ratio of  
(a) Marginal demand function and Revenue function (b) **Marginal demand function to Average demand function**  
(c) Fixed and variable revenues (d) Marginal Demand function and Total demand function
- 17) If  $x+y = 5$  and  $x-y = 3$  then, value of x  
(a) **4** (b) 3 (c) 16 (d) 8
- 18) Integration is the reverse process of  
(a) Difference (b) Mixing (c) Amalgamation (d) **Differentiation**
- 19) Data processing is done by  
(a) PC alone (b) Calculator alone (c) **Both PC and Calculator** (d) Pen drive
- 20) The command Ctrl +M is applied for  
(a) Saving (b) Copying (c) **Getting new slide** (d) Deleting a slide
- 21) \_\_\_\_\_ declared that he wanted to reduce political and economic matters in terms of number, weight and measure  
(a) **Sir William Petty** (b) G. Cramex (c) J.M. Keynes (d) Marshall
- 22) Functions, with more or equal to two independent variables, are called\_\_\_\_\_ functions.  
(a) Simple Univariate functions (b) **Multivariable functions** (c) Both 'a' and 'b' (d) None of these
- 23) \_\_\_\_\_ is an arrangement of same elements of the corresponding matrix into rows and columns by enclosing vertical lines.  
(a) Matrix (b) Function (c) **Determinants** (d) Cramer's rule
- 24) Formula for calculating consumer surplus \_\_\_\_\_  
(a)  **$Q_d = Q_s$**  (b)  $n_0 \frac{-P}{x} \frac{dx}{dp}$  (c)  $CS = \left[ \int_0^{x_0} (x)dx \right] - x_0 p_0$  (d)  $P_S = x_0 p_0 - \int_0^{x_0} g(x)dx$
- 25)  $Q_d=Q_s$  is \_\_\_\_\_  
(a) Non-equilibrium (b) **Equilibrium** (c) Minimum point (d) Maximum point
- 26) If  $x + y = 10$  and  $x - y = 6$  then, value of x  
(a) 4 (b) 3 (c) 16 (d) **8**
- 27)  $\frac{d}{dx}(500) =$  \_\_\_\_\_  
(a) **500** (b) -500 (c) 0 (d) 1
- 28)  $\int 9x^8 dx =$  \_\_\_\_\_  
(a)  **$x^9$**  (b)  $x^8$  (c)  $72x^7$  (d) 0
- 29) In a matrix, if the number of rows and columns are equal, it is called\_\_\_\_\_ matrix.  
(a) null (b) identity (c) singular (d) **square**
- 30) The methods which are helpful for achieving the objectives of the economic analysis are\_\_\_\_\_  
(a) Psychological methods (b) Biological methods (c) **Mathematical methods** (d) Physiological methods
- 31) Functions, with more than one independent variable are called\_\_\_\_\_  
(a) Double function (b) Triple function (c) **Multivariate functions** (d) Multiple functions

- 32) In an equation, if the largest power of the independent variable is one, then it is called\_\_\_\_\_.
- (a) Linear Equation** (b) One to one function (c) Unit Equation (d) Straight line
- 33) To construct the Linear supply function the least number of points needed are\_\_\_\_\_.
- (a) two** (b) three (c) four (d) five
- 34) The inverse of  $\begin{pmatrix} 0 & 2 \\ 2 & 0 \end{pmatrix}$
- (a)  $\begin{pmatrix} 0 & 1/2 \\ 2 & 0 \end{pmatrix}$  **(b)  $\begin{pmatrix} 0 & 1/2 \\ 1/2 & 0 \end{pmatrix}$**  (c)  $\begin{pmatrix} 0 & 1/2 \\ 1/2 & 1 \end{pmatrix}$  (d)  $\begin{pmatrix} 2 & 0 \\ 0 & 2 \end{pmatrix}$
- 35) The rank of zero matrix is \_\_\_\_\_
- (a) 0** (b) 1 (c) -1 (d)  $\infty$
- 36) A system of linear homogeneous equations has atleast \_\_\_\_\_
- (a) one solution** (b) two solutions (c) three solutions (d) four solutions
- 37) The equation  $AX = B$  can be solved by Cramer's rule only when \_\_\_\_\_
- (a)  $|A| = 0$  **(b)  $|A| \neq 0$**  (c)  $A = B$  (d)  $A \neq B$
- 38) If 60 units of some product cost Rs.1,400 and 40 units cost Rs.1,200 to manufacture then variable cost per unit is \_\_\_\_\_
- (a) Rs.100 (b) Rs.2,600 **(c) Rs.10** (d) Rs.5
- 39) The cost function  $y = 40 - 4x + x^2$  is minimum when \_\_\_\_\_
- (a)  $x = 2$**  (b)  $x = -2$  (c)  $x = 4$  (d)  $x = -4$
- 40) The marginal revenue is Rs.40 and the average revenue is Rs.60. The elasticity of demand with respect to price is \_\_\_\_\_
- (a) 1 (b) 0 (c) 2 **(d) 3**
- 41) What is the slope of the equation  $y = 3x + 2$ ?
- (a) 3** (b) 2 (c) -3 (d) -2
- 42) What is the ratio of the changes in vertical and horizontal lines called?
- (a) slope (b) gradient **(c) both** (d) equation
- 43) ICT stands for
- (a) Institute of Computer Technology (b) Information and Computer Technology  
**(c) Information and Communication Technology** (d) Internet and Computer Technology
- 44) Which analysis is frequently used in Economics?
- (a) word processor (b) spreadsheet (c) web browser **(d) all**
- 45) Which technology is used in exchange category?
- (a) E-mail, cell phone** (b) Radio, internet (c) Projector, PC (d) CD, DVD
- 46) How do you open a word document?
- (a) Start  $\rightarrow$  all programs  $\rightarrow$  accessories  $\rightarrow$  MS word (b) Start  $\rightarrow$  accessories  $\rightarrow$  all programs  $\rightarrow$  MS word  
**(c) Click start  $\rightarrow$  all programs  $\rightarrow$  MS word** (d) None
- 47) Which is used to insert page numbers, charts, equations, symbols?
- (a) view (b) reference **(c) insert** (d) Home
- 48) Which contains data and formula?

**(a) worksheet** (b) spreadsheet (c) page (d) sheet

49) Find the odd one out

(a) arithmetic (b) comparison (c) reference **(d) spell check**

50) MS Word helps to

(a) create (b) edit (c) print, save **(d) all**