Questions From syllabus of April , May and July 2015

CIVICS - (STD – X)

1. Name the countries with which Belgium   shares its boundary.

2. Explain the term ethnic.

3. Name the most dominant lingual group in Belgium

4. What do you know about the ethnic composition of the country of Belgium?

5. Name the capital city of Belgium.

6. What do you know about the ethnic composition of Sri Lanka?

7. When did Sri Lanka gain independence?

8. Define the term "majoritarianism."

9. Name of the head quarters of the Europion union

10. What majoritarian measures were taken by the government of Sri Lanka to establish Sinhala

     supremacy?

11. What were the demands of the Tamil Community in Sri Lanka?

12. Name the most dominant group in Srilanka.

13. What do you know about the community government in Belgium'?

14. Explain the Belgian model of power sharing.

15. State the prudential reason for power sharing.

16.State the moral reason for power sharing .

17. How has the idea of power sharing emerged?

18. What is horizontal distribution of power?

19. What is vertical division of power.?

20. Why is horizontal power sharing called a system of checks and
 balances?

21. What is a coalition   government.

22. Discuss the   different   forms of power sharing in modern
democracies ?

23. What are pressure Groups?

24. State any three arguments in favour of power sharing.

25.State any three arguments against power sharing?

26. What is a civil war ? Which country faced a civil war?

27.Explain the term . Prudential ?

 28.Name the official religion of Sri Lanka.

29. How many amendments have been made to the Belgian
constitution between 1970 and 1993?

HISTORY- (STD – X)

AGE OF INDUSTRIALIZATION

1. Explain the term orient.

2. Name the music publisher who produced a music album titled
“Dawn of the century”.

3. What is proto industrialization ?

4. What were trade guilds ?

5. Why merchants from towns in Europe began moving to the country side?

6. Why peasants and artisans in the country side began working for the merchants ?

7. Who is a stapler?

8. when did the first factories come up in England ?

9. what was the symbol of the new era?

10. What factor led to increase in the import of raw cotton to Britain in the 18th century?

11. Who invented the cotton mill?

12. Whatwas the benefit of the factory system of production?

13. State the characteristic features of the protoindustral period?

14. How was production carried out in the proto- industrial period?

15. Why London come to known as a finishing centre .

16. What were the two most dynamic industries in Britain ?

17. Why merchants and industrialists. Were slow to adapt to technological changes.

18. Discuss the pace of industrial change in England?

19.Who invented the steam Engine ?

20.Who began the industrial production of steam Engine ?

21. When did James watt got the patent for the steam Engine?

22. Why did some industrialists in Britain prefer hand labour machines?

23. Why the rich upper classes in Britain preferred goods produced by hand?

24.Discus the life of worker in industrial England ?

25. Who invented the spinning jenny and when?

26. Why women in Britain were hostile to the introduction of spinning jenny?

27. Name any two pre-colonial ports in India .

28. Which products from India dominated the international market in textiles?

29.Name two ports that developed in India during British colonial rule.

30.How was trade carried out in India during the pre-colonial period?

31. Explain why the port of surat declined in the eighteenth century?

32. Who were Gomasthas? why were they appointed by the English East India company?

33. How did the east India company procure regular supplies of cotton and silk textiles from India?

34. What factors led to clashes between gomasthas and the India weavers ?What was the outcome ?

35. Who was Henry patullo ? What did he say about Indian textiles ?

36. What problems were faced by India weavers in the late 19thcentury?

37.What were the implication of the export of Manchester goods to India?

38. Explain why textile exports from India to Britain declined by the mid 19thcentury?

39. How were India weaver affected due to the America civil war?

40.Who were the early entrepreneurs in India? How was capital arranged by them to set up industries in India?

41. When and where did the first cotton mill come up in India ?

42. Name three European managing Agencies in India. How did they control industrial production in India?

43.Who were jobbers ? Explain

44.How did Indian industrialists avoided competition with Manchester goods?

45. Why did industrial production increase in India during first world war?

46. What changes affeeted the pattern of industrialization in India in the first decade of the 20thcentury ?

47. Why did hand loom cloth production increase in India between 1900 and 1940?

48. How was market created for goods by producers in India?

49. How advertisement played an important part in expanding the market for products ?

50. Name the Marwari business man who set up the first India jute mill in Calcutta?

MATHS

1. Every linear equation in two variables has ___ solution(s).

(a) no (b) one(c) two (d) infinitely many

2. For a pair to be consistent and dependent the pair must have

(a) no solution (b) unique solution(c) infinitely many solutions (d) none of these

3. Graph of every linear equation in two variables represent a ___

(a) point (b) straight line(c) curve (d) triangle

4. Each point on the graph of pair of two lines is a common solution of thelines in case of ___

(a) Infinitely many solutions (b) only one solution(c) no solution (d) none of these

5. The pair of linear equations *x* = *y* and *x* + *y* = 0 has

(a) no common solution (b) infinitely many solutions(c) unique solution (d) none

6. For $x = 2$ in $2x - 8y = 12$ the value of y will be

(a) –1 (b) +1

(c) 0 (d) 2

7. The pair of linear equations is said to be inconsistent if they have

(a) only one solution (b) no solution

(c) infinitely many solutions. (d) both a and c

8 On representing $x = a$ and $y = b$ graphically we get _____

(a) parallel lines (b) coincident lines

(c) intersecting lines at (a, b) (d) intersecting lines at (b, a)

9. In a DABC, ĐC = 3 ĐB, ĐC = 2 (ĐA + ĐB) then ĐA, ĐB and ĐC are—

(a) 30°, 60°, 90° (b) 20°, 40°, 120°

(c) 45°, 45°, 90° (d) 110°, 40°, 50°

10. The pair of linear equations $x = 2$ and $x = 5$ has

(a) no common solution (b) infinitely many solutions

(c) unique solution (d) none

11. Graphically $x - 2 = 0$ represents a line

(a) parallel to x-axis at a distance 2 units from x-axis.

(b) parallel to _y_-axis at a distance 2 units from it.

(c) parallel to _x_-axis at a distance 2 units from _y_-axis.

(d) parallel to _y_-axis at a distance 2 units from _x_-axis.

12. If _ax_ + _by_ = _c_ and _lx_ + _my_ = _n_ has unique solution then the relation

between the coefficients will be _____

(a) _am_ ¹ _lb_ (b) _am_ = _lb_

(c) _ab_ = _lm_ (d) _ab_ ¹ _lm_

SHORT ANSWER TYPE QUESTIONS

13. Form a pair of linear equations for : If twice the son's age is added to

father's age, the sum is 70. If twice the father's age is added to the son's

age the sum is 95.

14. Amar gives 9000 to some athletes of a school as scholarship every

month. Had there been 20 more athletes each would have got 160

less. Form a pair of linear equations for this.

15. Give linear equations which is coincident with 2 _x_ + 3_y_ - 4 = 0

16. What is the value of a for which (3, *a*) lies on $2x - 3y = 5$

17. The sum of two natural nos. is 25 and their difference is 7. Find the nos.

18. Dinesh is walking along the line joining (1, 4) and (0, 6), Naresh is

walking along the line joining (3, 4,) and (1,0). Represent on graph and

find the point where both of them cross each other.

19. Solve the pair of linear equations

$x - y = 2$ and $x + y = 2$. Also find *p* if $p = 2x + 3$

20. Check graphically whether the pair of linear equations $3x + 5y = 15$,

$x - y = 5$ is consistent. Also check whether the pair is dependent.

21. For what value of *p* the pair of linear equations

$(p + 2) x - (2p + 1)y = 3(2p - 1)$

$2x - 3y = 7$

has unique solution.

22. Find the value of K so that the pair of linear equations:

$(3K + 1)x + 3y - 2 = 0$

$(K2 + 1)x + (k–2)y - 5 = 0$ is inconsistent.

23. Given the linear equation $x + 3y = 4$, write another linear equation in two variables such that the geometrical representation of the pair so formed is (i) intersecting lines (ii) parallel lines (iii) coincident lines.

24. Solve $x - y = 4$, $x + y = 10$ and hence find the value of p when $y = 3x - p$

25. Determine the value of K for which the given system of linear equations has infinitely many solutions:

$Kx + 3y = K - 3$

$12x + Ky = K$

26. Find the values of a and b for which and following system of linear equations has infinite no of solutions :

$2x + 3y = 7$

$2ax + (a + b)y = 28.$

1. *A* real no. a is a zero of the polynomial $f(x)$ if

(a) $f(a) > 0$ (b) $f(a) = 0$

(c) $f(a) < 0$ (d) none

2. The zeros of a polynomial $f(x)$ are the coordinates of the points where the

graph of $y = f(x)$ intersects

(a) x-axis (b) y-axis

(c) origin (d) (x, y)

3. If b is 0 zero of $f(x)$ then _____ is one of the factors of $f(x)$

(a) $(x - b)$ (b) $(x - 2b)$

(c) $(x + b)$ (d) $(2x - b)$

4. If $(y - a)$ is factor of $f(y)$ then ____ is a zero of $f(y)$

(a) y (b) a

(c) $2a$ (d) $2y$

5. Which of the following is not correct for : A quadratic polynomial may

have

(a) no real zeros (b) two equal real

zeros

(c) two distinct zeros (d) three real zeros.

6. Cubic poly $x = f(y)$ cuts y-axis at almost

(a) one point (b) two points

(c) three points (d) four points

7. Polynomial $x^2 + 1$ has ____ zeros

(a) only one real (b) no real

(c) only two real (d) one real and the

other non-real.

9. If one of the zero of the polynomial $g(x) = (k^2 + 4) x^2 + 13x + 4k$ is

reciprocal of the other then $k =$ ____

(a) 2 (b) – 2

(c) 1 (d) – 1

10. If 2 is a zero of both the polynomial, $3x^2 + ax - 14$ and $2x -$

b then

$a - 2b =$ ____

(a) –2 (b) 7

(c) –8 (d) –7

11. If zeros of the polynomial $ax^2 + bx + c$ are reciprocal of each

other then

(a) $a = c$ (b) $a = b$

(c) $b = c$ (d) $a = - c$

12. The zeros of the polynomial $h(x) = (x - 5)(x^2 - x - 6)$ are

(a) –2, 3, 5 (b) –2, –3, –5

(c) 2, –3, –5 (d) 2, 3, 5

13. Graph of $y = ax^2 + bx + c$ intersects x-axis at 2 distinct points if

(a) $b^2 - 4ac > 0$ (b) $b^2 - 4ac < 0$

(c) $b^2 - 4ac = 0$ (d) none

SHORT ANSWER TYPE QUESTIONS

14. If a and b are the zeros of the polynomial $2x^2 - 7x + 3$. Find the

sum of

the reciprocal of its zeros.

15. If a, b are the zeros of the polynomial $p(x) = x^2 - a(x + 1) -$

b such that

(a + 1)(b + 1) = 0 then find value of b.

16. If a, b are the zeros of the polynomial $x^2 - (k + 6)x + 2(2k - 1)$.

Find

k if a + b = 1 ab^2

17. If $(x + p)$ is a factor of the polynomial $2x^2 + 2px + 5x + 10$ find p.

20. Find zeroes of 2 - + 3x 8x 4 3.

21. If $(x + k)$ is a factor of the polynomial $x^2 - 2x - 15$ and $x^3 + a$.

Find k and a.

22. Form a quadratic polynomial, one of whose zero is $(2 + 5)$ and

the

sum of zeros is 4.

23. If sum of the zeroes of $kx^2 + 3k + 2x$ is equal to their product.

Find k.

24. If one zero of $4x^2 - 9 - 8kx$ is negative of the other find k.

LONG ANSWER TYPE QUESTIONS

25. Find the zeroes of $6x^2 - 3 - 7x$. Verify the relationship between

the zeros

and coefficients.

26. If one zero of he polynomial $(a^2 + a) x^2 + 13x + 6a$ is reciprocal

of the

other, find value (s) of $a.$

27. -5 is one of the zeroes of $2x^2 + px - 15$. Quadratic polynomial

$p(x^2 + x) + k$ has both the zeros equal to each other. Then find k.

28. Find the value of k such that $3x^2 + 2kx + x - k - 5$ has the sum of the

zeros as half of their product.

29. If $f(x) = 2x^4 - 5x^3 + x^2 + 3x - 2$ is divided by $g(x)$ the quotient is

$q(x) = 2x^2 - 5x + 3$ and $r(x) = -2x + 1$ find $g(x)$.

30. If $(x - 2)$ is one of the factors of $x^3 - 3x^2 - 4x + 12$ find the other

zeros.

31. If a and b are the zeros of he polynomial $x^2 - 5x + k$ such

that a − b =1,

find the value of k.

32. If a, b are zeros of quadratic polynomial $2x^2 + 5x + k$, find the

value of

k, such that $(a + b)^2 - ab = 24$.

33. Obtain all zeros of $x^4 - x^3 - 7x^2 + x + 6$ if 3 and 1 are zeros.

34. Find all the zeros of the polynomial $4x^4 - 20x^3 + 23x^2 + 5x - 6$ if

two of

its zeros are 2 and 3.

35. If $(2 + 3)$ and $(2 - 3)$ are two zeroes of $x^4 - 4x^3 - 8x^2 + 36x - 9$

find the other two zeroes.

36. What must be subtracted from $8x^4 + 14x^3 - 4x^2 + 7x - 8$ so that

the

resulting polynomial is exactly divisible by $4x^2 + 3x - 2$.

37. When we add $p(x)$ to $4x^4 + 2x^3 - 2x^2 + x - 1$ the resulting

polynomial is

divisible by $x^2 + 2x - 3$ find $p(x)$.

38. Find a and f if $(x^4 + x^3 + 8x^2 + ax + f)$ is a multiple of $(x^2 + 1)$.

39. If the polynomial $6x^4 + 8x^3 + 17x^2 + 21x + 7$ is divided by $3x^2 + 1$

$+ 4x$

then $r(x) = (ax + b)$ find a and b.

41. Find all the zeroes of $x^4 - 3x^3 - x^2 + 9x - 6$ if -3 and 3 are two

of

its zeros.

42. If $(x^3 - 3x + 1)$ is one of the factors of the polynomial $x^5 -$

$4x^3 + x^2 + 3x$

$+ 1$, find the other two factors.

43. What does the graph of the polynomial $ax^2 + bx + c$ represents.

What

type of graph will it represent (*i*) for a > 0, (*ii*) for a < 0. What

happens

if $a = 0$.

Std. X (Physics)

Question Bank from Syllabus of April, May and June

1.   Define electric current.

2.   Define one ampere.

3.   Find the number of electrons carrying 1C of charge.

4.   What is an ammeter?

5.   How voltmeter is connected in a circuit?

6.   What is the nature of V-I graph in ohmic conductor?

7.   What is the unit of resistivity.

8.   State the condition required to follow ohms law.

9. Name a source of constant potential difference.

10. Name a source of constant potential difference.

11. Define electric potential difference.

12. Why electric supply is our homes is done in parallel?

13. Draw the diagram for circuit to verify ohms law.

14. On what factors does the resistance depends.

15. Why tungsten is used in the filaments of electric bulbs?

16. What is super conductivity and critical temperature?

17. State ohms law and thus define resistance.

18. Does temperature affects resistivity explain in favour of your answer.

19. Derive equivalent resistance for parallel combination of resistance.

20. A wire of length L is bent to make a L circular ring. Find the effective resistance between two diametrically opposite points.

21. Find the resistance of a wire if 1000 j of work is done by the cell to move 10^{20} electrons through a cross section in 10 seconds.

22. Find the resistance of a wire of length 1 km, radius 2 mm and resistivity 4 x 10^{-6} Ωm

23. Find equivalent resistance of the following circuit.

24.

Answer the following questions.

(a) V_{AC} (b) V_{BC} (c) V_{AB} (d) Current across $\Omega 4$

(e) Current across 6Ω

25. Find effective resistance of the following circuit.

26. A wire is stretched to four times its original length find the new resistance in terms of old one.

27. Why tin and lead wires is used in fuse?

28. Derive equivalent resistance for series combination of resistance.

29. What is the defect of series combination of resistance.

30. Fid the resistivity of material if it gives the resistance 10Ω having length 80 cm and thickness 4 mm^2

31. What is the main property of charge?

32. How long will it take to pass 10 milli amperes of current thigh the p.d of 0.5 v if the charge flown is 0.2 C.

33. Define 1 volt.

34. How ammeter is connected in the circuit for verification of ohms law?

35. 1 milli ampere =………………. amperes

36.   What is the function of rheostat?

37.   For what purpose nichrome wire is used?

38.   Give an example of non ohmic conductor?

39.   How temperature affects the resistivity of semi conductor.

40.   Find effective resistance of following circuit between A&B

41.   Is current vector give explanation in support of your answer.

42.   Calculate the total charge on 10^{22} electrons.

43.   Find the new resistance of a wire if the wire of resistance 10Ω if

       length is increased by 50% & radius by 50%