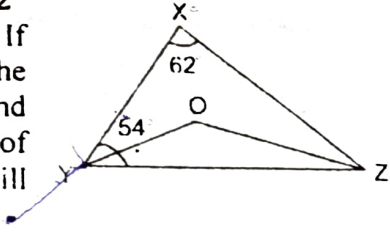
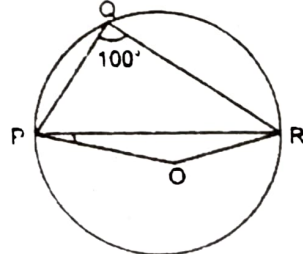
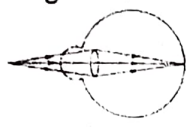
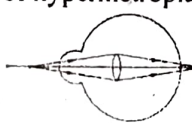
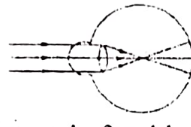


- 1- Which of the following statement is false?  
 (a) Every integer is a rational number  
 (b) Every whole number is a natural number  
 (c) There are infinitely many rational numbers between any two given rational numbers  
 (d) Every real number is represented by a unique point on the number line
- 2- Factors of  $x^3 - 23x^2 + 142x - 120$  are  
 (a)  $(x+1)(x-10)(x-12)$   
 (b)  $(x-1)(x+10)(x-12)$   
 (c)  $(x-1)(x-10)(x-12)$   
 (d)  $(x-1)(x-10)(x+12)$
- 3- It is given that  $\angle XYZ = 64^\circ$  and XY is produced to point P. If ray YQ bisects  $\angle ZYP$ , the reflex  $\angle QYP$  is  
 (a)  $322^\circ$  (b)  $290^\circ$  (c)  $120^\circ$  (d)  $302^\circ$
- 4- In the figure  $\angle X = 62^\circ$  and  $\angle XYZ = 54^\circ$ . If YO and ZO are the bisectors of  $\angle XYZ$  and  $\angle XZY$  respectively of  $\triangle XYZ$  and  $\angle YOZ$  will be  
 (a)  $110^\circ$  (b)  $121^\circ$  (c)  $142^\circ$  (d)  $108^\circ$
- 
- 5- Which of the following is not correct?  
 (a) Two circles of same radii are congruent  
 (b) Two square of same sides are congruent  
 (c) In a triangle; opposite to larger side is smaller  
 (d) Sum of any two sides of a triangle is greater than the third side
- 6- In the figure  $\angle PQR = 100^\circ$  where P, Q, R, are points on a circle with centre O. The  $\angle QPR$  is  
 (a)  $30^\circ$  (b)  $45^\circ$   
 (c)  $10^\circ$  (d)  $60^\circ$
- 
- 7- ABCD is a cyclic quadrilateral whose diagonals intersect at a point E. If  $\angle DBC = 70^\circ$ ,  $\angle BAC = 30^\circ$  find  $\angle BCD$   
 (a)  $80^\circ$  (b)  $90^\circ$  (c)  $70^\circ$  (d)  $60^\circ$
- 8- The sides of a triangular plot are in ratio 3:5:7 and its perimeter is 300 m. its area in sq. m. is  
 (a) 3000 (b) 1580  
 (c)  $1500\sqrt{3}$  (d)  $1600\sqrt{2}$
- 9- A field is in the shape of a trapezium whose parallel sides are 25m and 10m. The non parallel sides are 14m and 13m. The area of field in sq.m is  
 (a) 120 (b) 142 (c) 180 (d) 196
- 10- The diameter of a roller is 84 cm and its length is 120 cm. It takes 500 complete revolutions to move

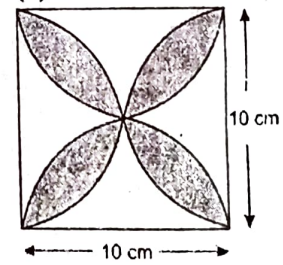
once over to a playground the area of playground in sq.m. is

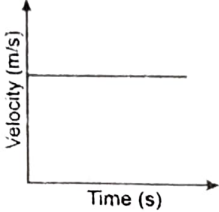
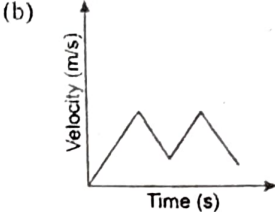
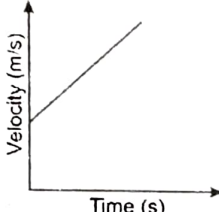
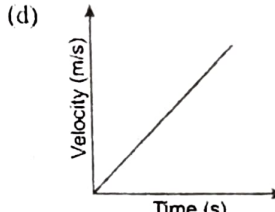
- (a) 1482 (b) 1584  
 (c) 1678 (d) 1614
- 11- The Man Booker prize this year has been won by  
 (a) Richard Flanagan (b) Jerome Peter  
 (c) A.C. Greyling (d) P. Guildhall
- 12- Ashraf Ghani is the  
 (a) Prime Minister of Tunisia  
 (b) President of Afghanistan  
 (c) Secretary General of W.H.O.  
 (d) Famous Poet of Pakistan
- 13- If president of India has to resign, he has to address his resignation letter to the  
 (a) Prime Minister (b) Speaker  
 (c) Vice President (d) Chief Justice
- 14- Who among the following is known as the 'Blade Runner'?  
 (a) Oscar Pistorius (b) Milkha Singh  
 (c) Usain Bolt (d) Kobe Bryant
- 15- 38<sup>th</sup> parallel is the boundary line between  
 (a) USA and Canada  
 (b) Turkey and Cyprus  
 (c) Pakistan and Afganistan  
 (d) North and South Korea
- 16- MI-5 is the secret agency of  
 (a) USA (b) Israel  
 (c) UK (d) France
- 17- Who is the Chief Economic Adviser of the Prime Minister?  
 (a) Arvind Subrahmaniam  
 (b) Rajiv Mehrishi  
 (c) D.S. Rawat  
 (d) Rajan Pillai
- 18- Which of the following is world's highest dam?  
 (a) Nurek (b) Guri  
 (c) Rogun (d) Tehri
- 19- How many countries participated in the first modern Olympics in 1896?  
 (a) 10 (b) 12 (c) 13 (d) 15
- 20- Which of these is not a desert?  
 (a) Steppe (b) Kolahari  
 (c) Sahara (d) Patagonia
- 21- The breakdown of pyruvate to give carbon dioxide, water and energy takes place in  
 (a) Cytoplasm (b) Mitochondria  
 (c) Chloroplast (d) Nucleus
- 22- Which of the following is not a part of the female reproductive system in human beings?  
 (a) Ovary (b) Uterus  
 (c) Vas Defereus (d) Fallopian Tube

- 23- The anther contains  
 (a) Sepals (b) Ovules  
 (c) Carpel (d) Pollen Grains
- 24- An example of homologous organs is  
 (a) Our arm and a dog's fore leg  
 (b) Our teeth and an elephant's tusks  
 (c) Potato and runners of grass  
 (d) All of the above
- 25- Which of the following groups does not contain only biodegradable items?  
 (a) Grass, Flowers and Leather  
 (b) Grass, Wood and Plastic  
 (c) Fruit Peels, Cake and Lime Juice  
 (d) Cake, Wood and Grass
- 26- Which of the following constitute a food chain?  
 (a) Grass, Wheat and Mango  
 (b) Grass, Goat and Human  
 (c) Goat, Cow and Elephant  
 (d) Grass, Fish and Goat
- 27- Which of the following are environment friendly practices?  
 (a) Carrying cloth bags to put purchases while shopping  
 (b) Switching off unnecessary lights and fans  
 (c) Walking to school instead of getting your mother to drop you on her scooter  
 (d) All of the above
- 28- The kidney in human beings are a part of the system for  
 (a) Nutrition (b) Respiration  
 (c) Excretion (d) Transportation
- 29- The autotrophic mode of nutrition requires  
 (a) Carbon dioxide and water (b) Chlorophyll  
 (c) Sunlight (d) All of the above
- 30- A Sexual reproduction takes place through budding in  
 (a) Amoeba (b) Yeast  
 (c) Plasmodium (d) Leishmania
- 31- Annul fair held during Pre-Islamic period was called.  
 (a) Suq (b) Ukaz  
 (c) Haj (d) Bait
- 32- Abraha who led an expedition to ka'abah was ruler of  
 (a) Makkah (b) Habsha  
 (c) Taif (d) Yathrib
- 33- Who was the foster mother of Prophet Muhammad (PBUH)  
 (a) Aaminah (b) Halima Saadiyah  
 (c) Thuraybah (d) Umm-e- Kulsoom
- 34- Who become the guardian of Prophet Muhammad (PBUH) after the death of his grandfather?  
 (a) Abu Lahab (b) Abu Jahal  
 (c) Abdul Muttalib (d) Abu Talib
- 35- Who is referred as al-Ruhul-Ameen?  
 (a) Jibreel (b) Mika'il  
 (c) Israfil (d) Iblis
- 36- The Holy Quran is the book of  
 (a) Allah  
 (b) Prophet Muhammad (PBUH)  
 (c) Hazrat Abu Bakr  
 (d) Hazrat Ali
- 37- Prophet hood is sealed after prophet.....  
 (a) Hazrat Ibrahim  
 (b) Hazrat Ismail  
 (c) Hazrat Ishaq  
 (d) Prophet Muhammad (PBUH)
- 38- Al-Qutubul Sitta (Six) are the collections of  
 (a) Fiqah (b) Tasawwuf  
 (c) Quran (d) Hadith
- 39- The term Tasawwuf means  
 (a) Sufi Movement (b) Islamic Law  
 (c) Sayings doings and deeds of the Prophet Muhammad (PBUH)  
 (d) Various aspects of Islam
- 40- Who is known as Toot-i-Hind  
 (a) Hazrat Nizamuddin  
 (b) Amir Khusrow  
 (c) Baba Farid Ganj-E-shakar  
 (d) Nasiruddin Chiragh Dehlawi
- 41- The curved surface area of a cone is  $308 \text{ cm}^2$  and its slant height is 14 cm. The total surface area of cone in sq. cm is  
 (a) 312 (b) 412 (c) 362 (d) 462
- 42- Twenty seven solid iron spheres each of radius  $r$  and surface area  $S$  are melted to form a sphere with surface area  $S'$ . The ratio of  $S'$  and  $S$  is  
 (a) 1:2 (b) 1:6 (c) 1:4 (d) 1:3
- 43- In a mathematics test given to 15 students the following marks (out of 100) are recorded  
 41, 39, 48, 52, 46, 62, 54, 40, 96, 52, 98, 40, 42, 52, 60  
 The median of the data is  
 (a) 46 (b) 52 (c) 54 (d) 60
- 44- Eleven bags of wheat flour, each marked 5 kg actually contained the following weights of flour (in kg)  
 4.97, 5.05, 5.08, 5.03, 5.00, 5.06, 5.08, 4.98, 5.04, 5.07, 5.00  
 The probability that any of these bags chosen at random contains more than 5 kg of flour is  
 (a)  $\frac{9}{11}$  (b)  $\frac{8}{11}$  (c)  $\frac{7}{11}$  (d)  $\frac{6}{-11}$
- 45- The LCM of 6, 72 and 120 is 360 their HCF is  
 (a) 120 (b) 6 (c) 72 (d) None
- 46- On dividing  $x^3 - 3x^2 + x + 2$  by a Polynomial  $g(x)$ , the quotient and remainder are  $x-2$  and  $-2x+4$  respectively. The  $g(x)$  is

- (a)  $x^2+x+1$  (b)  $x^2-x+1$   
 (c)  $x^2+x-1$  (d)  $x^2-x-1$
- 47- Five years hence, the age of William will be three times that of his son. Five years ago, William's age was seven times that of his son. The present age of William in year is  
 (a) 50 years (b) 45 years  
 (c) 40 years (d) 35 years
- 48- The sum and product of two numbers is 27 and 182 respectively. One of these is  
 (a) 8 (b) 10 (c) 12 (d) 14
- 49- Sum of the areas of two squares is  $468 \text{ m}^2$ . The difference of their perimeters is 24m. The side of the larger square in m is  
 (a) 18m (b) 16m (c) 14m (d) 12m
- 50- The sum of first 51 terms of an AP whose second and third terms are 14 and 18 respectively, is  
 (a) 5212 (b) 5458 (c) 5610 (d) 5646
- 51- Which diagram shows the defect of hypermetropia  
 (a)  (b)   
 (c)  (d) None of these
- 52- The change in focal length of an eye lens is caused by the action of the  
 (a) Pupil (b) Retina  
 (c) Ciliary Muscles (d) Iris
- 53- A current of 0.5A is drawn by a filament of an electric bulb for 20min. Find the amount of electric charge that flows through the circuit?  
 (a) 300 C (b) 600 C  
 (c) 20 C (d) 200 C
- 54- 100J of heat is produce each second in a  $4\Omega$  resistance. Find the potential difference across the resistor  
 (a) 10V (b) 200V  
 (c) 30V (d) 20V
- 55- At the time of short circuit, the current in the circuit  
 (a) Reduces substantially (b) Does not change  
 (c) Increases heavily (d) Vary continuously
- 56- Which is not the part of electric motor  
 (a) Insulated copper wire (b) Coil  
 (c) Split Rings (d) Stationary Brushes (Different Position)
- 57- Biogas contains about  
 (a) 29% Methane (b) 80% Methane  
 (c) 92% Methane (d) 75% Methane
- 58- The cause of reddening of the sun and twinkling of stars respectively is

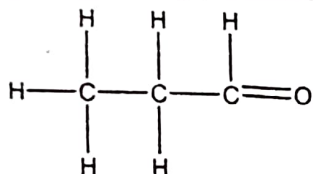
- (a) Scattering of light and atmospheric refraction  
 (b) Atmospheric refraction and scattering of light  
 (c) Dispersion and Tyndall effect  
 (d) Tyndall effect and dispersion
- 59- Dry ice is also known as  
 (a)  $\text{H}_2\text{O}$  in solid state (b)  $\text{CaCO}_3$   
 (c)  $\text{CO}_2$  (d)  $\text{D}_2\text{O}$
- 60- Brass is a mixture of  
 (a) 20% Zinc 80% Iron  
 (b) 30% Zinc 70% Iron  
 (c) 30% Zinc 70% Copper  
 (d) 30% Iron 70% Copper
- 61- Three point A(2,3), B(4,k) and C(6,-3) are collinear. The value of k is  
 (a) 3 (b) 2 (c) 1 (d) 0
- 62- In a triangle ABC, right angled at B, If  $\tan A = \frac{1}{\sqrt{3}}$ , the value of  $\cos A \cos C - \sin A \sin C$  will be  
 (a) -1 (b) 0 (c) +1 (d) -1/2
- 63- The shadow of a tower standing on a level ground is found to be 40 m longer when sun's altitude is  $30^\circ$  than when it is  $60^\circ$ , the height of tower in m is  
 (a)  $20\sqrt{3}$  m (b) 20 m  
 (c)  $\frac{20}{\sqrt{3}}$  m (d) 10 m
- 64- PQ is a chord of length 8 cm of a circle of radius 5 cm. The tangents at P and Q intersect at a point T. The length TP in cm is  
 (a) 20 cm (b)  $20\sqrt{3}$  cm  
 (c)  $20/3$  cm (d) 10 cm
- 65- From a solid cylinder whose height is 2.4 cm and diameter 1.4cm, a conical cavity of the same height and same diameter is hollowed out. The total surface area of the remaining solid in  $\text{cm}^2$  is  
 (a)  $17.6 \text{ cm}^2$  (b)  $20 \text{ cm}^2$   
 (c)  $10 \text{ cm}^2$  (d)  $8.6 \text{ cm}^2$
- 66- The length of the minute hand of a clock is 14 cm. The area swept by the minute hand in 5 minutes, in  $\text{cm}^2$  is  
 (a)  $154/3 \text{ cm}^2$  (b)  $190/3 \text{ cm}^2$   
 (c)  $120 \text{ cm}^2$  (d)  $69 \text{ cm}^2$
- 67- The area of the shaded region in  $\text{cm}^2$  where ABCD is a square of side 10 cm with semicircles drawn on each side of the square as diameter, is  
 (a)  $300/7$  (b)  $400/7$   
 (c) 50 (d)  $250/7$
- 68- Two cubes each of volume  $64 \text{ cm}^3$  are joined end to end. The surface area of resulting cuboid in  $\text{cm}^2$  is  
 (a)  $140 \text{ cm}^2$  (b)  $150 \text{ cm}^2$   
 (c)  $180 \text{ cm}^2$  (d)  $170 \text{ cm}^2$



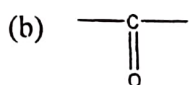
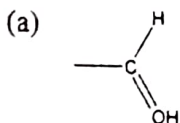
- 69- A cone of height 24 cm and radius of base 6 cm is made up of modelling clay. It is reshaped in form of a sphere. The radius of sphere in cm is  
 (a) 6 cm (b) 8 cm  
 (c) 7 cm (d) 5 cm
- 70- A 20 m deep well with diameter 7 m is dug and earth from digging is evenly spread out to form a platform  $22\text{m} \times 14\text{m}$ , the height of platform in m is  
 (a) 4 m (b) 3.5 m  
 (c) 3 m (d) 2.5 m
- 71- A solution contains 20 g of common salt in 520 g of water. The concentration in terms of mass by mass percentage of the solution is  
 (a) 4.02% (b) 11.1%  
 (c) 3.84% (d) 3.70%
- 72- According to the law of constant proportions, in ammonia, nitrogen and hydrogen are always present in the ratio (by mass)  
 (a) 1:8 (b) 3:14  
 (c) 8:1 (d) 14:3
- 73- Which among the following is a tetra atomic element  
 (a) Oxygen (b) Helium  
 (c) Phosphorus (d) Neon
- 74- Isotopes have  
 (a) same mass number and different atomic number  
 (b) same atomic number and different atomic mass number  
 (c) same number of protons and neutrons  
 (d) same number of Electrons
- 75- What is correct electronic configuration of Aluminium?  
 (a) 2, 8, 1 (b) 2, 8  
 (c) 2, 8, 2 (d) 2, 8, 3
- 76-  $2\text{Pb}(\text{NO}_3)_2(\text{s}) \xrightarrow{\text{heat}} 2\text{PbO}(\text{s}) + 4\text{NO}_2(\text{g})$  is an example of  
 (a) Displacement reaction  
 (b) Decomposition reaction  
 (c) Double displacement reaction  
 (d) Oxidation and reduction
- 77- Which of the following is an example of redox reaction  
 (a)  $2\text{Cu} + \text{O}_2 \rightarrow 2\text{CuO}$   
 (b)  $2\text{AgBr} \xrightarrow{\Delta} 2\text{Ag} + \text{Br}_2$   
 (c)  $\text{ZnO} + \text{C} \rightarrow \text{Zn} + \text{CO}$   
 (d)  $2\text{H}_2\text{O}_2 \rightarrow 2\text{H}_2\text{O} + \text{O}_2$
- 78- Tooth decay starts when the pH of the mouth is  
 (a) =5.5 (b) >5.5 (c) <5.5 (d) +6.0
- 79- Washing soda is obtained by the recrystallisation of  
 (a) Sodium hydrogen carbonate  
 (b) Bleaching Powder  
 (c) Sodium Hydroxide  
 (d) Sodium Carbonate
- 80- What is the correct order of reactivity of metals in increasing order  
 (a)  $\text{Al} > \text{Mg} > \text{Ca} > \text{Cu}$  (b)  $\text{Na} > \text{Ca} > \text{Mg} > \text{Zn}$   
 (c)  $\text{Cu} > \text{Ca} > \text{Al} > \text{Me}$  (d)  $\text{Au} > \text{Ag} > \text{Hg} > \text{Cu}$
- 81- The nature of the velocity time graph for non uniform motion of an object is  
 (a)  (b)   
 (c)  (d) 
- 82- A ball is gently dropped from a height of 20m. If its velocity increases uniformly at the rate of  $10\text{ m/sec}^2$ , after what time will it strike the ground?  
 (a) 1.414 s (b) 2s  
 (c) 4s (d) 1s
- 83- Which of the following has more inertia if their size is same  
 (a) A rubber ball (b) A stone ball  
 (c) A Plastic ball (d) An iron ball
- 84- An objects weight 12N when measured on the surface of the earth, what would be its weight when measured on the surface of the moon?  
 (a) 12N (b) 1N (c) 3N (d) 2N
- 85- A block of wood is kept on a table top. The mass of wooden block is 10kg and its dimensions are  $50\text{cm} \times 20\text{cm} \times 10\text{cm}$ . What would be the pressure exerted by the wooden block on the table top, if it is made to lie on the table top with its sides of dimensions  $20\text{ cm} \times 10\text{cm}$   
 (a)  $2450\text{N/m}^2$  (b)  $4900\text{N/m}^2$   
 (c)  $980\text{N/m}^2$  (d)  $9800\text{N/m}^2$
- 86- An object of weigh 120N is at a certain height above the ground. If the potential energy of the object is 480 J, the height at which the object is with respect to the ground will be  
 (a) 0.25 m (b) 4m  
 (c) 0.4 m (d) 25 m
- 87- Two girls A and B each of weight 400 N climb up a rope through a height of 10 m. Girl A takes 25s while Girl B takes 50s to accomplish this task. The comparison of power spent by two girls is  
 (a) Both Equal  
 (b) Girl A has more power

- (c) Girl B has more power  
 (d) None of the above
- 88- A person clapped his hands near a minaret and heard the each after 4s. What is the distance of the minaret from the person if the speed of the sound is taken as 344 m/s?  
 (a) 1376m (b) 688m  
 (c) 2752m (d) 344m
- 89- If the object is placed between centre of curvature C and focus F, the position of the image by a concave mirror is  
 (a) At the focus (b) At C  
 (c) Beyond C (d) Behind Mirror
- 90- A spherical mirror and a thin spherical lens have each a focal length of -15 cm. The mirror and lens are likely to be  
 (a) Both Concave (b) Both Convex  
 (c) Mirror concave, lens is convex  
 (d) Mirror is convex, lens is concave
- 91- The alloy of mercury is called  
 (a) Brass (b) Bronze  
 (c) Amalgam (d) Steel

92- Give name of the structure



- (a) Propanone (b) Prapanol  
 (c) Propanal (d) Propene
- 93- What is the structure of functional group of carboxylic acid



- 94- The atomic size  
 (a) Increases down the group  
 (b) Decreases down the group  
 (c) Increases along the period  
 (d) First increase then decrease in period
- 95- Cells were first discovered by  
 (a) Robert Hooks (b) Schleiden  
 (c) Schwann (d) Virchow
- 96- Which out of the following is not an example of Pteridophyta  
 (a) Marsilea (b) Ferns  
 (c) Horse Tails (d) Funaria
- 97- Which of the following is not a Vertiberate  
 (a) Dog Fish (b) Rana Tigrina  
 (c) Turtle (d) Starfish
- 98- Who amongst the following received Nobel Prize for Physiology & Medicine in 2005?  
 (a) Marshall and Warren  
 (b) Willian and Anderson  
 (c) Amartya Sen  
 (d) Abdus Salam
- 99- The process in which water evaporates and falls on the land as rain and later flows back into the sea via rivers is called  
 (a) Carbon Cycle (b) Nitrogen Cycle  
 (c) Water Cycle (d) None of the above
- 100- The xylem in plants are responsible for  
 (a) Transport for water  
 (b) Transport for food  
 (c) Transport for amino acids  
 (d) Transport of oxygen

## ANSWERS

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