

- 1 If the numbers $3p+4$, $7p+1$ and $12p-5$ are in A.P., then the value of p is:
 A) 5 B) 3 C) 0 D) 8
- 2 The 5th terms of the sequence defined by $t_1=2$, $t_2= 3$ and $t_n = t_{n-1} + t_{n-2}$ for $n \geq 3$:
 A) 16 B) 13 C) 15 D) 2
- 3 The sum of first 20 odd natural numbers is :
 A) 400 B) 200 C) 500 D) 800
- 4 If 18, a , b , -3 are in A.P., then $a + b =$
 A) 15 B) 16 C) 17 D) 18
- 5 If $a_n = x^2$, when x is even and $a_n = x^2 + 1$, when x is odd, find $a_{15} - a_{10}$
 A) 136 B) 252 C) 116 D) 126
- 6 Which term of A.P : $15, 13\frac{3}{4}, 12\frac{1}{2}, 11\frac{1}{4}, \dots$ is the first negative term.
 A) 13 B) 14 C) 15 D) none of these
- 7 Find the common difference of an AP whose first term is 5 and sum of its first four terms is half the sum of the next four terms.
 A) 2 B) -2 C) 4 D) 3
- 8 The roots of the equation $ax^2 + bx + c = 0$ are in the ratio $m:n$, then
 A) $mnb^2 = (m+n)ac$ B) $\frac{mna^2}{(m+n)c^2}$ C) $\frac{mnb^2}{ac} = (m+n)^2$ D) none of these
- 9 If one fourth of a herd of elephants was seen in the forest two more than thrice the square root of the herd had gone to mountain and the remaining 22 elephants were seen on the bank of a river .Find total no. of elephants.
 A) 46 B) 64 C) 36 D) 63
- 10 If the sum of n successive even natural numbers starting from 2 is 72. Find the value of n .
 A) 8 B) 12 C) 4 D) 6
- 11 The positive value of p for which the equation $x^2 + 3bx + c = 0$ and $x^2 + px + q$ has equal roots, then $q = ?$
 A) 4 B) 8 C) 2 D) 6
- 12 The point on x -axis which is equidistant from the point $(5, -2)$ and $(-3, 2)$ is
 A) $(0, 1)$ B) $(5, 2)$ C) $(2, 0)$ D) $(1, 0)$
- 13 The point $A(4, 3)$ and $B(x, 5)$ lie on a circle. If the co-ordinates of the centre O , are $(2, 3)$. Then x is
 A) 3 B) 2 C) 4 D) 5
- 14 The distance between the point $A(a \sin \alpha, a \cos \alpha)$ and $B(a \cos \alpha, -a \sin \alpha)$ is
 A) a^2 B) $\sqrt{2}$ C) 2 D) a^2
- 15 The point $A(0, 0)$, $B(3, 3\sqrt{3})$ and $C(3, -\sqrt{3})$ are the vertices of a triangle. Then triangle is:
 A) isosceles B) Right angled C) equilateral D) scalene
- 16 The point $A(-3, 0)$, $B(1, -3)$ and $C(4, 1)$ are vertices of a triangle. Then triangle is
 A) Isosceles & right B) equilateral C) scalene D) none of these
- 17 If $(-2, -1)$, $(a, 0)$, $(4, b)$ and $(1, 2)$ are the vertices of a parallelogram. Then, values of a and b are
 A) 1, 3 B) 2, 3 C) 1, 2 D) 3, 1
- 18 What is the area of Δ formed by the points $(a, a+c)$, (a^2, c^2) and $(-a, c-a)$?

- A) 0 B) a^2 C) $\sqrt{(b^2 + c^2)}$ D) None of these
- 19 If the points $(-1,3)$, $(2,p)$ and $(5, -1)$ are collinear the value of p is :
- A) -1 B) 1 C) $\sqrt{3}$ D) 0
- 20 Which of the following point is equidistant from $(3, 2)$ and $(-5, -2)$?
- A) $(0,-2)$ B) $(0,1)$ C) $(0,2)$ D) $(2,0)$
- 21 If the distance of $P(x,y)$ from $A(-1, 5)$ and $B(5, 1)$ are equal then
- A) $y=2x$ B) $5x=2y$ C) $3x=2y$ D) $2x=3y$
- 22 If the mid point of the line joining $A(5,-1)$ and $(k,-2)$ is (x,y) and $2x+2y+1=0$, then value of k is:
- A) 3 B) -5 C) 0 D) -3
- 23 In equilateral ΔABC , AD is altitude, then $2AD^2$ equals
- A) BD^2 B) DC^2 C) $\frac{1}{2} BC^2$ D) $\frac{3}{2} AB^2$
- 24 In rhombus PQRS, $PQ^2 + QR^2 + RS^2 + SP^2 = ?$
- A) $OP^2 + OQ^2$ B) $OQ^2 + OR^2$ C) $OR^2 + OS^2$ D) $PR^2 + QS^2$
- 25 In ΔABC , $DE \parallel BC$, $AD = 2.4$ cm, $AE = 3.2$ cm, $CE = 4.8$ cm. the value of B D is
- A) 3.6 cm B) 4.2 cm C) 4.0 cm D) None of these
- 26 The sides of a similar triangle are in the ratio 4:9 area of these triangles are in the ratio :
- A) 3 : 5 B) 4 : 9 C) 81 : 16 D) 16 : 81
- 27 If $\Delta ABC \sim \Delta DEF$, $BC = 4$ cm, $EF = 5$ cm and area $(\Delta ABC) = 80$ cm^2 , the area (ΔDEF) is
- A) 120 cm^2 B) 125 cm^2 C) 150 cm^2 D) 200 cm^2
- 28 In an isosceles ΔABC if $AC = BC$ and $AB^2 = 2 AC^2$, then $\angle C$ is equal to :
- A) 40° B) 60° C) 30° D) 90°
- 29 If in ΔABC and ΔDEF . $\frac{AB}{DE} = \frac{BC}{DF}$, then they will be similar if :
- A) $\angle B = \angle E$ B) $\angle A = \angle D$ C) $\angle B = \angle D$ D) $\angle A = \angle F$
- 30 The sum of square of the sides of a rhombus is equal to the sum of the square of its:
- A) diagonals B) altitudes C) medians D) None of these
- 31 If ΔABC and ΔDEF are similar triangles such that $\angle A = 47^\circ$ and $\angle B = 83^\circ$, then $\angle F$ is :
- A) 60° B) 70° C) 50° D) 100°
- 32 If the height of an equilateral triangle is 6 cm, then side of equilateral triangle is :
- A) 8 cm B) 10 cm C) $4\sqrt{3}$ cm D) $3\sqrt{2}$ cm
- 33 In a ΔPQR , it is given that PM is the internal bisector of $\angle P$. If $PQ=8$ cm, $QM = 4$ cm and $MR = 6$ cm then PR is
- A) 10 cm B) 12 cm C) 11 cm D) 9 cm
- 34 If $\Delta ABC \sim \Delta PQR$, AD and PM are their medians respectively, if $AD:PM = 3:4$ then $ar(\Delta ABC) : ar(\Delta PQR)$ is
- A) 16:9 B) 9:25 C) 25:9 D) 9:16
- 35 Convert an AC generator into DC generator
- A) split-ring type commutator must be used B) slip rings and brushes must be used C) a stronger magnetic field has to be used D) a rectangular wire loop has to be used

- 36 To 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 stabilizers D) use of electric meter
- 37 The strength of magnetic field inside a long current carrying straight solenoid is
- A) more at the ends than at the centre B) minimum in the middle C) same at all points D) found to increase from one end to the other
- 38 Choose the incorrect statement
- A) Fleming's right-hand rule is a simple rule to know the direction of induced current
- B) The right-hand thumb rule is used to find the direction of magnetic fields due to current carrying conductors
- C) The difference between the direct and alternating currents is that the direct current always flows in one direction, whereas the alternating current reverses its direction periodically
- D) In India, the AC changes direction after every $\frac{1}{50}$ second
- 39 Commercial electric motors do not use
- A) an electromagnet to rotate the armature
- B) effectively large number of turns of conducting wire in the current carrying coil
- C) a permanent magnet to rotate the armature
- D) a soft iron core on which the coil is wound
- 40 For a current in a long straight solenoid N- and S-poles are created at the two ends. Among the following statements, the incorrect statement is
- A) The field lines inside the solenoid are in the form of straight lines which indicates that the magnetic field is the same at all points inside the solenoid
- B) The strong magnetic field produced inside the solenoid can be used to magnetise a piece of magnetic material like soft iron, when placed inside the coil
- C) The pattern of the magnetic field associated with the solenoid is different from the pattern of the magnetic field around a bar magnet
- D) The N- and S-poles exchange position when the direction of current through the solenoid is reversed
- 41 Choose the incorrect statement from the following regarding magnetic lines of field
- A) The direction of magnetic field at a point is taken to be the direction in which the north pole of a magnetic compass needle points
- B) Magnetic field lines are closed curves
- C) If magnetic field lines are parallel and equidistant, they represent zero field strength
- D) Relative strength of magnetic field is shown by the degree of closeness of the field lines.
- 42 Unit of electric power may also be expressed as
- A) volt ampere B) kilowatt hour C) watt second D) joule second.
- 43 Two resistors of resistance $2\ \Omega$ and $4\ \Omega$ when connected to a battery will have
- A) same current flowing through them when connected in parallel
- B) same current flowing through them when connected in series
- C) same potential difference across them when connected in series
- D) different potential difference across them when connected in parallel
- 44 In an electrical circuit three incandescent bulbs A, B and C of rating 40 W, 60 W and 100 W respectively are connected in parallel to an electric source. Which of the following is likely to happen regarding their brightness?
- A) Brightness of all the bulbs will be the same
- B) Brightness of bulb A will be the maximum
- C) Brightness of bulb B will be more than that of A

D) Brightness of bulb C will be less than that of B

- 45 A wire of resistance 5Ω is stretched and made its length tripled. The resistance of new wire will be ____ Ω .
A) 10 B) 25 C) 45 D) 15
- 46 Which of the following is not a part of cerebrum?
A) Hunger center B) Sensory area C) Pons D) Temporal lobe
- 47 Which of the following is a mixed gland?
A) Adrenal B) Pancreas C) Salivary D) Thyroid
- 48 Which of the following has centres of many reflex activities?
A) Sensory area B) Medulla C) Association area D) Motor area
- 49 Opening of a petal of flower during day time and closing at night time is an example of
A) Phototropism B) Chemotropism C) Seismonasty D) Photonasty
- 50 Posture and balance of body is controlled by
A) Cerebrum B) Cerebellum C) Pons D) Medulla
- 51 Which of the following is incorrectly paired?
A) Bougainvillea – Budding B) Rose-Cutting C) Apple – Grafting D) Grape wine – Layering
- 52 It is a unicellular organism, which develops protective wall during unfavourable conditions and on getting favourable conditions splits to form many new organisms at the same time, Identify the organism.
A) Paramecium B) Plasmodium C) Trypanosoma D) Leishmania
- 53 Which of the following methods is used to prevent pregnancy by cutting the sperm duct and tying in opposite directions to prevent the release of sperm?
A) Tubectomy B) Vasectomy C) IUCD D) Chemical barrier
- 54 Organism which reproduce by binary fission is
A) Spirogyra B) Mucor C) Leishmania D) Rhizopus
- 55 Vegetative propagation refers to the formation of new plants from
A) Stem, root, flower B) Stem, root, leaves C) Stem, flower, fruits D) Stem, flower, leaves
- 56 Which of the following salts does not contain water of crystallization?
A) Blue vitriol B) Baking soda C) Washing soda D) Gypsum
- 57 Which of the following phenomenon occur, when a small amount of acid is added to water?
(i) Ionisation (ii) Neutralisation (iii) Dilution (iv) Salt formation
A) (i) & (ii) B) (i) & (iii) C) (ii) & (iii) D) (ii) & (iv)
- 58 Which among the following is not a base?
A) NaOH B) KOH C) NH_4OH D) $\text{C}_2\text{H}_5\text{OH}$
- 59 Which of the following are present in a dilute aqueous solution of hydrochloric acid?
A) H_3O^+ & Cl^- B) H_3O^+ & OH^- C) OH^- & Cl^- D) HCl
- 60 Which of the following salt is acidic in nature?
A) NaNO_3 B) Na_2SO_3 C) Na_2CO_3 D) NH_4Cl
- 61 Many salts absorb water from atmosphere. This property is known as
A) Crystallization B) Hydration C) Deliquescence D) Efflorescence
- 62 An acid is a
A) Proton donor B) Proton acceptor C) Electron donor D) Electron acceptor

- 63 The drying of milk of lime (white washing) is due to the action ofgas in air.
 A) Oxygen B) Nitrogen C) CO₂ D) Hydrogen
- 64 Which of the following is an alkali?
 A) Fe(OH)₂ B) Cu(OH)₂ C) Zn(OH)₂ D) NaOH
- 65 Which of the following is used for dissolution of gold?
 A) HCl B) H₂SO₄ C) HNO₃ D) Aqua regia
- 66 Which one of the following can be used as acid – base indicator for a visually impaired student?
 A) Vanilla essence B) Turmeric C) Litmus D) Petunia leaves
- 67 Nettle leaves contain.....acid
 A) Lactic acid B) Citric acid C) Oxalic acid D) Methanoic acid
- 68 What is the mean annual inflow of Indian rivers?
 A) About 1569 million cubic metres B) About 1669 million cubic metres C) About 1769 million cubic metres D) About 1869 million cubic metres
- 69 How much surface water is covered by the Indus, the Ganga and the Brahmaputra?
 A) About 20% B) About 30% C) About 40% D) About 60%
- 70 Which one of the following is not a multi-purpose River – Valley Project of North India?
 A) Tungabhadra Project B) Bhakra Nagal Project C) Damodar Valley Project D) Chambal Valley Project
- 71 Choose the main source of irrigation in India:
 A) Canals B) Ocean currents C) Jet Steams D) None of the above
- 72 Which Indian leader has said, 'River dams are the temples of modern India'?
 A) Lala Lajpat Rai B) Pt. Jawahar Lal Nehru C) Pandit Madan Mohan Malviya D) Subhash Chandra Bose
- 73 Which is one is a source of fresh water in India?
 A) Sea-water B) Groundwater C) Lakes D) Cyclones
- 74 On which one of the following rivers Sardar Sarover Dam is built?
 A) Raiver Kaveri B) River Krishna C) River Narmada D) River satluj
- 75 The sectors are classified into public and private sector on the basis of
 A) Employment conditions B) The nature of economic activity C) Ownership of enterprises D) Number of workers employed in eh enterprises
- 76 GDP is the sum total of the value of _____ goods produced during particular year.
 A) All final goods and services B) All goods and services C) All intermediate goods and services D) All intermediate and final goods and services
- 77 Which one of the following is not an activity of the Secondary Sector?
 A) Brick-making B) Sugar-making C) Manufacturing D) Forestry
- 78 Which one of the following activity belongs to the Tertiary Sector?
 A) Fishing B) Agriculture C) Mining D) Banking
- 79 What is disguised unemployment?
 A) When people are made to work less than B) When people are ready to work but they C) When less people are made to work D) When everyone is made to work according to his

- their potential have no jobs or work to do more than their potential potential
- 80 Which one of the following is not an example of the Public Sector?
 A) Railways B) Post Offices C) Reliance Industries D) Army
- 81 Which one of the following occupations is not associated with primary sector
 A) Basket weaver B) Gardener C) Potter D) Priest
- 82 Which one among the following is the most appropriate meaning of Under-employment?
 A) Workers are not paid for their work B) Workers are working less than what they are capable of doing C) Workers are working in a lazy manner D) Workers do not want to work
- 83 When was the Indian National Congress formed?
 A) In 1882 B) In 1883 C) In 1884 D) In 1885
- 84 Who was the President of its First Session?
 A) Dadabhai Naoroji B) Surendernath Banerjee C) W.C. Bannerjee D) Gopal Krishna Gokhale
- 85 Name the leader who sacrificed his life while boycotting the Simon Commission?
 A) Raj Guru B) Bhagat Singh C) Sukhdev D) Lala Lajpat Rai
- 86 Which one of the following statements is false about Alluri Sitaram Raju?
 A) He claimed he had special powers B) He was inspired by the non-co-operation movement C) He believed in the principle of non-violence D) He persuaded people to give up drinking
- 87 Which one of the following statements is not related to the Gandhi-Irwin Pact?
 A) Gandhiji agreed not to launch any further mass agitations against the British B) Gandhiji agreed to participate in the Round Table Conference C) Gandhiji decided to call off the Civil Disobedience Movement D) The British agreed to release the political prisoners.
- 88 In which of the following years Mahatma Gandhi inspired the peasants of Champaran district of Bihar to struggle against the oppressive plantation system?
 A) 1916 B) 1917 C) 1918 D) 1919
- 89 In which one of the following Indian National Congress Sessions, the idea of 'Non-Cooperation Movement' was accepted?
 A) Lahore Session B) Nagpur Session C) Calcutta (Kolkata) Session D) Madras (Chennai) Session
- 90 Who among the following composed 'Vande Matram' ?
 A) Mahatma Gandhi B) Abanindra Nath Tagore C) Ravindra Nath Tagore D) Bankim Chandra Chattopadhyay
- 91 Who among the following created the first image of Bharat Mata?
 A) Ravindra Nath Tagore B) Bankim Chandra Chattopadhyay C) Abanindra Nath Tagore D) Jawaharlal Nehru
- 92 In which one of the following Indian National Congress Sessions, the demand of 'Puran Swaraj' Was formalized?
 A) Nagpur Session B) Lahore Session C) Madras (Chennai) Session D) Calcutta (Kolkata) Session

- 93 Which one of the following agreements gave reserved seats to 'Depressed Classes' in Provincial and Central Legislative Councils?
 A) Lucknow Pact B) Gandhi-Irwin Pact C) Poona Pact D) None of these
- 94 Which one of the following combination of colour was there in the 'Swaraj flag' designed by Gandhiji in 1921?
 A) Red, Green and White B) Red, Green and Yellow C) Orange, White and Green D) Yellow, White and Green
- 95 In which of the following regions was Dalit participation limited in the Civil disobedience movement
 A) Maharastra and Nagaland B) Awadh and Maharashtra C) Maharastra and Nagpur D) Kerala and Karnataka
- 96 Why were the Dalits ignored by the congress for a long time?
 A) Fear of offending the Sanatanis B) Fear from Dr. B.R. Ambedkar C) Fear of offending the Sanatanis D) Fear from industrialists
- 97 Which one of the following large countries has not adopted federalism?
 A) USA B) China C) India D) Brazil
- 98 Which one of the following countries fall in the category of 'coming together federation'?
 A) India B) USA C) Spain D) Belgium
- 99 Which of the following states has special statues in India?
 A) Jharkhand B) Uttrakhand C) Himachal Pradesh D) Hilly states of North East India
- 100 Which one of the following states have been formed recently?
 A) Telengana B) Orissa C) Jharkhand D) Maharashtra
- 101 Make a meaningful sentence-
 The backbone/ education/ of every/ institution/ library is.
 A) Library is the backbone of every educational institution. B) Library is of every educational institution the backbone. C) Library is the backbone of educational institution every. D) Library is educational institution the backbone of every.
- 102 Make a meaningful sentence-
 Exercise/ running to/ the point of lameness/ does not mean.
 A) Exercise running to the point of lameness does not mean. B) Exercise mean running to the point of lameness does not. C) Exercise does not mean running to the point of lameness. D) Exercise does not mean the point of lameness running to.
- 103 Find out the missing word in the following sentence- (omission)
 Atal Ji was a prolific writer spent several hours a day writing.
 A) Writer who spent B) Writer where spent C) Writer which spent D) Writer why spent
- 104 Find out the missing word in the following sentence- (omission)
 He effectively reinforced his views life.
 A) Views above life B) Views on life C) Views after life D) Views upon life
- 105 Find out the missing word in the following sentence- (omission)
 The present generation has lot to learn from his ideas and views.
 A) Has have lot B) Has an lot C) Has many lot D) Has a lot
- 106 Supply the correct word-
very next day our new manager arrived.
 A) A B) The C) An D) No article
- 107 Supply the correct word-
of us took an instant dislike to him.
 A) Many B) Above C) My D) No
- 108 Edit the following sentence-
 On 12th April 1961, Major Yuri Gagrin become the first man ever to venture in space.

- A) Become- became B) Become- becomes C) Become- has become D) Become- have become
- 109 Edit the following sentence-
Some highly reputed travel agency had a vacancy for a guide.
- A) Some- something B) Some- a C) Some-all D) Some- their
- 110 Edit the following sentence-
The work involve taking charge of tourists.
- A) Involve- involving B) Involve- involved C) Involve- involves D) Involve- will
- 111 जार्ज पंचम की नाक पाठ के लेखक कौन हैं?
- A शिवपूजन सहाय B) कमलेश्वर C) जयशंकर प्रसाद D) सुमित्रानंदन पंत
- 112 इंग्लैंड के प्रिंस का नाम क्या था?
- A) केनिंग B) जार्ज पंचम C) फिलिप D) इनमें से कोई नहीं
- 113 पाठ में रानी के सूट की कीमत कितनी बताई गई है?
- A) तीन हजार B) दस हजार C) दो हजार D) पाँच हजार
- 114 कहाँ जार्ज पंचम की नाक नहीं थी?
- A) दिल्ली B) लखनऊ C) मुम्बई D) मेरठ
- 115 'दास्तान' का अर्थ है-
- A) आरंभ B) कहानी C) पागल D) खामोशी
- 116 'राम-लक्ष्मण-परशुराम संवाद' में तुलसीदास ने किस भाषा का प्रयोग किया है
- A) ब्रज B) अवधी C) खड़ीबोली D) बघेली
- 117 लोहे की खांड से तात्पर्य है-
- A) ऊखमय B) अजमय C) अयमय D) इनमें से कोई नहीं
- 118 'रिपु' का समानार्थक है-
- A) मित्र B) पिता C) आनंद D) दुश्मन
- 119 परशुराम के पिता का नाम क्या था?
- A) सहस्रबाहु B) जमदाग्नि C) जनक D) भरद्वाज
- 120 राम-लक्ष्मण-परशुराम संवाद में कौशिक किसके लिए कहा गया है?
- A) परशुराम B) विश्वामित्र C) राम D) जनक
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Answer Key, MCQ, Class X, (Date of Exam 30/08/2018)

1	2	3	4	5	6	7	8	9	10
B	B	A	A	D	B	A	C	B	A
11	12	13	14	15	16	17	18	19	20
A	D	B	D	C	A	A	D	B	A
21	22	23	24	25	26	27	28	29	30
C	D	D	D	A	D	B	D	C	A
31	32	33	34	35	36	37	38	39	40
C	C	B	D	A	B	B	D	C	C
41	42	43	44	45	46 C	47 B	48 B	49 D	50 B
C	A	B	C	C					
51 A	52 B	53 B	54 C	55 B	56 B	57 B	58 D	59 A	60 D
61 C	62 A	63 C	64 D	65 D	66 A	67 D	68-D	69-D	70-A
71-A	72-B	73-B	74-C	75-C	76-A	77-D	78-D	79-A	80-C
81-D	82-B	83-D	84-C	85-D	86-C	87-A	88-A	89-B	90-D
91-C	92-B	93-C	94-A	95-C	96-A	97-B	98-B	99-D	100-A
101-A	102-C	103-A	104-B	105-D	106-B	107-A	108-A	109-B	110-C
111	112	113	114	115	116	117	118	119	120
A	C	D	A	B	B	C	D	B	B