

**KP SI 2022 PYQ English**

**Q1.** In which year Indian Citizenship Act was passed?

- (a) 1955
- (b) 1957
- (c) 1952
- (d) 1958

**Q2.** Which of the following is not an example of Living Fossils?

- (a) Sea-urchins
- (b) Limulus
- (c) Sphenodon
- (d) Coelacanth

**Q3.** Select the missing number from the given responses?

3	2
4	24

2	-1
-2	4

6	5
0	?

- (a) 11
- (b) 0
- (c) 1
- (d) 30

**Q4.** The term "Yavanpriya" mentioned in ancient Sanskrit texts denoted

- (a) Dance performers
- (b) Pepper
- (c) Ivory
- (d) Fine variety of muslin

**Q5.** By which constitutional amendment fundamental duties have been incorporated into Indian Constitution?

- (a) 92
- (b) 42
- (c) 38
- (d) 76

**Q6.** In certain code 253 means 'books are old', 546 means 'man is old' and 378 mean 'buy good books'. What stands for 'are' in that code?

- (a) 5
- (b) 6
- (c) 2
- (d) 4

**Q7.** The title given by British Government to Mahatma Gandhi which he surrendered during the non - cooperation movement was

- (a) Bharat Ratna
- (b) Kaiser-e-Hind
- (c) Frontier Gandhi
- (d) Rai Bahadur

**Q8.** If the diagonal of a square is doubled, then how much time will be its area?

- (a) two times
- (b) four times
- (c) three times
- (d) same

**Q9.** Which of the following is not an example of non-flowering plant?

- (a) Pinus
- (b) Algae
- (c) Spirogyra
- (d) Agaricus

**Q10.** Seven persons A, B, C, D, E and G are standing in a straight line.

D is to the right of G.

C is between A and B.

E is between F and D.

There are three persons between G and B.

Who is on the extreme left?

- (a) A
- (b) G
- (c) D
- (d) B

**Q11.** Todar Mal was associated with

- (a) Law
- (b) Literature
- (c) Music
- (d) Finance

**Q12.** Which is the least number that should be added to 2055, so that the sum is exactly divisible by 27?

- (a) 24
- (b) 27
- (c) 31
- (d) 28

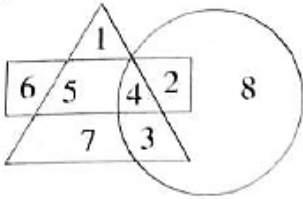
**Q13.** Two of the Mughal emperors wrote their own memories. They were

- (a) Jahangir and Shahjahan
- (b) Humayun and Jahangir
- (c) Babur and Humayun
- (d) Babur and Jahangir

**Q14.** Anirban Lahiri is associated with which sports?

- (a) Golf
- (b) Horse racing
- (c) Chess
- (d) Polo

**Q15.** Which number is in all the geometrical figures?



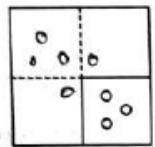
- (a) 8
- (b) 4
- (c) 3
- (d) 5

**Q16.** If difference between Compound Interest and Simple Interest on a certain sum of money for 2 years @ 5% p.a. is Rs. 122, find the sum of money.

- (a) Rs. 48800
- (b) Rs. 15000
- (c) Rs. 14000
- (d) Rs. 16000

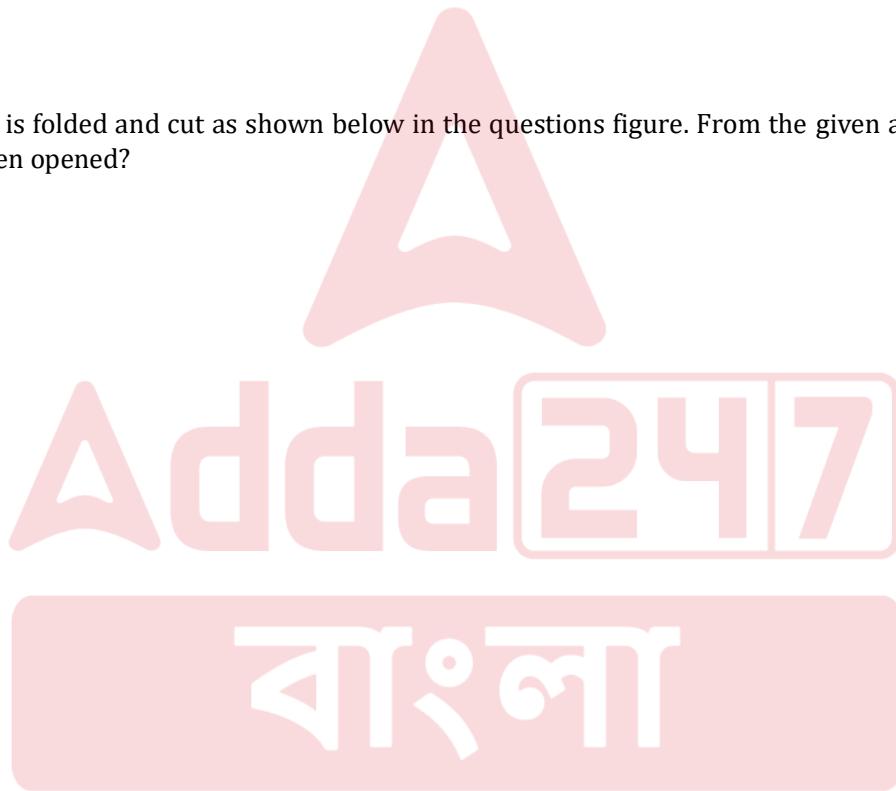
**Q17.** A piece of paper is folded and cut as shown below in the questions figure. From the given answer figures, indicate how it will appear when opened?

Questions Figure:



Answer Figures:

- (a)
- (b)
- (c)
- (d)



**Q18.** Kala Ramchandra has been appointed as first woman Police Commissioner of which city?

- (a) Lucknow
- (b) Gurugram
- (c) Hyderabad
- (d) Chennai

**Q19.** If  $A + B = C + D$  and  $A + D > B + C$ , then which of the following is definitely wrong?

- (a)  $B > D$
- (b)  $A > C$
- (c)  $A > B$
- (d)  $C > D$

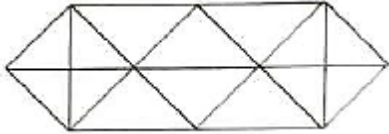
**Q20.** Which country is regarded as "Land of Midnight Sun" ?

- (a) Sweden
- (b) Iceland
- (c) Greenland
- (d) Norway

**Q21.** The profit after selling a shirt for Rs. 863 is same as the loss incurred after selling the same shirt for Rs. 631. What is the cost price of the shirt?

- (a) Rs. 747
- (b) Rs. 800
- (c) Rs. 750
- (d) Rs. 763

**Q22.** How many triangles are there in the figures?



- (a) 14
- (b) 28
- (c) 24
- (d) 20

**Q23.** Who was the most eminent ruler of Satvahana dynasty?

- (a) Second Pulakeshin
- (b) Jaggyokeshi
- (c) First Satkorni
- (d) Goutomi Putra Satkorni

**Q24.**  $14785 - 358 - 4158 - 9514 = ?$

- (a) 785
- (b) 825
- (c) 755
- (d) 721

**Q25.** The treaty of Srirangapatnam was signed between Tipu Sultan and

- (a) Warren Hastings
- (b) Cornwallis
- (c) Robert Clive
- (d) Dalhousie

**Q26.** What is the name of the sulphur naturally found in nature?

- (a) Gypsum
- (b) Cynabar
- (c) Brickstone
- (d) Brimstone

**Q27.** The lines joining places with equal rainfall are called

- (a) Isorain
- (b) Isoheil
- (c) Contour lines
- (d) Isohyets

**Q28.** The smallest positive integer, which when multiplied by 392 gives a perfect square, is

- (a) 7
- (b) 3
- (c) 2
- (d) 5

**Q29.** What will come in place of the "?" mark?

7	4	5
8	7	6
3	3	?
29	19	31

- (a) 6
- (b) 4
- (c) 3
- (d) 5

**Q30.** What is the name of the outermost membrane of Axon?

- (a) Synapse
- (b) Axoplasm
- (c) Dendrite
- (d) Neurolema

**Q31.** A statement is given followed by some conclusions. Choose the conclusion which logically follows from the given statement.

*Statement:* Most dresses in that shop are expensive.

*Conclusions:*

- (a) Some dresses in that shop are expensive.
- (b) Handloom dresses in that shop are cheap.
- (c) There are no cheap dresses available in that shop.
- (d) There are cheap dresses also in that shop.

**Q32.** Rickets disease is caused due to deficiency of

- (a) Vitamin – D
- (b) Vitamin – B
- (c) Vitamin – A
- (d) Vitamin – C

**Q33.** Find the odd number pair.

- (a) 104 : 78
- (b) 96 : 80
- (c) 64 : 48
- (d) 80 : 60

**Q34.** Railway staff College is located at

- (a) Mussoorie
- (b) Hyderabad
- (c) Pune
- (d) Vadodara

**Q35.** 12 men construct 1.5 Km of road in 7 days. 28 men will construct 12 km of roads in how many days?

- (a) 38 days
- (b) 24 days
- (c) 20 days
- (d) 28 days

**Q36.** Which one of the following is an example of chemical change?

- (a) Preparation of ice cubes from water
- (b) Magnetization of soft iron
- (c) Burning of paper
- (d) Dissolution of cane sugar in water

**Q37.** Present ages of A and B are in the ratio 5 : 6. After seven years this ratio becomes 6 : 7. Then the present age of A in years is

- (a) 32
- (b) 30
- (c) 33
- (d) 35

**Q38.** Which Union ministry implements the 'Pradhan Mantri Gram Sadak Yojana' scheme?

- (a) Ministry of Panchayati Raj
- (b) Ministry of Road Transport and National Highways
- (c) Ministry of Agriculture
- (d) Ministry of Rural Development

**Q39.** 56% of Y is 182. What is the value of 'Y' ?

- (a) 330
- (b) 364
- (c) 350
- (d) 325

**Q40.** India imports most of its crude oil from which of the following countries?

- (a) Iran
- (b) Iraq
- (c) Ukraine
- (d) United States of America

**Q41.** Which hormone controls the tropic movement in plants?

- (a) Heteroauxin
- (b) Gibberellin
- (c) Cytokinin
- (d) Auxin

**Q42.** Sunita rode her scooty northwards, then turned left and moved some distance and then again rode to her left 4km. She found herself exactly 2 km West of her starting point. How far did she ride northwards initially?

- (a) 4 km
- (b) 2 km
- (c) 6 km
- (d) 5 km

**Q43.** What is the unit of electromotive force of a cell?

- (a) Dyne
- (b) Volt
- (c) Ampere
- (d) Joule

**Q44.** A can complete a piece of work in 12 days. A and B together can complete the same piece of work in 8 days. In how many days can B alone complete the same piece of work?

- (a) 28 days
- (b) 18 days
- (c) 15 days
- (d) 24 days

**Q45.** Which is the longest river of Asia?

- (a) Yantze Kiang
- (b) Huang he
- (c) Mekong
- (d) Tigris

**Q46.** From the given alternative words, select the word which can not be formed using the letters of the given word:

CUMBERSOME

- (a) SOBER
- (b) ROME
- (c) MOUSE
- (d) MERCY

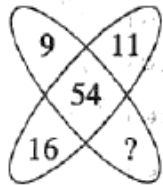
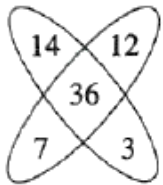
**Q47.** Which of the following Emperor was known as "Kunik"?

- (a) Ashoka
- (b) Bindusar
- (c) Bimbisar
- (d) Ajatasatru

**Q48.** Famous dance from "Salsa" has been originated in which country?

- (a) Jamaica
- (b) Portugal
- (c) Spain
- (d) Cuba

**Q49.** Select the missing number from the given responses :



- (a) 12
- (b) 16
- (c) 18
- (d) 17

**Q50.** Haematology : Blood :: Phycology : ?

- (a) Fishes
- (b) Algae
- (c) Diseases
- (d) Fungi

**Q51.** India's national carrier, Air India, has been officially handed over to

- (a) Spicejet
- (b) Indigo Airlines
- (c) The Tata Group
- (d) Jet Airways

**Q52.** The driver of an ambulance sees a bus moving in the same direction 40 meter ahead of him. After 20 second, the bus is 60 meter behind. If the speed of the ambulance is 30km/hr, what is the speed of the bus?

- (a) 22 km/hr
- (b) 12 km/hr
- (c) 10 km/h
- (d) 15 km/hr

**Q53.** The battle of Plassey was fought in

- (a) 1787
- (b) 1766
- (c) 1757
- (d) 1780

**Q54.** The ratio of the length and the breadth of a rectangular plot is 6:5. If the breadth of the plot is 34 meter less than the length, what is the perimeter of the rectangular plot?

- (a) 748 m
- (b) 408 m
- (c) 374 m
- (d) 814 m

**Q55.**  $\frac{3}{4}$  th of  $\frac{2}{9}$  th of  $\frac{1}{5}$  th of a number is 249.6. What is 50% of that number?

- (a) 3734
- (b) 3794
- (c) 3744
- (d) 3749

**Q56.**  $[(12)^2 \times (14)^2] \div (16)^2 = ?$

- (a) 104.25
- (b) 282.24
- (c) 110.25
- (d) 126

**Q57.** Kushan Emperor Kanishka has been transformed into Buddhism from whom?

- (a) Vishnugopa
- (b) Ashwaghosh
- (c) Agrasen
- (d) Birupaksha



**Q58.** If order of the English alphabet is reversed starting from Z to A, which will be the eighth letter of the right of 'O' ?

- (a) W
- (b) G
- (c) F
- (d) V

**Q59.** B.C. Roy award is given in the field of

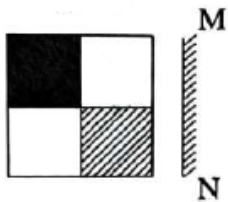
- (a) Environment
- (b) Journalism
- (c) Music
- (d) Medicine

**Q60.** The description of Samudragupta's war campaigns are found from which inscription or 'Prashasti' ?

- (a) Mahishwar Prashasti
- (b) Allahabad Prashasti
- (c) Nasik Prashasti
- (d) Harishen Prashasti

**Q61.** If a mirror is placed on the line MN then which of the answer figures is the right image of the given figure?

Question Figure:



Answer Figures:

- (a)
- (b)
- (c)
- (d)

**Q62.** A train 100 meter long, moving at a speed of 50km/hr crosses a train 120 meter long coming from opposite direction in 6 second. The speed of the second train is

- (a) 74 km/h
- (b) 82 km/hr
- (c) 60 km/h
- (d) 70 km/hr

**Q63.** India has launched which operation to bring back its nationals from Ukraine?

- (a) Operation Ganga
- (b) Operation Yamuna
- (c) Operation Bharat
- (d) Operation Saraswati

**Q64.** You come to know that your boss is writing a false report to the highest authority. What would you do?

- (a) Ignore and keep quiet.
- (b) Discuss with your colleagues and then take step jointly.
- (c) Meet your boss and directly protest against his actions.
- (d) Somehow report the incident to all.

**Q65.**  $(-251 \times 21 \times -12) \div ? = 158.13$ . Find the value of '?'.

- (a) 150
- (b) 400
- (c) 250
- (d) 300

**Q66.** Which scientist among the names given below is associated with the discovery of the radioactive element 'Radium'?

- (a) Michael Faraday
- (b) Albert Einstein
- (c) Isaac Newton
- (d) Marie Curie

**Q67.** In a certain code "MOUSE" is written as "PRUQC". How is "SHIFT" written in that code?

- (a) VJIDR
- (b) VIKRD
- (c) RKIVD
- (d) VKIDR

**Q68.** Which British Governor introduced "Panchshala Bandobast" ?

- (a) Welesley
- (b) Warren Hastings
- (c) Cornwallish
- (d) Willium Bentinck

**Q69.** The largest country of the world by geographical area is

- (a) Vatican City
- (b) China
- (c) Russia
- (d) Australia

**Q70.**  $\sqrt[3]{148877} = ?$

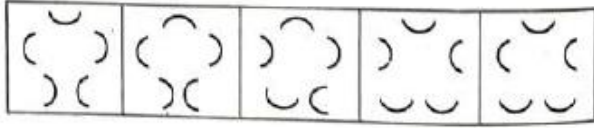
- (a) 43
- (b) 73
- (c) 63
- (d) 53

**Q71.** The land from "Bajada" is found in which region?

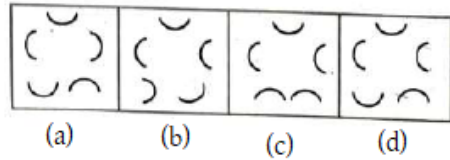
- (a) Mountain Peak areas
- (b) Plainland
- (c) Plateau region
- (d) Desert region

**Q72.** Select a figure from amongst the answer figures which will continue the same series as established by the five problem figures.

Problem Figures:



Answer Figures:



**Q73.** There are three statements followed by three conclusions. Which of the conclusions logically follows from the given statements?

*Statements :* All dolls are windows. All bottles are windows. All cars are bottles.

*Conclusions :*

- I. All cars are windows.
- II. Some cars are dolls.
- III. Some windows are cars.

- (a) All follow.
- (b) Only II and III follow.
- (c) Only I and II follow.
- (d) Only I and III follow.

**Q74.** Caracas is the capital of which country?

- (a) Equador
- (b) Venezuela
- (c) Philippines
- (d) Peru

**Q75.** Identify the diagram that best represents the relationship among the classes given below:

Animals, Land animals, Sea animals

- (a)
- (b)
- (c)
- (d)

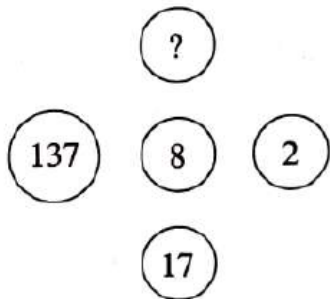
**Q76.** Who is the author of "The Republic"?

- (a) Homer
- (b) Aristotle
- (c) Socrates
- (d) Plato

**Q77.** Who is the inventor of Barometer?

- (a) Amidio Avogadro
- (b) Torricelli
- (c) Priestle
- (d) Alexander Graham Bell

**Q78.** Select the missing number from the given responses:



- (a) 97
- (b) 9107
- (c) 1097
- (d) 907

**Q79.** Which city is known as "Electronic city of India" ?

- (a) Bengaluru
- (b) Hyderabad
- (c) Mumbai
- (d) Gurugram

**Q80.** If the numerator of a fraction is increased by 200% and the denominator of the fraction is increased by 120%, the resultant fraction becomes  $\frac{4}{11}$ . What is the original fraction?

- (a)  $\frac{6}{11}$
- (b)  $\frac{3}{11}$
- (c)  $\frac{4}{15}$
- (d)  $\frac{5}{12}$

**Q81.** From which of the following sectors, India earns most of its foreign currency?

- (a) Spices
- (b) Tea
- (c) Jute
- (d) Tobacco

**Q82.** Sir Thomas Roe came to which Mughal Emperor's Court?

- (a) Aurangzeb
- (b) Jahangir
- (c) Akbar
- (d) Shahjahan

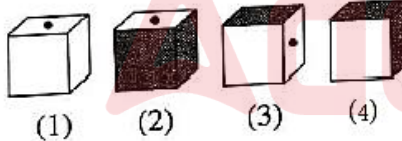
**Q83.** The average price of 80 mobile phone is Rs. 30,000. If the highest and lowest price mobile phones are sold out, then the average price of remaining 78 mobile phones is Rs. 29,500. The cost of the highest price mobile is Rs. 80,000. The cost of lowest price mobile is

- (a) Can't be determined
- (b) Rs. 15000
- (c) Rs. 18000
- (d) Rs. 19000

**Q84.** In certain years a sum of money is doubled itself at  $6\frac{1}{4}\%$  simple interest per annum, then the required time will be

- (a) 8 years
- (b)  $10\frac{2}{3}$  years
- (c) 16 years
- (d)  $12\frac{1}{2}$  years

**Q85.** The figure given on the left hand side is folded to form a box. which boxes can be formed from the options (1), (2), (3) and (4)?



- (a) 2 and 3
- (b) 1, 3 and 4
- (c) 2 and 4
- (d) 1 and 4

**Q86.** 10% discount and then 20% discount in succession is equivalent to total discount of

- (a) 24%
- (b) 28%
- (c) 30%
- (d) 15%

**Q87.** The most arid place on the earth is situated in which continent?

- (a) South America
- (b) Africa
- (c) Asia
- (d) Australia

**Q88.** Pointing towards Rita, Nikhil said "I am the only son of her mother's son". How is Rita related to Nikhil?

- (a) Cousin
- (b) Niece
- (c) Aunt
- (d) Mother

**Q89.** Who is the author of "The soul of India"?

- (a) Satish Chandra Samanta
- (b) Bipin Chandra Pal
- (c) Rishi Aurobindo
- (d) Umesh Chandra Bandopadhyay

**Q90.** Find the sum of first 30 natural numbers.

- (a) 463
- (b) 468
- (c) 470
- (d) 465

**Q91.** Who is the director of famous movie "Rashoman"?

- (a) Antonioni
- (b) Andrei Tarkovski
- (c) Cristoph Kisloski
- (d) Akira Kurosawa

**Q92.** Who is the present speaker of Lok Sabha?

- (a) Biman Banerjee
- (b) Om Birla
- (c) Meera Kumar
- (d) Venkaiya Naidu

**Q93.** Divide 81 into three parts so that  $\frac{1}{2}$  of 1st,  $\frac{1}{3}$  of 2nd and  $\frac{1}{4}$  of 3rd are equal.

- (a) 30, 27, 24
- (b) 27, 18, 30
- (c) 36, 26, 18
- (d) 18, 27, 36

**Q94.** The famous painting named "Damayanti" is creation of which famous painter?

- (a) Rabindranath Tagore
- (b) Nandalal Bose
- (c) Abanindranath Tagore
- (d) Raja Ravi Barma

**Q95.** Which of the two ratio 17 : 18 and 10 : 11 is greater?

- (a) Can't determine
- (b) 10 : 11
- (c) 17 : 18
- (d) Both are same.

**Q96.** In which year Panchayat Raj has been included in the Indian Constitution?

- (a) 1990
- (b) 1992
- (c) 1978
- (d) 1996

**Q97.** 729 ml of mixture contains milk and water in the ratio 7 : 2. How much more water is to be added to get a new mixture containing milk and water in the ratio 7 : 3?

- (a) 52 ml
- (b) 81 ml
- (c) 60 ml
- (d) 71 ml

**Q98.** Which is the capital of Meghalaya?

- (a) Kohima
- (b) Imphal
- (c) Shillong
- (d) Aizol

**Q99.** If  $+$  =  $\times$ ,  $-$  =  $\div$ ,  $\times$  =  $+$ ,  $\div$  =  $-$ , then which is the correct equation out of the following?

- (a)  $18 \times 6 - 4 + 7 \times 8 = 47$
- (b)  $18 \div 6 + 4 - 2 \div 3 = 22$
- (c)  $18 + 6 - 4 \times 2 \div 3 = 26$
- (d)  $18 - 6 \times 7 \div 2 + 8 = 63$

**Q100.** Full form of RNA is

- (a) Rare Nucleic Acid
- (b) Remote Nuclear Activity
- (c) Ribonucleic Acid
- (d) Random Nuclear Acid

## SOLUTION

**S1. Ans.(a)**

**Sol.** In 1955, the Government of India passed the Indian Citizenship Act. The act provides for two ways for foreigners to acquire Indian citizenship.

**S2. Ans.(a)**

**Sol.** Those organisms that originated in the distant past and are still alive today with unchanged morphological and physiological functions are called living fossils. Examples are Limulus, Peripatus, Sphenodon, Latimaria, Coelacanth and Platypus.

**S3. Ans.(b)**

3	2
4	24

2	-1
-2	4

6	5
0	?

**Sol.**

The pattern is:

$$3 \times 2 \times 4 = 24$$

$$2 \times (-2) \times (-1) = 4$$

$$6 \times 5 \times 0 = 0$$

**S4. Ans.(b)**

**Sol.** In ancient Sanskrit texts 'Yavanpriya' referred to pepper. The fruit of this plant is dried and used as a spice.

**S5. Ans.(b)**

**Sol.** The Fundamental Duties were incorporated into the Indian Constitution by the 42nd Constitutional Amendment of 1976. Later, in 2002, through the 86th Constitutional Amendment Act, several other fundamental duties were added to it.

**S6. Ans.(c)**

**Sol.** books are old - 253 ..... (I)

man is old - 546 ..... (II)

buy good books - 378 ..... (III)

(I) and (III) contain 'books'. So the code of 'books' is 3. (I) and (II) contain 'old'. So the code of 'old' is 5. Then (I) implies that the code of 'are' is 2.

**S7. Ans.(b)**

**Sol.** The title given by the British government to Mahatma Gandhi during the Non-Cooperation Movement was Kaiser-e-Hind. He was awarded this title by the Emperor of India, for his outstanding role in public service.

**S8. Ans.(b)**

**Sol.** Let side of a square be x unit

Length of diagonal =  $\sqrt{2}$  x unit

Area =  $x^2$  Sq. unit

Now if the diagonal is doubled, the diagonal is =  $2\sqrt{2}$  x unit

Side of a square =  $\frac{2\sqrt{2}x}{\sqrt{2}} = 2x$  unit

Area =  $(2x)^2 = 4x^2$  Sq. unit

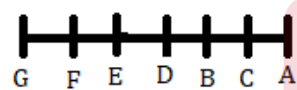
So the area will be four times.

**S9. Ans.(a)**

**Sol.** Pinus is not an example of non-flowering plant. Non-flowering plants carry out their reproductive function by producing spores or spores. They are called Thallophytes. All these plants have neither flowers nor fruits.

**S10. Ans.(b)**

**Sol.**



G is on the extreme left.

**S11. Ans.(d)**

**Sol.** Todar Mal was associated with Finance. He was the first finance minister of the Mughal Empire during the reign of Emperor Akbar. His system of revenue collection is known as the settlement of Todar Mal.

**S12. Ans.(a)**

**Sol.** 2055 divided by 27 has 3 remainders. So if you add the number  $(27 - 3) = 24$  with 2055, the sum is divisible by 27.

**S13. Ans.(d)**

**Sol.** The two Mughal emperors who wrote autobiographies were Babur and Jahangir. Babur was the founder of the Mughal Empire and his autobiography is called Babarnama. Jahangir was the fourth Mughal emperor. The name of his autobiography is Jahangirnama.

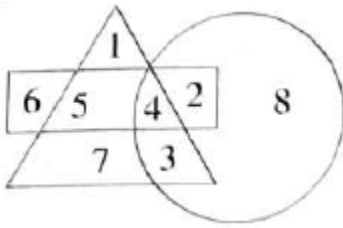
**S14. Ans.(a)**

**Sol.** Anirban Lahiri is an Indian golfer. It is a club and ball game, where players try to hit the ball with the help of a club into a certain hole. Golf players are called golfers.



**S15. Ans.(b)**

**Sol.**



The geometric figure implies that 4 is present in all figures.

**S16. Ans.(a)**

**Sol.** Difference =  $P \left( \frac{r}{100} \right)^2$

$$\rightarrow 122 = P \left( \frac{5}{100} \right)^2$$

$$\rightarrow P = \frac{122 \times 100 \times 100}{5 \times 5}$$

$$\rightarrow P = \text{Rs. } 48800$$

**S17. Ans.(c)**

**Sol.** Option c is the correct figure.

**S18. Ans.(b)**

**Sol.** Kala Ramchandra has been appointed as the first woman police commissioner of Gurugram city. She was elected as the first woman commissioner in Gurugram on 15 February 2022.

**S19. Ans.(a)**

**Sol.**  $A + B = C + D$

$$A - D = C - B \dots \text{(I)}$$

$$A + D > B + C \dots \text{(II)}$$

$$A - D - A - D > C - B - B - C$$

$$\rightarrow -2D > -2B$$

$$\rightarrow D > B$$

So  $B > D$  is wrong.

**S20. Ans.(d)**

**Sol.** Norway is known as the "Land of Midnight Sun". In Norway, the sun can be seen late at night or at midnight.

**S21. Ans.(a)**

**Sol.** Let cost price of shirt be Rs.  $x$

ATQ,

$$863 - x = x - 631$$

$$\rightarrow x + x = 863 + 631$$

$$\rightarrow 2x = 1494$$

$$\rightarrow x = \text{Rs. } 747$$

**S22. Ans.(b)**

**Sol.**



There are 28 triangles in this figure.

**S23. Ans.(d)**

**Sol.** Goutomi Putra Satkorni was the best emperor of Satavahana dynasty. Various details about Goutomi Putra Satkorni are available from his extant coins, inscriptions and royal genealogies in Puranas.

**S24. Ans.(c)**

**Sol.**  $14785 - 358 - 4158 - 9514$

$$= 14785 - (358 + 4158 + 9514)$$

$$= 14785 - 14030$$

$$= 755$$

**S25. Ans.(b)**

**Sol.** The Treaty of Srirangapatnam was signed in 1792 between Tipu Sultan and Lord Cornwallis. The signing of this treaty alienated half of Tipu Sultan's kingdom and significantly increased British rule, power and influence in South India.

**S26. Ans.(a)**

**Sol.** Sulfur found free in nature is called gypsum. It is a soft sulfate mineral, composed of calcium sulfate dihydrate. It is used in the construction industry.

**S27. Ans.(d)**

**Sol.** Lines on a map that indicate areas of equal rainfall are called Isohyets.

**S28. Ans.(c)**

**Sol.** Factor of  $392 = 2 \times 2 \times 2 \times 7 \times 7$

So 392 multiplied by 2 will be a square number.

**S29. Ans.(d)**

**Sol.**

7	4	5
8	7	6
3	3	?
29	19	31

$$7 \times 3 + 8 = 29$$

$$4 \times 3 + 7 = 19$$

$$5 \times ? + 6 = 31$$

So 5 will sit in the sign ?.

**S30. Ans.(d)**

**Sol.** The outermost covering of the axon is called the neurolemma. Axons surrounded by neurolemma are called nerve fibers.

**S31. Ans.(d)**

**Sol.** The given sentence implies that the conclusion 'There are cheap dresses also in that shop' is correct.

**S32. Ans.(a)**

**Sol.** Rickets is caused by vitamin D deficiency. It is a condition that causes bones in children to become weak or soft in nature. The disease causes children to have bowed legs, stunted growth, bone pain, and sleep problems.

**S33. Ans.(b)**

**Sol.**  $104 : 78 = 4 : 3$

$96 : 80 = 6 : 5$

$64 : 48 = 4 : 3$

$80 : 60 = 4 : 3$

So the odd number pair is  $96 : 80$ .

**S34. Ans.(d)**

**Sol.** Railway Staff College is located at Vadodara.

**S35. Ans.(b)**

**Sol.** Required time =  $7 \times \frac{12}{1.5} \times \frac{12}{28} = 24$  days

**S36. Ans.(c)**

**Sol.** Combustion of paper is an example of a chemical change. Combustion of paper results in the burning of paper into ash. A chemical change results in one or more substances changing into a different or new substance. So the combustion of paper is an example of a chemical change.

**S37. Ans.(d)**

**Sol.** Let common multiple be  $x$

Present age of A =  $5x$  years

Present age of B =  $6x$  years

7 years hence, Age of A =  $(5x + 7)$  years

7 years hence, Age of B =  $(6x + 7)$  years

ATQ,

$$\frac{(5x + 7)}{(6x + 7)} = \frac{6}{7}$$

$$\rightarrow 35x + 49 = 36x + 42$$

$$\rightarrow x = 7$$

Present age of A =  $5 \times 7 = 35$  years

**S38. Ans.(d)**

**Sol.** Union Ministry of Rural Development implements the scheme "Pradhan Mantri Gram Sadak Yojana".

**S39. Ans.(d)**

$$\text{Sol. } Y \times \frac{56}{100} = 182$$

$$\rightarrow Y = 182 \times \frac{100}{56}$$

$$\rightarrow Y = 325$$

**S40. Ans.(b)**

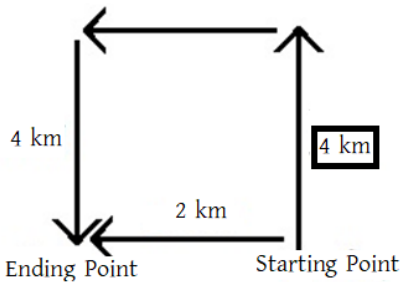
**Sol.** India imports most of its crude oil from Iraq. It is a Middle Eastern country.

**S41. Ans.(d)**

**Sol.** Auxin hormone is the hormone that controls tropic movement in plant body. The chemical name of this hormone is indole acetic acid. This hormone mainly regulates plant growth.

**S42. Ans.(a)**

**Sol.**



Sunita initially went north for a distance of 4 km.

**S43. Ans.(b)**

**Sol.** The unit of cell electromotive force is the volt. In addition to electromotive force, the SI unit of electric potential difference, voltage and electric potential is the volt.

**S44. Ans.(d)**

**Sol.** A works in one day =  $\frac{1}{12}$  part

A and B work together in one day =  $\frac{1}{8}$  part

B works in one day =  $\frac{1}{8} - \frac{1}{12} = \frac{1}{24}$  part

B will complete this work in  $\frac{1}{\frac{1}{24}} = 24$  days.

**S45. Ans.(a)**

**Sol.** The Yantze Kiang is the longest river in Asia. The river is located in China and its source is the Tibetan Plateau. The Yantze Kiang River empties into the East China Sea.

**S46. Ans.(d)**

**Sol.** The word MERCY cannot be formed with the letters of the word CUMBERSOME. Because there is no 'Y' in the given word.

**S47. Ans.(d)**

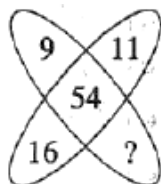
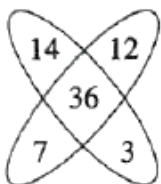
**Sol.** Emperor Ajatasatru was known as 'Kunik'. He was a king of the Haryanka dynasty. The Haryanka dynasty flourished during his reign.

**S48. Ans.(d)**

**Sol.** The famous dance style 'Salsa' originated in Cuba, a Central American country. Salsa is one of the most popular Latin dances. The two main styles of salsa dancing are linear and circular.

**S49. Ans.(c)**

**Sol.**



$$7 + 3 + 12 + 14 = 36$$

$$16 + ? + 11 + 9 = 54$$

$$\rightarrow ? = 54 - 16 - 11 - 9 = 18$$

**S50. Ans.(b)**

**Sol.** The study of Blood is called Hematology. Similarly, the study of Algae is called Phycology. So, Algae is the correct answer.

**S51. Ans.(c)**

**Sol.** The national airline of India, Air India has been officially handed over to the Tata Group.

**S52. Ans.(b)**

**Sol.** Let speed of bus was x km/hr

ATQ,

$$20(30 - x) \times \frac{5}{18} = 40 + 60$$

$$\rightarrow (30 - x) = \frac{100 \times 18}{5 \times 20}$$

$$\rightarrow (30 - x) = 18$$

$$\rightarrow x = 30 - 18$$

$$\rightarrow x = 12 \text{ km/hr}$$

So the speed of the bus was 12 km/hr.

**S53. Ans.(c)**

**Sol.** The Battle of Palashi was fought on June 23, 1757 in north-eastern India with the last independent Nawab of Bengal, Siraj Ud Daulah, and the British East India Company. The English company won the war and paved the way for British rule in India.

**S54. Ans.(a)**

**Sol.** Length of rectangular field =  $34 \times \frac{6}{6-5} = 34 \times \frac{6}{1} = 204 \text{ m}$

Breadth of rectangular field =  $34 \times \frac{5}{6-5} = 34 \times \frac{5}{1} = 170 \text{ m}$

Perimeter of rectangular field =  $2 \times (204 + 170) = 2 \times 374 = 748 \text{ m}$

**S55. Ans.(c)**

**Sol.** Let number be x

ATQ,

$$x \times \frac{1}{5} \times \frac{2}{9} \times \frac{3}{4} = 249.6$$

$$\rightarrow x = 249.6 \times \frac{5}{1} \times \frac{9}{2} \times \frac{4}{3}$$

$$\rightarrow x = 7488$$

Number = 7488

$$50\% \text{ of number} = 7488 \times \frac{50}{100} = 3744$$

**S56. Ans.(c)**

**Sol.**  $[(12)^2 \times (14)^2] \div (16)^2$

$$= \frac{12 \times 12 \times 14 \times 14}{16 \times 16}$$

$$= 110.25$$

**S57. Ans.(b)**

**Sol.** Kanishka, the Kushan emperor, was initiated into Buddhism by Ashvaghosha.

**S58. Ans.(b)**

**Sol.** The English alphabet is written in reverse order from Z to A.

ZYXWVUTSRQPONMLKJIH **G** FEDCBA

Then the eighth position to the right of 'O' will be the letter G.

**S59. Ans.(d)**

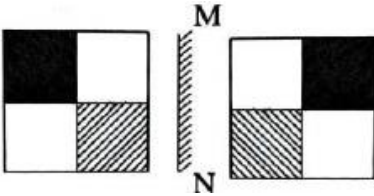
**Sol.** B. C. Roy Award is given in the Department of Medicine. B. C. Roy award was started in Roy's memory in 1962 by the Medical Council of India.

**S60. Ans.(b)**

**Sol.** The description of Samudragupta's war can be found from Harishen's 'Allahabad Prashasti'. This inscription contains a hymn to Samudragupta and information about Samudragupta's conquests and the boundaries of the Gupta empire.

**S61. Ans.(d)**

**Sol.**



Option d is the correct diagram.

**S62. Ans.(b)**

**Sol.** Total Distance = 100 + 120 = 220 m

Relative speed =  $\frac{220}{6} \times \frac{18}{5} = 132$  km/hr

Speed of the second train = 132 - 50 = 82 km/hr

**S63. Ans.(a)**

**Sol.** The operation that the Indian government is conducting to bring back Indians from Ukraine is called Operation Ganga. It is an ongoing operation of the Government of India. The Indian Air Force was brought under this operation on 1st March 2022.

**S64. Ans.(c)**

**Sol.** If I come to know that my superior is giving a false report to the higher authority, I will directly meet your boss and directly protest against his actions.

**S65. Ans.(b)**

**Sol.**  $(-251 \times 21 \times -12) \div ? = 158.13$

$\rightarrow 63252 \div ? = 158.13$

$\rightarrow \frac{63252}{?} = 158.13$

$\rightarrow ? = \frac{63252}{158.13}$

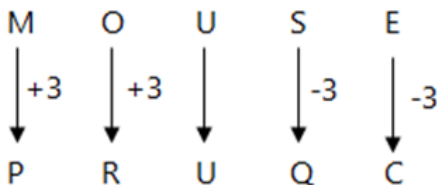
$\rightarrow ? = 400$

**S66. Ans.(d)**

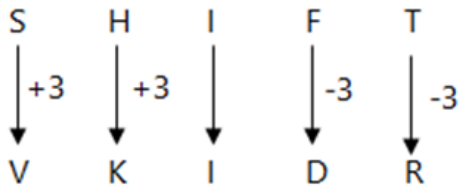
**Sol.** Radioactive 'radium' was discovered by scientist Marie Curie. She was the first woman scientist to win the Nobel Prize. She single-handedly won the Nobel Prize in Chemistry in 1911.

**S67. Ans.(d)**

**Sol.**



Similarly,



**S68. Ans.(b)**

**Sol.** English Governor Warren Hastings introduced the 'Panchshala Bandobast'. The system was a policy of settling land with zamindars or lessees for a period of five years.

**S69. Ans.(c)**

**Sol.** Russia is the largest country in the world by size. This country is known as Eurasia because it is located on both the continents of Europe and Asia. It is the ninth most populous country in the world.

**S70. Ans.(d)**

**Sol.**  $\sqrt[3]{148877} = \sqrt[3]{53 \times 53 \times 53} = 53$

**S71. Ans.(d)**

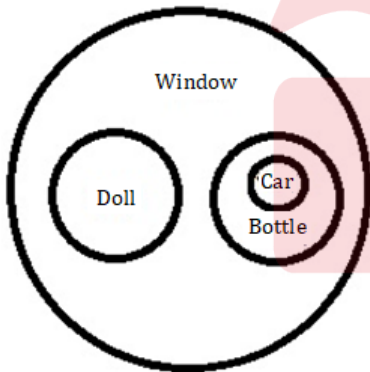
**Sol.** A variety of landforms are formed by the combined action of wind and water currents at the foot of the mountains in the desert region, one of the main landforms being the Bajada. The slopes of the Bajada Plain are gentle in nature. The Bajada landform is found in the foothills of the Atlas Mountains in northwest Africa's Sahara Desert.

**S72. Ans.(c)**

**Sol.** The figure in option c is correct.

**S73. Ans.(d)**

**Sol.**



Only I and III follow.

**S74. Ans.(b)**

**Sol.** Caracas is the capital of Venezuela. It is located in the northern part of the country. As one of the main economic and cultural centers of the country, the contribution of the city of Caracas is important.

**S75. Ans.(c)**

**Sol.** The figure in option c is correct.

**S76. Ans.(d)**

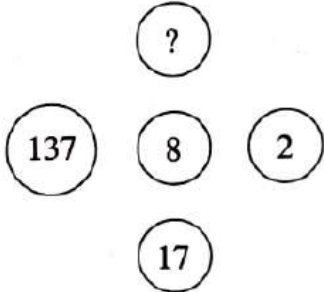
**Sol.** The book 'The Republic' is written by Plato. Plato is a Greek philosopher. He expounded the philosophical doctrines of Socrates in his writings.

**S77. Ans.(b)**

**Sol.** Torricelli was the inventor of the barometer. This barometer instrument is used to measure atmospheric pressure. Torricelli was a famous Italian mathematician and physicist.

**S78. Ans.(c)**

**Sol.**



$$8 \times 2 + 1 = 17$$

$$8 \times 137 + 1 = 1097$$

**S79. Ans.(a)**

**Sol.** Bangalore city is known as 'Electronic city of India'. It is an important information technology center. The main campuses of companies such as Infosys, Wipro, TCS, HCL, Tech Mahindra, Biocon etc. are located here, the main IT and biotechnology hub in the Electronic City.

**S80. Ans.(c)**

**Sol.** Let original fraction be  $\frac{x}{y}$

ATQ,

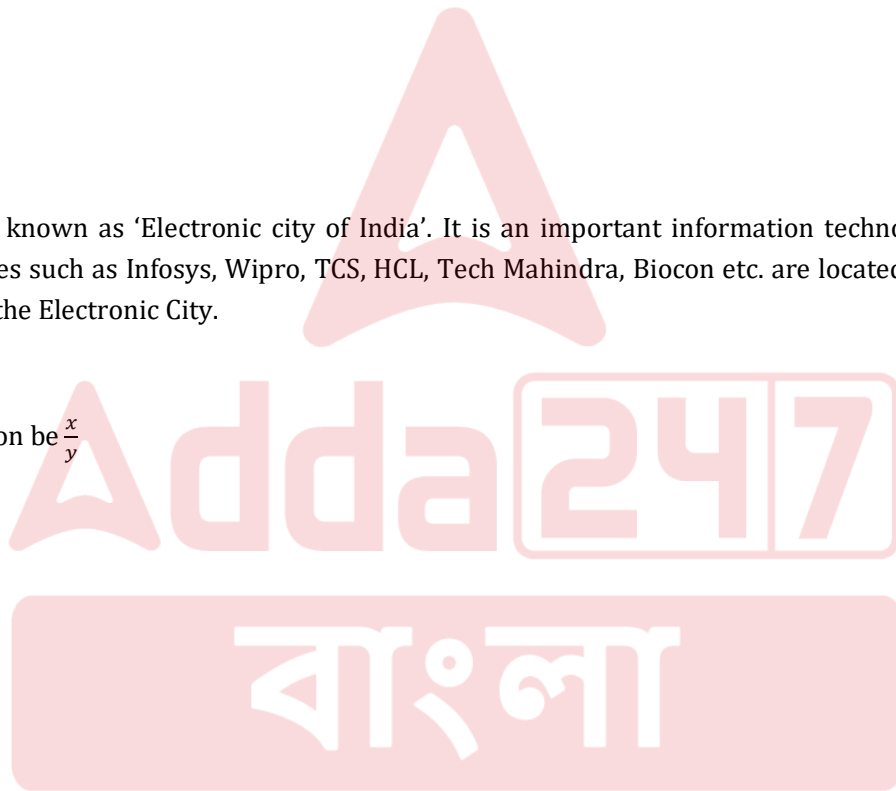
$$\frac{x+(x \times 200\%)}{y+(y \times 120\%)} = \frac{4}{11}$$

$$\rightarrow \frac{x+2x}{y+1.2y} = \frac{4}{11}$$

$$\rightarrow \frac{3x}{2.2y} = \frac{4}{11}$$

$$\rightarrow \frac{x}{y} = \frac{4}{11} \times \frac{2.2}{3}$$

$$\rightarrow \frac{x}{y} = \frac{4}{15}$$

**S81. Ans.(b)**

**Sol.** Tea is India's largest foreign exchange earner.

**S82. Ans.(b)**

**Sol.** Sir Thomas Roe visited the court of Mughal Emperor Jahangir. He came to Jahangir's court in 1615 as an envoy of King James I.

**S83. Ans.(d)**

**Sol.** Price of 80 mobile phone =  $80 \times 30000 = \text{Rs. } 2400000$

Price of 78 mobile phone =  $78 \times 29500 = \text{Rs. } 2301000$

Price of highest and lowest mobile phone =  $2400000 - 2301000 = \text{Rs. } 99000$

Lowest mobile phone price =  $99000 - 80000 = \text{Rs. } 19000$



**S84. Ans.(c)****Sol.** Let principal be Rs. p

Time = t years

Rate of interest =  $6\frac{1}{4}\% = \frac{25}{4}\%$ Simple interest =  $2p - p = \text{Rs. } p$ 

$$p = \frac{p \times t \times 25}{100 \times 4}$$

$$\rightarrow t = \frac{p \times 100 \times 4}{p \times 25}$$

$$\rightarrow t = 16 \text{ years}$$

**S85. Ans.(b)****Sol.** 1, 3 and 4 boxes are possible.**S86. Ans.(b)****Sol.** Price after first discount =  $100 - (100 \times \frac{10}{100}) = 100 - 10 = \text{Rs. } 90$ Price after second discount =  $90 - (90 \times \frac{20}{100}) = 90 - 18 = \text{Rs. } 72$ Total discount =  $100 - 72 = \text{Rs. } 28$ Total discount as a percentage =  $\frac{28}{100} \times 100 = 28\%$ **S87. Ans.(a)****Sol.** The driest place on Earth is South America. It is the fourth largest continent in the world. The North American continent is connected to Central and North America by the Panama Canal in the north.**S88. Ans.(c)****Sol.** Pointing at Rita, Nikhil said, 'I am the only son of her mother's son'. Rita is Nikhil's Aunt.**S89. Ans.(b)****Sol.** 'The author of the book 'Bharat Atma' is Bipin Chandra Pal. He also wrote English books like 'Indian Nationalism', 'Nationality and Empire', 'Swaraj and Present Situation', 'Fundamentals of Social Reform' etc. He published Bandemataram magazine in 1906 and edited another magazine called Swaraj in 1908.**S90. Ans.(d)****Sol.** The sum of first 30 natural numbers =  $\frac{n(n+1)}{2} = \frac{30(30+1)}{2} = \frac{15 \times 31}{2} = 465$ **S91. Ans.(d)****Sol.** Akira Kurosawa is the director of famous movie 'Rashoman'.**S92. Ans.(b)****Sol.** The current Speaker of the Lok Sabha is Om Birla. He is an Indian politician. who is the 17th Speaker of the Lok Sabha. He is one of the members of the Bharatiya Janata Party.**S93. Ans.(d)****Sol.** Ratio =  $\frac{A}{2} = \frac{B}{3} = \frac{C}{4}$ 

$$\rightarrow A : B : C = 2 : 3 : 4$$

A will get =  $81 \times \frac{2}{9} = \text{Rs. } 18$ B will get =  $81 \times \frac{3}{9} = \text{Rs. } 27$ C will get =  $81 \times \frac{4}{9} = \text{Rs. } 36$

**S94. Ans.(d)**

**Sol.** The famous painting named "Damayanti" is creation of famous painter Raja Ravi Barma .

**S95. Ans.(c)**

**Sol.**  $\frac{17}{18} = 0.9444$

$\frac{10}{11} = 0.9090$

17 : 18 is greater .

**S96. Ans.(b)**

**Sol.** The Panchayati Raj system was incorporated in 1992 through the 73rd Amendment to the Indian Constitution.

**S97. Ans.(b)**

**Sol.** Milk contains =  $729 \times \frac{7}{9} = 567$  ml

Water contains =  $729 \times \frac{2}{9} = 162$  ml

The new mixture contains water =  $567 \times \frac{3}{7} = 243$  ml

Water is added =  $243 - 162 = 81$  ml

**S98. Ans.(c)**

**Sol.** Shillong is the capital of Meghalaya. It is a city and a municipal area in Khasi hills district in eastern Meghalaya state. It was formerly known as the "Scotland of the East". This place receives a lot of rainfall.

**S99. Ans.(c)**

**Sol.** From the options

$18 + 6 - 4 \times 2 \div 3$  [Put the value of  $+$  =  $\times$ ,  $-$  =  $\div$ ,  $\times$  =  $+$ ,  $\div$  =  $-$ ]

=  $18 \times 6 \div 4 + 2 - 3$

=  $108 \div 4 + 2 - 3$

=  $27 + 2 - 3$

=  $29 - 3$

= 26

**S100. Ans.(c)**

**Sol.** The complete form of RNA is ribonucleic Acid. Ribonucleic acid or RNA acts as a messenger between ribosomes and DNA.