Danish Sir's Practice Papers

SSLC MCQ PRACTICE PAPER (July – 2021 Exam)

Sub: Maths, Science, Social (40 Marks Each)

Code no. 2106-30

Time: 2 Hour

Total Marks: 120

MATHEMATICS

2. Which of the following is false in A.P.

(a) $T_{n+1} = T_n$ +d **(b)** $s_n - s_{n-1} = T_n$

(c) $A = \frac{a+b}{2}$ **(d)** $d = \frac{T_n + a}{n-1}$

3. A straight line which passes through two points on a circle is

(a) A chord **(b)** A secant

(c) A tangent **(d)** The radius

4. If the midpoint of A(x,y) and B(4,7)is P(3,7) then the coordinates A is

(a) (2,6) **(b) (7,12)**

(c) (1,2) **(d) (2,3)**

5. A solid sphere of radius x cm is melted and cast into a shape of a solid cone of radius x cm. Then the height of the cone is :

(a) 3x cm **(b) x cm**

(c) 4 x cm **(d) 2 x cm**

6. The measure of angle of elevation of top of tower 75 $\sqrt{3}$ high from a point at a distance of 75 m from foot of tower I a horizontal plane is

(a) 30^0 **(b) 60^0**

(c) 90^0 **(d) 45^0**

7. The square of a number is added to the three times of the number, the sum is 28. This statement can be represented as

(a) $x^2 - 3x - 28 = 0$ **(b)** $x^2 - 3x + 28 = 0$

(c) $x^2 + 3x = 28$ **(d)** $x^2 + 3x + 28 = 0$

8. If sin a+1/2,then the value of cot A=

(a) 1/√3 **(b) √3**

(c) √3/2 **(d) 1**

9. A number is selected at random from the numbers 1 to 30. The probability that it is a prime number. [2014]

(a) $\frac{2}{3}$ **(b)** $\frac{1}{6}$

(c) $\frac{1}{3}$ **(d)** $\frac{11}{30}$

10. **The distance of the point p(3,4) from the x-axis is**

(a) 3 unit **(b) 4 unit**

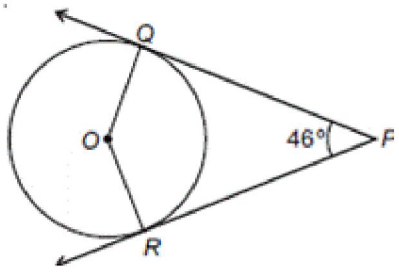
(c) 7 unit **(d) 1 unit**

11. If the roots of the equation $12x^2 + mx + 5 = 0$ are in the ratio 3:2,m equals

(a) $\frac{1}{12}$ **(b)** $\frac{5}{12}$

(c) $^5\sqrt{10}$ **(d)** $\frac{5}{12}\sqrt{10}$

12. In figure, PQ and PR two tangents to a circle QPR with centre O. If QOR equals: = 46°, [2014



(a) 67° **(b)** 134°

(c) 44° **(d) 46^0**

13. The pair of linear equations 8x -5y=7and 5x-8y= -7 have

(a) One solution **(b) Two solution**
(c) No solution **(d) Many solution**

14. If 1 is a root of the equations $ay^2 + ay + 3 = 0$ and $y^2 + y + b = 0$, then *ab* equals [2012]

(a) 3 **(b)** $-\frac{7}{2}$
(c) 6 **(d) -3**

15. The distance of the point (4,7) from the Y – axis is

(a) 4 **(b) 7**
(c) 11 **(d)** $\sqrt{65}$

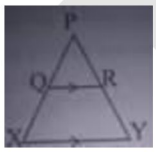
16. The ratio of the length of a pole and its shadows is 1 : $\sqrt{3}$. The angle of elevation of of the sun is :

(a) 90^0 **(b)** 60^0
(c) 30^0 **(d)** 45^0

17. The number of solutions of the pair of linear equations x+2y-8=0 and 2x +4y=16 have

(a) 0 **(b) 1**
(c) Infinitely many **(d) None**

18. PQR is a triangle XY||QR cutting PQ and PR produced at 'X' and 'Y'. If PQ= 4cms,PX=7.2cms, PR=3.5cms,then PY is



(a) 5.4cms **(b) 5.6cms**
(c) 5.7cms **(d) 6.3cms**

19. If the height and length of the shadow of a man are same, then the angle of elevation of the sun

(a) 30^0 **(b)** 60^0
(c) 45^0 **(d)** 15^0

20. The value of k for which the pair of linear equations 4x + 6Y - 1= 0 and 2x + ky -7 = 0 represents parallel lines is

(a) K=3 **(b) K=2**
(c) K=4 **(d) K= -2**

21. An equation that can be expressed in the form of a $x^2 + c = 0$ where 'a' and 'c' are real numbers is called.

(a) Adfected quadratic equation **(b) Pure** quadratic equation
(c) Linear equation **(d) Bio-** quadratic equation

22. If one if the root of the equation $x^2 - 6$=x is 3 then the other root is

(a) 2 **(b) 3**
(c) -2 **(d) -3**

23. X+2y-4=0 and 2x+4y-12=0 then the lines are

(a) Cooincide **(b) Parallel**
(c) Intersect **(d) None of these**

24. If the difference between the circumference and the radius of a circle is 37 cm, then using $\pi\frac{22}{7}$, the circumference of the circle is(in cm) [2013]

(a) 154 **(b) 44**
(c) 14 **(d) 7**

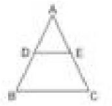
25. The pair of linear equation 2x+ 3y – 9 =0 and 4x +6y – 18 = 0 represents two lines which are …….

(a) Interesting lines **(b) Parallel lines**
(c) Perpendicular to each other **(d) Coinciding lines**

26. If sin $\emptyset = \frac{3}{5}$ and $\emptyset = \frac{4}{5}$, find the value of $\sin^2 \emptyset + cos^2 \emptyset$

(a) 4 **(b)** 2
(c) 3 **(d)** 1

27. In the figure AB=12cms, AD=7cms,AC=18cms and DE ||BC then the length of AE is



(a) 10.5cms **(b) 7.5cms**
(c) 11.5cms **(d) 12.5cms**

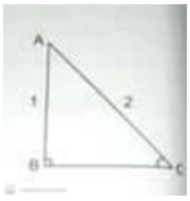
28. For the following distribution.

Marks less than	10	20	30	40	50	60
no. of sutdents	3	12	27	57	75	80

The modal class is :

(a) 10-20 **(b) 20-30**
(c) 30-40 **(d) 50-60**

29. In the figure the value of sin C is



(a) $\frac{2}{\sqrt{3}}$ **(b)** $\frac{\sqrt{3}}{2}$
(c) $\frac{1}{2}$ **(d)** 1

30. (secA+tanA)(1-sin A)=

(a) Sec A **(b) Sin A**
(c) Cosec A **(d) Cos A**

31. Perimeter of a square is 40cm then the length of diagonal is

(a) 100cms **(b)** $10\sqrt{2}$ **Cms**
(c) $5\sqrt{2}$ **Cms** **(d) 5cms**

32. The remainders obtained when a number is divided by 5 are

(a) 0,1,2,3,4,5 **(b)** 0,1,2,3,4,
(c) 0,1,2,3, **(d)** 0,1,2,3,

33. If the radius of the base of a right circular cylinder is halved, keeping the height same, then the ratio of the volume of the cylinder thus obtained to the volume of original cylinder is [2012]

(a) 1:2 **(b) 2:1**
(c) 1:4 **(d) 4:1**

34. If a pole of height 6 m casts a shadow $2\sqrt{3}\,m$ long on the ground, then the sun s elevation is :

(a) 30^0 **(b)** 60^0
(c) 45^0 **(d)** 90^0

35. For a symmetrical distribution, which is correct

(a) Mean > Mode > Media n **(b) Mean < Mode < Median**
(c) Mode = $\frac{Mean + Median}{2}$ **(d) Mean =Mode = Media n**

36. In a progression, If . T_n = 2^{n2}+1, then s_2 is

(a) 3 **(b) 9**
(c) 12 **(d) 11**

37. If the common difference of an A.P. is -6 then $a_{16} - a_{12}$ is

(a) 24 **(b)** 42
(c) 30 **(d)** -24

38. The areas of similar triangles are proportional to

(a) Corresponding si des **(b) Square root of corresponding sides**
(c) Square of corres ponding sides **(d) Cubes root of corresponding sides**

39. The maximum value of $\sin\theta$ *is*

(a) $\frac{2}{\sqrt{3}}$ **(b)** $\frac{\sqrt{3}}{2}$
(c) 1 **(d)** $\sqrt{2}$

40. The point (0, 3) lies on

(a) I Quadrant **(b)** II Quadrant
(c) x-axis **(d)** y-axis

SCIENCE

1. Iron nails were dipped in an aqueous solution of copper sulphate. After about 30 minutes, it was observed that the colour of the solution changed from

(a) Colorless to light green **(b)** Blue to light green
(c) Blue to colourless **(d)** Green to blue

2. Wings of an insect and a bird are example of which organs?

(a) Homologous **(b)** Analogous
(c) Vestigial **(d)** analytic

3. Which type of lens is needed to rectify the problem of myopia?

(a) Biconvex lens **(b)** biconcave lens
(c) Concave lens **(d)** Plano-convex lens

4. An element common to all acids is

(a) Oxygen **(b)** Hydrogen
(c) Nitrogen **(d)** Carbon

5. The non renewable form of energy among these is

(a) Solar energy **(b) Wind energy**
(c) Nuclear energy **(d) Ocean thermal energy**

6. A student obtained a sharp image of the grills of a window on a screen using a concave mirror. His teacher remarked that for getting better results a well lit distance object (preferably the Sun) should be focused on the screen. What should be done for this purpose?

[2012, 2013

(a) Move the screen and the mirror towards the object **(b)** Move the screen and the mirror away from the object
(c) Move the screen slightly away from the mirror **(d)** Move the mirror slightly towards the screen

7. A prism splity up a beam of white light into seven colours because ---------Is different colour

(a) Amplitude **(b) Speed**
(c) Enery **(d) none**

8. Hydrogen gas is not liberated when a metal react with concentrated nitric acid because nitric acid

(a) Does not contain hydrogen atoms **(b)** Oxidizes itself
(c) Oxidizes hydrogen to form water **(d)** Is a strong reducing agent and gain hydrogen

9. Which of the following phenomena occur, when a small amount of acid is added to water?

(i) Ionisation

(ii) Neutralisation

(iii) Dilution

(iv) Salt formation

(a) a) (i) and (ii) **(b)** b) (i) and (iii)
(c) c) (ii) and (iii) **(d)** d) (ii) and (iv)

10. The inner lining of stomach is protected by one of the following from hydrochloric acid. Choose the correct one

(a) Pepsin **(b)** Mucus
(c) Salivary amylase **(d)** Bile.

11. According to Mendeleev's Periodic law, the elements were arranged in the periodic table in the order of

(a) Increasing atomic number **(b)** Decreasing atomic number
(c) Increasing atomic masses **(d)** Decreasing atomic masses

12. The two elements for which Mendeleev left blank places in his original periodic table were

(a) Si, Ti **(b)** Ga, Ge
(c) Al, Ga **(d)** As, Sb

13. The number of pair(s) of sex chromosomes in a human diploid cell is

(a) one **(b)** two
(c) three **(d)** four.

14. An example of abiotic component is

(a) Plants **(b)** soil
(c) microorganisms **(d)** animals

15. The most important safety method used for protecting home appliances from short circuiting or overloading is

(a) Earthing **(b) Use of fuse**
(c) Use of sterilizer **(d) Use of electric meter**

16. A heat producing device should be used in an electric. This device should have

(a) High resistance and low melting point **(b)** low resistance and high melting point
(c) High resistance and high melting point **(d)** Low resistance and low melting point

17. Coliform is a group of

(a) bacteria **(b)** wind plants
(c) wild animals **(d)** diseases

18. Which of the following characters can be acquired but not inherited?

(a) body weight **(b)** body colour
(c) eye colour **(d)** all of these.

19. The PH value of mouth is

(a) 5.0 **(b)** 5.5
(c) 5.3 **(d)** 5.1

20. Part of the flower that develops into fruit and part of the seed that develop into root respectively are

(a) Ovary and plumule **(b) Plumule and radicle**
(c) Ovary and radicle **(d) Ovary and ovule**

21. Which of the following is the correct sequence of events of sexual reproduction in flowers?

.

(a) Pollination, fertilization, seedling, embryo. **(b)** Seedling, embryo, fertilization, pollination.
(c) Pollination, fertilization, embryo, seedling. **(d)** Embryo, seedling, pollination, fertilization

22. Advanced sunrise and delayed sunset are explained on the basis of

(a) Dispersion of light **(b) Scaterring of light**
(c) White colour of clouds **(d) Atmospheric refraction**

23. Which gas is harnessed from bio-mass?

(a) LPG **(b)** CNG
(c) ethane **(d)** methane

24. Which of the following will give displacement reactions?

(a) NaCl solution and copper metal **(b)** MgCl2 solution and aluminium metal
(c) FeSO4 solution and silver metal **(d)** AgNO3 solution and copper metal.

25. Which of the following pairs of two vegetables

represent the correct homologous structures?

(a) Sweet potato and potato **(b)** Sweet potato and tomato
(c) Carrot and potato **(d)** Radish and carrot

26. An aqueous solution turns red litmus solution blue. Excess addition of which of the following solutions would reverse the change

(a) Baking powder **(b)** Lime
(c) Ammonium hydroxide solution **(d)** Hydrochloric acid

27. The colours of aqueous solutions of CuSO

4

and

FeSO

4

as observed in the laboratory are :

(a) Pale green and light blue respectively **(b)** Light blue and dark green respectively
(c) Dark blue and dark green respectively **(d)** Dark blue and pale green respectively

28. If one hydrogen atom of propane is replaced by a ketone group, than the molecular formula of the compound obtained is

(a) C_4H_80 **(b)** C_3H_8O
(c) C_3H_6O **(d)** $C_4H_{10}O$

29. A ray of light travelling in water falls at right angles to the boundary of a parallel-sided glass block. The ray of light :

(a) is refracted towards the normal **(b)** is refracted away from the normal
(c) is refracted away from the normal **(d)** is reflected along the same path.

30. Reactive metals are good reducing agents. The most suitable example related to this is

(a) $PbO + C \longrightarrow Pb + CO$; $ZnO \longrightarrow$ + C O

(b) $3MnO_2 + 4Al \longrightarrow 2A1_2O_3 + 3Mn$

(c) $Zn + C \longrightarrow Cu + H_2O$

(d) $CuO + H_2$

31. When the speed of the coil of generator is increased

(a) The induced emf decreases but frequency increases

(b) The induced emf increases but frequency decreased

(c) The induced emf increases and the frequency increases

(d) The induced emf decreases and the frequency decreases

32. Which of the following statements does not apply to elements belonging to the same period

the periodic table?

.

(a) The number of valence electrons increases on moving from left to right.

(b) The atomic size increases from left to right.

(c) The atomic size goes on decreasing from left to right.

(d) The metallic character of elements decreases from left to right

33. In which of the following chemical equations, the abbreviations represent the correct states of the reactions and products involved at reaction temperature?

(a) 2H2 (l) + O2(l) >>> 2H2 O(g)

(b) 2H2 + 02 >>>> 2H2O (g)

(c) 2H2 (g) + 0 (g) >>> 2H2 O (l)

(d) 2H2 + O2 >>> 2H2O (l)

34. Which of the following endocrine glands is unpaired?

(a) Adrenal **(b)** Testes

(c) Pituitary **(d)** Ovary

35. The group of organisms that reproduce through fission only is

(a) Amoeba, Hydra, spyrogyra

(b) Leishmania, Ameoba, yeast

(c) Ameoba, Plasmodiu, Planaria

(d) Plasmodium, Ameoba, leishmania

36. Water shed management

(a) increases droughts and floods

(b) increases the production and income of the watershed community

(c) decreases the bio diversity of the downstream reservoirs

(d) increases deforestation.

37. The functional group present in ethanol is

(a) ___CO **(b) ___OH**

(c) ___CHO **(d) __COOH**

38. Spinal cord originate from

(a) Cerebrum **(b)** Medulla

(c) Pons **(d)** Cerebellum

39. The splitting up of white light into seven colours on passing through a glass prism is called

(a) Refraction **(b) Deflection**

(c) Dispersion **(d) scattering**

40. What happens when a solution of an acid is mixed with a solution of a base in a test tube?

a)The temperature of the solution increases

(b) The temperature of the solution decreases (c) The temperature of the solution remains same (d) Salt formation takes place

(a) (a) only **(b)** (a) & (c)

(c) (b) and (c) **(d)** (a) and (d)

SOCIAL STUDIES

1. India's sex ratio in 2011 is

(a) 1000:946 **(b)** 1000:945

(c) 1000:1094 **(d)** 1000:900

2. The policy implemented by Delhousie is

(a) Subsidiary alliance **(b)** Doctrine of lapse

(c) Inam commission **(d)** Ilbert bill

3. The office of the world Trade Organisation is located

(a) At New York in America

(b) At Paris in France

(c) At London in England

(d) At Geneva in Switzerland

4. Plato wrote book called

(a) Politics **(b)** The republic

(c) Democracy **(d)** Nationalism

5. Rice crops requires annual rainfall of

(a) 100-200cm **(b)** 10-50cm
(c) 60-70cm **(d)** 80-90 cm

6. The summer rainfall in Kerala is called as

(a) Kalabaisakhi **(b)** Mango showers
(c) Coffee blossoms **(d)** Andhis

7. First Round Table Conference was held in _____

(a) 1930 **(b) 1932**
(c) 1931 **(d) 1942**

8. The tropical deciduous forests are found in annual rainfall is .

(a) 10 – 50 cm **(b)** 100-200cm
(c) 10-30cm **(d)** 200-250cm

9. Halgali rebels were basically

(a) Farmers **(b)** Carpenters
(c) Bedas **(d)** Black smiths

10. The book gulagiri was written by

(a) Raja ram mohan roy **(b)** Jyothibha phule
(c) M. G.Ranade **(d)** Dayananda saraswathi

11. Raghoba approached the British for support

(a) To fight against the Maratha federation **(b)** To defeat Shaalam II of Mughal empire
(c) As Madhav Rao Peshawahad asked him to do so **(d)** As per the treaty of Salbai

12. The U.N.O as the World organization came into existence on

(a) 24th October 1946 **(b)** 26th October 1945
(c) 25th October 1946 **(d)** 24th October 1945

13. The British historians called the revolt of 1857 as

(a) First war of independence **(b)** Sepoy mutiny
(c) Iworld war **(d)** II world war

14. If a country's Total National income is 15,000 crore and population is 10,000 crore, then the per capita income of the country is

(a) 1.5 crore **(b)** 15000
(c) 1.5 Lakh **(d)** 10000

15. India has ____type of climate

(a) Tropical monsoon **(b)** Temperature
(c) Tundra **(d)** Monsoon

16. The article gave permission to the establishment of minority educational institution .

(a) Article 21A **(b)** Article17
(c) Article29 **(d)** Article30

17. The best suitable soil for cashew crop is

(a) Black **(b)** Laterite
(c) Desert **(d)** Mountain

18. **Named Bachaavo movement was led by**

(a) Medha Patkar **(b) Arjun Aradhya**
(c) Tehari Gharwals **(d) Villagers og Salyani**

19. Muslim league was founded in

(a) 1924 **(b)** 1922
(c) 1929 **(d)** 1906

20. Teleshopping means

(a) Trading from home it self **(b)** Trading at International level
(c) Domestic Trade **(d)** Retail trading

21. **The victory who implemented the Bengal division was**

(a) Lord conwallis **(b) Dalhousie**
(c) Lord Curzon **(d) Robert clive**

22. The direct tax among these

(a) Stamp duty **(b)** Penalties
(c) GST **(d)** VAT

23. I am an artist painting a picture for my own satisfaction. This is an example for

(a) Labour discrimination **(b)** Paid work
(c) unpaid work **(d)** Unorganised work

24. The highest peak in the world is

(a) K² **(b)** Mt. Everest
(c) Kachanjunga **(d)** Nandadevi

25. The actual burden that will be imposed on the government treasury is indicated by

(a) Revenue deficit **(b)** Fiscal deficit
(c) Primary deficit **(d)** Tax deficit

26. The women and child development department started to provide

(a) Shelter **(b)** Health
(c) Education **(d)** Food

27. **The king who did not want to merge with the Indian union and remain independent was**

(a) Sheik abdullah **(b) Bahadursha**
(c) hari singh **(d) Ranjith singh**

28. Quantitative Credit control Measure the following is the

(a) Change in lending margins **(b)** Bank rate policy
(c) Moral suassion **(d)** Direct action

29. Jharkhand MukthiMorcha is an example of

(a) Tribal Displacement Movement **(b)** People Launching movement to protect tress
(c) People's agitation ag ainst dam constructi on **(d)** People agitation against refineries

30. 'Glasnost and Perestroika' are the names of the

(a) Communist parties of the USSR **(b)** Socialist Movements of the USSR
(c) Reformations of the USSR **(d)** Political policies of the USSR

31. According to 2014-15 survey the percentage of women working in unorganized sector .

(a) 80% **(b)** 77%
(c) 60% **(d)** 50%

32. The upper Krishna project is constructed across the river

(a) kaveri **(b)** Krishna
(c) kosi **(d)** Mahanadi

33. Bauxite is the main raw material for _____ industry.

34. The Communist Government in Russia was founded by _____

35. Coastal erosion is mostly caused by _____ action.

36. The law prohibiting female feticide was implemented in the year _____

37. The most important ferro –alloy metal is _____

38. A national policy was implemented in the year _____ for the welfare of child labour.

39. The affiliated body of the UNO which appears like a cabinet committee is _____

40. For the development of villages and agriculture in India _____ means of transport is essential.