Mount Abu Public School

SUMMER HOLIDAYS HOMEWORK

CLASS – XI (COMMERCE)

Should we judge a dolphin by its ability to climb a tree?

We do not wear the Board exam marks on our sleeves? Right. But …. they do signify a simple thing: it quantifies the level of sincerity and sense of responsibility of a student as per the level of the complexity of the subjects each one studies. This sense of sincerity and responsibility should begin from the time the student steps in XI.

With mercury rising to unprecedented heights, it is that time of the year where Summer Vacations provide us a little respite from the scorching heat. At the same time it also allows students enough time for introspection, reviewing past performances, learning from mistakes, goal setting, planning strategically and tactically, identifying obstacles to success. Gearing up for this wonderful period of rejuvenation, let us prepare ourselves to utilize our time in many constructive ways. So, with the idea of fostering new learning experiences and to enhance individual inquisitiveness, the school has planned some to channelize the energies of the young MAPIANS.

Here are some guidelines for you to invigorate your ward while giving him the chance to enjoy this period of unrestrained fun.

- **Learning doesn't stop when school is out.**
- **Work smart, not hard.**
- **For every hour of electronics time, you owe an hour of outside playtime.**
- **Reading is a must.**
- **Before you ask for a favor, do a chore.**
- **There's no sleeping all day or staying up all night.**
- **Be honest to a fault.**
- **Question every fact**
- **Do better today than you did yesterday.**

Holiday Homework (for all subjects) must be submitted as per the mentioned dates.

- **5th July, Physics / Accountancy**
- **8th July, B.Studies / Chemistry**
- **10th July, English**
- **12th July, Mathematics/ I.P**
- **15th July, Optional/ Economics**

ENGLISH

- ***The following titles are to be read under the reading programme initiated by the school and must be done on A4 size sheets and to be submitted in a transparent folder***

1. Read the tale 'The Little Match Girl' by Hans Christian Andersen, modify and twist the conclusion to come up with a more favourable ending.
2. Read the prose 'An Angel in Disguise' by T.S. Arthur and critically analyze the character of Mrs. And Mr. Joe Thompson in not more than 100 words.
3. Read the following poem and write down the message that the poem tries to put forth in not more than 100 words.

Nine Gold Medals

- (David Roth)

The athletes had come from so many the countries
To run for the gold and the silver and bronze
Many weeks and months in training
All building up to the games

All round the field spectators were gathered
Cheering on all the young women and men
Then the final event of the day was approaching
The last race about to begin

The loudspeakers called out the names of the runners
The one hundred metres the race to be run
And nine young athletes stood there determined
And poised for the sound of the gun

The signal was given, the pistol exploded
And so did the runners on hearing the sound
But the youngest among them stumbled and staggered
And he fell on his knees to the ground

He gave out a cry of frustration and anguish
His dreams and his efforts dashed in the dirt
But as sure as I'm standing here telling the story
Now it's a strange one, but here's what occurred

The eight other athletes stopped in their tracks
The ones who had trained for so long to compete
One by one they turned round and came back to help him
And lifted the lad to his feet

Then all nine runners joined hands and continued
The one hundred metres reduced to a walk

And the banner above that said "Special Olympics"
Could not have been nearer the mark

That's how the race ended, nine gold medals
They came to the finish line holding hands still
And the banner above and nine smiling faces
Said more than these words ever will
Said more than these words ever will

❖ **The following homework to be done in your CLASS WORK REGISTER itself**

1. Write down the notes and summary of the chapter '**BIRTH**'.
2. **ARTICLE**: Hard Work and Punctuality are essential for a happy and successful life. They help in meeting the desired targets of life. You are Kavya/Kanha. Write an article in 150-200 words highlighting the importance of hard work and punctuality in a student's life.
3. **LETTER**: You have realized the necessity of education and financial independence of women for their family, society and in turn for the nation. Write a letter to the editor, The National Times, highlighting your ideas on the importance of education of women leading to a better status for them. You are Tarun/Taruna B-7/9, Mall Road Delhi. You are Sreeja/Thomas.

4. Draw a **POSTER** on the conservation of Water and Saving our Sparrows

5. Indulge in ***COMMUNITY SERVICE*** *under the school Community initiative* ***'Ek Aase ek Prayas'*** and write your experience in about 150 words along with your **photograph** as a proof.

SUGGESTIONS

- visiting old age homes
- visiting an orphanage
- service at a religious place,
- tutor poor children
- Participate in the cleanup of a local river, park, or any area

ACCOUNTANCY

PROJECT WORK

No. of Pages: 5 to 6 pages

Note down the Transactions for 15 days from June 1st June 2019 to 15th June 2019 of the business organisation and Prepare an Accounting Equation for the transactions that has been noted.:

1. Grocery Shop
2. Salon
3. Cosmetic Shop
4. Optician
5. Bakery Shop
6. Sweet Shop

7. Or any form of Business Organization.

Prepare an Accounting Equation for the transactions that has been noted.

ASSIGNMENT SHEET

Solve the assignment sheet given below in separate register and submit it in a channel file.

ACCOUNTING EQUATION

Q1 : Prepare accounting equation on the basis of the following:
(a) Harsha started business with cash Rs 2,00,000
(b) Purchased goods from Naman for cash Rs 40,000
(c) Sold goods to Bhanu costing Rs 10,000/- Rs 12,000
(d) Bought furniture on credit Rs 7,000

Q2 : Prepare accounting equation from the following:
(a) Kunal started business with cash 2,50,000
(b) He purchased furniture for cash 35,000
(c) He paid commission 2,000
(d) He purchases goods on credit 40,000
(e) He sold goods (costing Rs 20,000) for cash 26,000

Q3 : Mohit has the following transactions, prepare accounting equation:
(a) Business started with cash 1,75,000
(b) Purchased goods from Rohit 50,000
(c) Sales goods on credit to Manish (Costing Rs 17,500) 20,000
(d) Purchased furniture for office use 10,000
(e) Cash paid to Rohit in full settlement 48,500
(f) Cash received from Manish 20,000
(g) Rent paid 1,000
(h) Cash withdrew for personal use 3,000

Q4 : Rohit has the following transactions:
(a) Commenced business with cash 1,50,000
(b) Purchased machinery on credit 40,000
(c) Purchased goods for cash 20,000
(d) Purchased car for personal use 80,000
(e) Paid to creditors in full settlement 38,000
(f) Sold goods for cash costing Rs 5,000 4,500
(g) Paid rent 1,000
(h) Commission received in advance 2,000

Q5 : Use accounting equation to show the effect of the following transactions of M/s Royal Traders:
(a) Started business with cash 1,20,000
(b) Purchased goods for cash 10,000
(c) Rent received 5,000
(d) Salary outstanding 2,000
(e) Prepaid Insurance 1,000

(f) Received interest 700
(g) Sold goods for cash (costing Rs 5,000) 7,000
(h) Goods destroyed by fire 500

Q6 : Show the accounting equation on the basis of the following transaction:
(a) Udit started business with:
(i) Cash
(ii) Goods
(b) Purchased building for cash
(c) Purchased goods from Himani
(d) Sold goods to Ashu (Cost Rs 25,000)
(e) Paid insurance premium
(f) Rent outstanding
(g) Depreciation on building
(h) Cash withdrawn for personal use
(i) Rent received in advance
(j) Cash paid to Himani on account
(k) Cash received from Ashu

Q7 : Show the effect of the following transactions on Assets, Liabilities and Capital through accounting equation:
(a) Started business with cash
(b) Rent received
(c) Invested in shares
(d) Received dividend
(e) Purchase goods on credit from Ragani
(f) Paid cash for house hold Expenses
(g) Sold goods for cash (costing Rs 10,000)
(h) (i) Cash paid to Ragani Deposited into bank

Q8 : Show the effect of following transaction on the accounting equation:
(a) Manoj started business with
(i) Cash 2,30,000
(ii) Goods 1,00,000
(iii) Building 2,00,000
(b) He purchased goods for cash 50,000
(c) He sold goods(costing Rs 20,000) 35,000
(d) He purchased goods from Rahul 55,000
(e) He sold goods to Varun (Costing Rs 52,000) 60,000
(f) He paid cash to Rahul in full settlement 53,000
(g) Salary paid by him 20,000
(h) Received cash from Varun in full settlement 59,000
(i) Rent outstanding 3,000
(j) Prepaid Insurance 2,000
(k) Commission received by him 13,000
(l) Amount withdrawn by him for personal use 20,000
(m) Depreciation charge on building 10,000
(n) Fresh capital invested 50,000

(o) Purchased goods from Rakhi 6,000

Q9 : Transactions of M/s. Vipin Traders are given below.
Show the effects on Assets, Liabilities and Capital with the help of accounting Equation.
(a) Business started with cash 1,25,000
(b) Purchased goods for cash 50,000
(c) Purchase furniture from R.K. Furniture 10,000
(d) Sold goods to Parul Traders (costing Rs 7,000 vide bill no. 5674) 9,000
(e) Paid cartage 100
(f) Cash Paid to R.K. furniture in full settlement 9,700
(g) Cash sales (costing Rs 10,000) 12,000
(h) Rent received 4,000
(i) Cash withdrew for personal use

- **Paste the financial statements of various companies taken from daily newspaper**
- **Find out the names of any five companies registered on a stock exchange. Monitor the prices of their shares for 15 working days. Write your observation about changes in their prices.**
- **Prepare for July Test Series.**

B.STUDIES

1. Revise the Chapters 01 and 02 on a regular basis. While revising, students are required to solve the questions of the following Chapters in the Separate Register:-
Chapter 01:- Nature and Purpose of Business (Page No. 46 , Q11 to 30)
Chapter 02:- Forms of Business organization (Page No. 98 ,Q35 to 51)
2. Select any one cooperative society and analyze the following aspects—
   a. Objective of formation.
   b. Nature and size of business.
   c. Number of members and their role.
   d. Evolution or history of society.
   e. Benefits of society to its members.
   f. Control and management of society.
3. Approach a nearby bank and collect information about various facilities offered by them and also collect leaflets about salient features of different schemes. Compile and suggest what other services you feel the bank should be providing to its customers.
4. Prepare either 20 MCQs / True or false / Fill in the blanks from each chapter(1 to 5) . Submit in the form of hard copy.

MATHEMATICS

Assignment (Chapters 1,3,4 and 5)

Chapter 1(Sets)

1. If n(U) =15, A and B are two sets such that $A \subset B$,n(A) =8 and n(B)= 12 ,use Venn diagram to find the following:

   i)n(A') ii)n(B') iii)n($A \cap B'$) iv)n($A' \cap B$)

2. Write the set A = $\{x: x \in Z, x^3 < 27\}$ in the roster form.
3. Writ the set X = $\left\{1, \frac{1}{4}, \frac{1}{9}, \frac{1}{16}, \frac{1}{25}, \ldots\ldots\ldots\ldots\ldots\ldots\right\}$ in the set – builder form.
4. What is the total number of proper subsets of a set consisting of 10 elements?
5. How many elements has P(B) , if B = $\emptyset$?
6. **Write the following in set builder form:**

   i) (-7,0) ii)(2,5] iii)[4,8] iv) [1,6)

7. A college awarded 38 medals in Football, 15 in Basketball and 20 to Cricket. If these medals went to a total of 58 men and only three men got medals in all the three sports, how many received medals in exactly two of the three sports?
8. If A and B are two sets such that n (A ∪ B) = 50, n (A) = 28 and n (B) = 32, find n $(A \cap B)$
9. In a group of 50 people, 35 speak Hindi, 25 speak both English and Hindi and all the people speak at least one of the two languages. How many people speak only English and not Hindi? How many people speak English?
10. Let A = {a,b,c,d,e}, B = {b,d,f,h} , C = {d,i,k}. Verify the following identities :

    (i) A ∪ (B ∩ C) = (A ∪ B) ∩ (A ∪ C)

    (ii) A ∩ (B ∪ C) = (A ∩ B) ∪ (A ∩ C)

    (iii)A ∩ (B - C) = (A ∩ B) - (A ∩ C)

    (iv) A - (B ∪ C) = (A - B) ∩ (A - C)

    (v) A - (B ∩ C) = (A - B) ∪ (A - C)

    (vi) $A \cap (B \Delta C) = (A \cap B) \Delta (A \cap C)$.

11. In a survey of 700 students in a college, 180 were listed as drinking Limca, 275 as drinking Miranda and 95 were listed as both drinking. Limca as well Miranda. Find how many students were drinking neither Limca nor Miranda.

12. There are 200 individuals with a skin disorder, 120 has been exposed to chemical C_1, 50 to chemical C_2 and 30 to both the chemicals C_1 and 30 to both the chemicals C_1 and C_2. Find the number of individuals exposed to

    (i) chemical C_1 or chemical C_2

    (ii) chemical C_1 but not chemical C_2

    (iii) chemical C_2 but not chemical C_1.

13. There are 40 students in a chemistry class and 60 students in a physics class. Find the number of students which are either in physics class or chemistry class in the following cases :

    (i) the two classes meet at the same hour.

    (ii) the two classes meet at different hours and 20 students are enrolled in both the subjects.

14. In a survey it was found that 21 persons liked product P_1, 26 liked product P_2 and 29 liked product P_3. if 14 persons liked products P_1 and P_2; 12 persons liked products P_3 and P_1; 14 persons liked products P_2 and P_3 and 8 liked all the three products. Find how many liked products P_3 only.

15. In a survey of 60 eople, it was found that 25 people read newspaper H, 26 read newspaper T, 26 read newspaper I, 9 read both H and I, 11 read both H and T, 8 read both T and I, 3 read all three newspapers. Find:

    (i) The numbers of people who read at least one of the newspapers.

    (ii) The numbers of people who read exactly one newspapers.

Chapter 3 (Trigonometric functions)

16. Find the values of:

i) $\cos 3060^0$ $\quad ii) cot(-1315^0)$ $\quad iii) tan(-315^0)$

$iv) sec(855^0)$ $\quad v) cosce(1845^0)$ $\quad vi) \sin(-\frac{11\pi}{6})$

17. If A, B, C, D are angles of a cyclic quadrilateral, prove that : cos A + cos B + cos C + cos D = 0.

18. If $\tan^2\theta = 2\tan^2\emptyset + 1, prove$ that $\cos 2\theta + \sin^2\emptyset = 0$

19. Prove that : $\frac{tan(\frac{\pi}{4}+x)}{tan(\frac{\pi}{4}-x)} = \left(\frac{1+tanx}{1-tanx}\right)^2$

20. Prove that $\frac{cos\theta}{1+sin\theta} = \tan(\frac{\pi}{4} - \frac{\theta}{2})$

21. Find the maximum and minimum values of $7\cos\theta + 24\sin\theta$.

22. If $10\sin^4\boldsymbol{\alpha} + \mathbf{15}\,\boldsymbol{cos^4\alpha} = \mathbf{6}, \boldsymbol{findthevalueof}\ \mathbf{27}\,\boldsymbol{cosec^6\alpha} + \mathbf{8}\boldsymbol{sec^6\alpha}$.

23. If $\alpha and \beta$ are acute angles such that tan $\alpha = \frac{m}{m+1} and tan\beta = \frac{1}{2m+1}, prove that \alpha + \beta = \frac{\pi}{4}$.

24. Prove that : cos 20° cos 40° cos 60° cos 80° = $\frac{1}{16}$.

25. Prove that : sin 10° sin 30° sin 50° sin 70° = $\frac{1}{16}$.

26. Prove that : sin 20° sin 40° sin 60° sin 80° = $\frac{3}{16}$.

27. Prove that : 1 + cos 2x + cos 4x + cos 6x = 4 cos x cos 2x cos 3x.

28. Prove that : $\frac{cos\ 6\theta + 6cos\ 4\theta + 15\ cos\ 2\theta + 10}{cos\ 5\theta + 5\ cos\ 3\theta + 10\ cos\theta}$ = 2 cos θ

29. Show that : $\sqrt{2 + \sqrt{2 + \sqrt{2 + 2\ cos\ 8\theta}}} = 2\ cos\theta$.

30. Prove that : $\frac{sec\ 8\theta - 1}{sec\ 4\theta - 1} = \frac{tan\ 8\theta}{tan\ 2\theta}$

31. Prove that tan $4\theta = \frac{4\ tan\theta(1 - tan^2\theta)}{1 - 6\ tan^2\theta + tan^4\theta}$.

32. Prove that : $\left(1 + cos\frac{\pi}{8}\right)\left(1 + cos\frac{3\pi}{8}\right)\left(1 + cos\frac{5\pi}{8}\right)\left(1 + cos\frac{7\pi}{8}\right) = \frac{1}{8}$.

33. Prove that: $(cos\alpha - cos\beta)^2 + (sin\alpha - sin\beta)^2 = 4\ sin^2\left(\frac{\alpha - \beta}{2}\right)$

34. Prove that : sin 18° = $\frac{\sqrt{5} - 1}{4}$.

35. Prove that : cos 18° = $\frac{\sqrt{10 + 2\sqrt{5}}}{4}$.

36. Prove that: (sin 3A + sin A) sin A + (cos 3A - cos A) cos A = 0

37. Prove that: cos $2\theta cos\frac{\theta}{2}$ - cos $3\theta cos\frac{9\theta}{2}$ = s in $5\theta sin\frac{5\theta}{2}$

38. Prove that : $\frac{1 + cos4x}{cotx - tanx} = \frac{1}{2}$sin4x

39. Prove that: $cos\alpha + cos\beta + cos\gamma + cos(\alpha + \beta + \gamma) = 4cos\frac{\alpha + \beta}{2} cos\frac{\beta + \gamma}{2} cos\frac{\gamma + \alpha}{2}$

40. Solve the equation : cos $\theta + cos\ 3\theta - 2\ cos\ 2\theta = 0$.

41. Solve : 7 cos$^2\ \theta + 3$ sin$^2\theta = 4$.

42. Solve : $\sqrt{3}$ cos θ + sin $\theta = \sqrt{2}$.

43. Solve : $\sqrt{2}$ sec θ + tan $\theta = 1$.

44. Prove that: $cos^2 A + cos^2\left(A + \frac{\pi}{3}\right) + cos^2\left(A - \frac{\pi}{3}\right) = \frac{3}{2}$

45. Prove that : cos^{2}2x – cos^2 6x = sin 4x sin 8x.

46. Prove that : sin(n + 1) A (n + 2) A + cos (n + 1) A cos (n + 2) A = cos A

Chapter 4 (Mathematical induction)

47. Prove by the principal of mathematical induction that for all n ∈ N :

1 + 4+ 7 + ...+(3n – 2) = $\frac{1}{2}\ n$ (3n – 1) .

48. Using the principal of mathematical induction prove that: $1^3 + 2^3 + 3^3 + \ldots\ldots n^3 = \left\{\frac{n(n+1)}{2}\right\}^2$ for all $n \in N$

49. If x and y are any two distinct integers, then prove by mathematical induction that $(x^n - y^n)$ is divisible by $(x - y)$ for all $n \in N$.

50. Using the principal of mathematical induction prove that:

$1 + \frac{1}{1+2} + \frac{1}{1+2+3} + \cdots . + \frac{1}{1+2+3+\cdots .+n} = \frac{2n}{n+1}$ for all $n \in N$

51. Prove by the principal of induction that for all $n \in N$, $(10^{2n-1} + 1)$ is divisible by 11.

52. Prove by the principal of induction that for all $n \in N$.

(i) $\frac{1}{1.4} + \frac{1}{4.7} + \frac{1}{7.10} + \cdots \ldots \ldots . + \frac{1}{(3n-2)(3n+1)} = \frac{n}{3n+1}$

(ii) $\frac{1}{3.7} + \frac{1}{7.11} + \frac{1}{11.15} + \cdots \ldots \ldots . + \frac{1}{(4n-1)(4n+3)} = \frac{n}{3(4n+3)}$

(iii) $1.2 + 2.3 + 3.4 + \ldots\ldots\ldots + n(n+1) = \frac{n(n+1)(n+2)}{3}$

(iv) $3^{2n} + 7$ is divisible by 8 for all $n \in N$.

(v) $n(n+1)(n+5)$ is a multiple of 3 for all $n \in N$.

Chapter 5 (Complex Number)

53. Evaluate the following:

54. Express $(1 - 2i)^{-3}$ in the standard form $a + bi$.

55. Find the multiplication inverse of $z = 3 - 2i$.

56. Perform the indicated operation and find the result in the form $a + bi$: $\frac{2-\sqrt{-25}}{1-\sqrt{-16}}$.

57. Find the real values of x and y , if $(3x - 7) + 2iy = -5y + (5 + x)i$

58. If $a + bi = \frac{c+i}{c-i}$, where c is real , prove that : $a^2 + b^2 = 1$ and $\frac{b}{a} = \frac{2c}{c^2-1}$

59. If $(x + iy)^{1/3} = a + ib$, x, y, a b $\in R$. Show that $\frac{x}{a} + \frac{y}{b} = 4(a^2 - b^2)$.

60. Find the real numbers x and y if $(x - iy)(3 + 5i)$ is the conjugate of $-6 - 24i$.

61. If $\frac{a+ib}{c+id} = x + iy$, prove that $\frac{a-ib}{c-id} = x - iy$ and $\frac{a^2+b^2}{c^2+d^2} = x^2 + y^2$.

62. If $\frac{(a+i)^2}{(2a-i)} = p + iq, show\ that:\ p^2 + q^2 = \frac{(a^2+1)^2}{(4a^2+1)}$.

63. If $x + iy = \sqrt{\frac{a+ib}{c+id}}$, $prove\ that:\ (x^2 + y^2)^2 = \frac{a^2+b^2}{c^2+d^2}$.

64. Find the least positive value of n, if $\left(\frac{1+i}{1-i}\right)^n = 1$.

65. Find real $\theta\ such\ that\ \frac{3+2i\ sin\theta}{1-2i\ sin\ \theta}$ is purely real.

66. If α *and* β are different complex numbers with $|\beta| = 1, find \left|\frac{\beta-\alpha}{1-\bar{\alpha}\beta}\right|$.

67. Find non – zero integral solutions of $|1 - i|^x = 2^x$.

68. Find the square roots of the following : 7 – 24i .

69. Find the square roots of the following : -15 – 8i .

70. Find the square root of i .

71. Solve the following quadratic equations by factorization method : $x^2 - 5ix - 6 = 0$

72. Solve : $2x^2 - (3 + 7i)x - (3 - 9i) = 0$

73. Write $\frac{i-1}{cos\frac{\pi}{3} + i\, sin\frac{\pi}{3}}$ in polar form.

2. **Make 10 multiple choice questions for each chapter (1,2,4,5)**
3. **Do all these activities in practical file**

Activity 1: To find the number of subsets of a given set and verify that if a set has n number of elements, then the total number of subsets is 2^n .

Activity 2: To represent set theoretic operations using Venn diagrams.

Activity 3: To distinguish between a Relation and a Function.

Activity 4: To verify the relation between the degree measure and the radian measure of an angle.

Activity 5: To find the values of sine and cosine functions in second, third and fourth quadrants using their given values in first quadrant.

Activity 6: To interpret geometrically the meaning of i = $\sqrt{-1}$ and its integral powers.

Note:

- **Do all the questions neatly in practice notebook.**
- **Do all activities in practical file neatly .**
- **Learn and write trigonometry identities in the same notebook**

ECONOMICS

PART A

- Read two Editorials per week related to dynamics of Indian Economy including its functioning and policy framework for domains like the Business World, Banking Sector, Stock Market etc or Economics of International World like Brexit, Eurozone, Trump's Policy from.

  Economics Daily like (The Economic times, Live Mint, The Business Standard, The Economist, New York Times) and submit synopsis of the same in your own words along with the original articles.

PART B

Assignment (MICRO ECONOMICS- Introduction, Consumer's Equilibrium & Demand) :

1. A consumer consumes only two goods and is in equilibrium. Show that price and demand for a good are inversely related. Explain using utility analysis.
2. A consumer consumes only two goods x and y and is in equilibrium. Price of good y falls. Explain the reaction of consumer through utility analysis.
3. Starting from the point of consumer equilibrium, suppose MU of a rupee increases. Tell how is it going to make an impact on quantity demanded?
4. A consumer wants to consume two goods X & Y. The prices of X and Y goods are Rs 4 and Rs 5 respectively. The consumer's income is Rs 20.

   (i) Write down the equation of the budget line.
   (ii) How much of good X can the consumer purchase if she spends her entire income on that good?
   (iii) How much of good Y can she consume if she spends her entire income on that good?
   (iv) What is the slope of the budget line?

5. Suppose a consumer can afford to buy 6 units of good 1 and 8 units of good 2 if she spends her entire income. The prices of the two goods are Rs 6 and Rs 8 respectively. How much is the consumer's income?
6. A consumer consumes only two goods X and Y. At a consumption level of these two goods, he finds that the ratio of marginal utility of price in case of X is higher than in case of Y. Explain the reaction of the consumer.
7. What will be the impact on demand of the good due to increase in price of substitute good? Use Diagram.
8. What cause an upward movement along a demand curve?
9. Distinguish between expansion of demand and increase in demand with the help of a diagram.
10. Giving reasons, comment on the shape of Production Possibilities Curve based on the following schedule:

Good X (Units)	0	1	2	3	4
Good Y (Units)	8	6	4	2	0

11. Draw a production possibility curve and show the following situations: (1) Fuller Utilization of resources (2) Economic Growth (3) Decrease in Resources (4) Under Utilization of Resources
12. Explain the impact of rise in price of related good on the demand for given good. Use Diagram.
13. The demand function of a commodity x is given by
    Q= 20-3P.

Find out the values of P, when corresponding value of Q are given as 5, 8, 11 and 14.

14. Explain with the help of diagrams, the effect of the following changes on the demand of a commodity:

(a) An unfavorable change in taste of the buyer of the commodity

(b) A fall in income of its buyer, if the income is inferior.

15. Analyse the properties of indifference curve with the help of diagram.

- Prepare chapters thoroughly for July test series.

INFORMATICS PRACTICES

Q1. Prepare a presentation in SWAY on any one of the topics listed below and share the link with poonam.chopra7@mountabuschool.com

- Wi-Fi Networking Concepts
- Social Networking effects
- Cyber Laws / Security
- What makes a country developed?
- Cyber Crimes
- Internet Vs Newspapers
- Technologies that will disappear in next 5 years

Q2. Visit the website "Code.org" Complete at least two online courses available on the website. Submit the completion certificate of the same

Q3. Complete an 'Android development Course' from any website like Coursera, Edx etc. and deposit print of screenshot of the completion of course.

ASSIGNMENT

1. Write Python command/instruction/statement to display your name.

2. Write Python command to display your school name, class, and section, separated by "-".

3. Evaluate the following expressions manually:

(i) (2 + 3) ** 3 - 6 / 2

(ii) (2 + 3) * 5//4+(4 + 6)/ 2

(iii) 12 + (3 * 4 – 6) / 3

(iv) 12 + (3 * *4 – 6)// 2

(v) 12 * 3 % 5 + 2 * 6//4

(vi) 12 % 5 *3 +(2*6)//4 4.

Evaluate the above expressions by using IDLE as a calculator and verify the results that you got manually.

1. Identify invalid variable names from the following, give reason for each:

int, total marks, S.I., volume, tot_strength, #tag, tag$, 9a

2. Find the output of the following code:

(1) x=3

y=x+2 x+=y print(x,y)

(2) x=-2

y=2 x+=y y-=x print(x,y)

(3) a=5

b=2*a a+=a+b b*=a+b print(a,b)

(4) p=10 q=20 p*=q/3 q+=p+q*2 print(p,q)

(5) p=5%2

q=p**4 r=p//q p+=p+q+r r+=p+q+r q-=p+q*r print(p,q,r)

(6) p=21//5

q=p%4 r=p*q p+=p+q-r r*=p-q+r q+=p+q print(p,q,r)

3. Write Python expressions to represent the following situations:

a. Add remainder of 10/7 to the product of 10 and 7.

b. Find the square root of the sum of 8 and 43.

c. Find the sum of the square roots of 8 and 43.

d. Find the integral part of the quotient when 63 is divided by 29

PHYSICAL EDUCATION

- Write 3 practical's in Physical Education Practical File (Samar Publication).
  Practical 1. Any one individual game (Badminton, Table -Tennis and Taekwondo)
  Practical 2. Any one team game (Football, Basketball and Cricket)
  Practical 3. American Alliance for Health, Physical Education, Recreation & Dance (***AAHPERD***)