

Q1. The Hindalco Unit at Muri is located on the bank of which river?

- (a) Tungabhadra
- (b) Mahanadi
- (c) Subarnarekha
- (d) Kangshawati

Q2. In a code language 724 means 'leaf is green', 371 means 'green and blue' and 438 means 'sky is blue'. Then which numbers represent 'leaf' and 'is'?

- (a) 2 and 8
- (b) 2 and 7
- (c) 7 and 4
- (d) 2 and 4

Q3. If the ratio of principal and simple interest at 4% per annum for a specific time is 5: 2, find the number of years for which the principal was deposited.

- (a) 18 years
- (b) 10 years
- (c) 15 years
- (d) 12 years

Q4. In which year Sundarban in West Bengal has been declared as a Heritage Site?

- (a) 1987
- (b) 1999
- (c) 1969
- (d) 1979

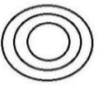
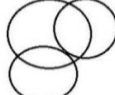

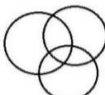
Q5. Which industry is known as 'Sunrise Industry'?

- (a) Construction Industry
- (b) Petrochemical Industry
- (c) Transport Industry
- (d) Computer Industry

Q6. The National Police Academy at Hyderabad is named after which of the following personalities?

- (a) Sardar Vallabhbhai Patel
- (b) Pandit Jawaharlal Nehru
- (c) Lal Bahadur Shastri
- (d) Mahatma Gandhi

**Q7. Explain the following relationship with the help of Venn diagram:
Singer, Musician, Doctor**

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

Q8. If height of Mercury in a Barometer decreases rapidly it denotes

- (a) chances of clean weather
- (b) chances of storm
- (c) chances of Sunny weather
- (d) chances of rain

Q9. CMM, EOO, GQQ, ? , KUU

- (a) ITT
- (b) GRR
- (c) ISS
- (d) GSS

Q10. The ratio of market prices of wheat and paddy is 2:3 and the ratio of quantities consumed in a family is 5: 4. Find the ratio of expenditure on wheat and paddy.

- (a) 8:15
- (b) 6:5
- (c) 1:1
- (d) 5:6

Q11. G's father is X's son. P is G's uncle. Y is X's brother. Then how is Y related to P?

- (a) Father
- (b) Uncle
- (c) Brother
- (d) Nephew

Q12. In human body blood does not clot in

- (a) Brain
- (b) Artery
- (c) Capillary
- (d) Vein

Q13. ABCDEFGHIJKLMNOPQRSTUVWXYZ.

Which letter in this alphabet is the eighth letter to the right of the letter which is tenth letter to the left of the last but one letter of the alphabet?

- (a) H
- (b) X
- (c) I
- (d) W

Q14. Which of the following is the world's oldest Capital City?

- (a) Accra
- (b) Canberra
- (c) Oslo
- (d) Damascus

Q15. Father is three times as old as his son. After twelve years, his age will be twice as that of the age of his son. What is the present age of the son?

- (a) 14 years
- (b) 10 years
- (c) 36 years
- (d) 12 years

Q16. A garrison of 500 men had provisions for 24 days. However, a reinforcement of 300 men arrived. The food will now last for

- (a) 18 days
- (b) 15 days
- (c) $17\frac{1}{2}$ days
- (d) 16 days

Q17. How many pairs of letters are there in the word 'CASTRAPHONE' which have as many letters between them in the word as in the alphabet?

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

Q18. How many two digit prime numbers are there?

- (a) Can't be determined
- (b) 25
- (c) 21
- (d) 23

Q19. Which state of India is the first state to start Coffee plantation?

- (a) Kerala
- (b) Karnataka
- (c) Andhra Pradesh
- (d) Tamil Nadu

Q20. Which temperature in Celsius scale represents Absolute Zero Temperature?

- (a) -373.15°C
- (b) -273.15°C
- (c) -237.15°C
- (d) 0°C

Q21. Whose Pen-name was 'Dhumketu'?

- (a) Satyajit Ray
- (b) Kaji Nazrul Islam
- (c) Sharat Chandra Chattopadhyay
- (d) Sunil Gangopadhyay

Q22. On which river Tehri Dam has been built?

- (a) Ichhamati
- (b) Ganges
- (c) Ravi
- (d) Iravati

Q23. Simplify:

$$(\sqrt{20} + \sqrt{1125} - \sqrt{567}) (\sqrt{500} + \sqrt{245} + 9\sqrt{7})$$

- (a) 567
- (b) 2012
- (c) 1445
- (d) 878

Q24. Which one of the following is not a Dwarf Planet?

- (a) Eris
- (b) Pluto
- (c) Ceres
- (d) Neptune

Q25. 12, 25, 37, 49, ?

- (a) 60
- (b) 69
- (c) 56
- (d) 65

Q26. Shyam borrowed some money from his friend at simple interest of 6% per annum. He returned his friend Rs. 15,600. After how much time did Shyam return the money if he borrowed Rs. 12,000?

- (a) 3.5 years
- (b) 8 years
- (c) 5 years
- (d) 2.5 years

Q27. Tungabhadra is a tributary of

- (a) Kaveri river
- (b) Krishna river
- (c) Godavari river
- (d) Brahmaputra river

Q28. A and B can do a piece of work in 10 and 15 days respectively. A alone did the work for 4 days and then B did it for 5 days. Thereafter C did the remaining work in 8 days. How long will they take to complete the work together?

- (a) 3 days
- (b) 5 days
- (c) 8 days
- (d) 7 days

Q29. Which of the following is known as Mixed gland?

- (a) Pancreas
- (b) Thyroid
- (c) Liver
- (d) Pituitari

Q30. If '+' means 'x', '÷' means '-', 'x' means '+' and '-' means '÷', then what is the value of $(2+27-3+2\times 3\div 2)$?

- (a) 39
- (b) 35
- (c) 27
- (d) 37

Q31. Who has won the India's Science Award, Bhatnagar Puroshkar for Chemistry in 2020?

- (a) Prof. Rajat Shubhra Hazra
- (b) Prof. Surajit Dhara
- (c) Prof. Surjendu Dutta
- (d) Prof. Jyotirmoyee Das

Q32. A mixture of dettol and water contains 80% of water. What volume of dettol is to be added to 60 litres of this mixture, so that the new mixture contains 75% of water?

- (a) 10 litres
- (b) 4 litres
- (c) 8 litres
- (d) 6 litres

Q33. If the following words are arranged in alphabetical order which word will come last?

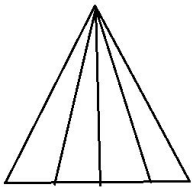
1. Abandon 2. Actuate 3. Accumulate 4. Acquit 5. Achieve

- (a) Achieve
- (b) Actuate
- (c) Acquit
- (d) Accumulate

Q34. Indian Oil Corporation's first 'Green Hydrogen' plant will be built at

- (a) Jamnagar Refinery
- (b) Mathura Refinery
- (c) Paradip Refinery
- (d) Haldia Refinery

Q35. How many triangles are there in the given figure?



- (a) 16
- (b) 10
- (c) 14
- (d) 12

Q36. About 80% of the coal reserves of India lie in the

- (a) Godavari Valley
- (b) Damodar Valley
- (c) Mahanadi Valley
- (d) Son Valley

Q37. Find the fourth proportional of the following numbers:

$$\frac{1}{3}, \frac{1}{6}, \frac{1}{9}, ?$$

- (a) $\frac{1}{27}$
- (b) $\frac{1}{18}$
- (c) $\frac{1}{6}$
- (d) $\frac{1}{3}$

Q38. During whose Governorship each Police Station of British India started functioning under Sub Inspector of Police?

- (a) Lord Mountbatten
- (b) Lord Cornwallis
- (c) Lord Bentinck
- (d) Lord Rippon

Q39. If 'X\$Y' means 'X is father of Y'; 'X#Y' means 'X is mother of Y'; 'XxY' means 'X is sister of Y', then how is D related to N in N#A\$BxD?

- (a) Can not be determined
- (b) Nephew
- (c) Granddaughter
- (d) Grandson

Q40. The Pompos grasslands are found in which continent?

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

Q41. If 27th September in a year is Saturday, then what day will be 27th October in the same year?

- (a) Sunday
- (b) Monday
- (c) Saturday
- (d) Thursday

Q42. Which one of the following is a Tax-free Sea port in India?

- (a) Cochin
- (b) Kandala
- (c) Mumbai-
- (d) Haldia

Q43. In 1943, Subhas Chandra Bose formed the Provisional Government of Free India at

- (a) Bangkok
- (b) Rangoon
- (c) Berlin
- (d) Singapore

Q44. Rashik walks 20m North. Then he turns right and walks 30 m. Then he turns right and walks 35m. Then he turns left and walks 15 m. Then he again turns left and walks 15 m. In which direction and how many meters away is he from his original position?

- (a) 45m East
- (b) 15m West
- (c) 30m West
- (d) 30m East

Q45. Whose biography is 'Romancing with life'?

- (a) Raj Kapoor
- (b) Dilip Kumar
- (c) Amitabh Bachchan
- (d) Dev Anand

Q46. If a seller sold two sarees at Rs. 400 each and made a profit of 20% on the first and a loss of 20% on the second, what is his total profit or loss on the whole?

- (a) 1% profit
- (b) No profit no loss
- (c) 4% profit
- (d) 4% loss

Q47. A began a business with Rs. 2,250 and was joined afterwards by B with Rs. 2,700. If the profits at the end of the year were divided in the ratio of 2: 1, after how much time B joined the business?

- (a) 3 months
- (b) 6 months
- (c) 7 months
- (d) 5 months

Q48. Which least number is divisible by 12, 15, 20 and 25?

- (a) 600
- (b) 300
- (c) 150
- (d) 200

Q49. Which of the following is a browser to access Dark Web?

- (a) Tor
- (b) Google Chrome
- (c) ios
- (d) Linux

Q50. 45 men can produce 10000 electric bulbs in 12 days in a co-operative concern. The concern got an order to produce 10000 electric bulbs in 9 days. How many more men would be employed to meet the order?

- (a) 10
- (b) 60
- (c) 55
- (d) 15

Q51. What is Fire Ice ?

- (a) Methylene Hydrate
- (b) Methane Hydrate
- (c) Propene Hydrate
- (d) Ethane Hydrate

Q52. A sum, at the compound rate of interest, becomes $2\frac{1}{2}$ times in 6 years. The same sum becomes how many times in 18 years?

- (a) $\frac{125}{8}$
- (b) $\frac{5}{2}$
- (c) $\frac{625}{16}$
- (d) $\frac{25}{4}$

Q53. Who Named Kolkata as 'Alinagar'?

- (a) Bahadur Shah Alam
- (b) Siraj Ud Duolla
- (c) Mir Kashim
- (d) Mir Jafar

Q54. The 'Pegasus' spyware, allegedly used for surveillance of phones recently, was developed by

- (a) France
- (b) Israel
- (c) USA
- (d) Canada

Q55. Six friends, namely, A, B, C, D, E, F are sitting on a bench. E and F are sitting in the middle. A and B are sitting in the furthest corner. If C is sitting just left to A, then who is sitting just right to B?

- (a) E
- (b) D
- (c) C
- (d) A

Q56. The concept of Welfare State is included in the Constitution of India in the

- (a) Directive Principles of State Policy
- (b) Preamble
- (c) Fourth Schedule
- (d) Fundamental Rights

Q57. M men agreed to purchase an article for Rs. R. If 4 men drop out, how much more (in Rs.) will each have to contribute to purchase the article at the same price?

- (a) $\frac{4M - R}{4R}$
- (b) $\frac{4R}{M^2 - 4M}$
- (c) $\frac{4M}{R^2 - 4R}$
- (d) $\frac{M^2 - 4R}{MR}$

Q58. Buddhist religious scripture Tripitaka was written in

- (a) Hindi
- (b) Pali
- (c) Sanskrit
- (d) Bengali

Q59. The tenure of each Member of Legislative Council is

- (a) 5 years
- (b) 3 years
- (c) 6 years
- (d) 2 years

Q60. Choose the alternative which closely resembles the water-image of the given word:

NUCLEAR

- (a) ИПСГЕАЪ
- (b) ВАЕГСУИ
- (c) ИУСГЭАЪ
- (d) ИПСТЕАЪ

Q61. The length of a hall is 5m more than its breadth. If the area of the floor of the hall is 84 m², what are the length and breadth of the hall?

- (a) 14m and 6m
- (b) 11m and 6m
- (c) 13m and 8 m
- (d) 12m and 7m

Q62. Who was the first recipient of Padma Vibhushan?

- (a) Pandit Jawaharlal Nehru
- (b) Nand Lal Bose
- (c) Dr. Bir Bhan Bhatia
- (d) Satyandra Nath Bose

Q63. The average of three numbers is 80. The first number is 10 more than twice the second and the second number is 10 less than thrice the third. What is the lowest number?

- (a) 66
- (b) 68
- (c) 28
- (d) 26

Q64. Padmashri award winner Mouma Das is associated with which field of Sports?

- (a) Cricket
- (b) Badminton
- (c) Table Tennis
- (d) Lawn Tennis

Q65. A sum was put at simple interest at a certain rate for 3 years. Had it been put at 1% higher rate; it would have fetched Rs. 5,100 more. The sum is

- (a) Rs. 1,20,000
- (b) Rs. 1,70,000
- (c) Rs. 1,25,000
- (d) Rs. 1,50,000

Q66. INDRA 2021 was scheduled to be held at .

- (a) Singapore
- (b) Russia
- (c) Japan
- (d) India

Q67. Who wrote the play 'Mudrarakshasha'?

- (a) Kalhan
- (b) Shudrak
- (c) Vishakhdutta
- (d) Kalidas

Q68. How many 4's are there preceded by 7 but not followed by 3 in the following number series?

5 9 3 2 1 7 4 2 6 9 7 4 6 1 3 2 8 7 4 1 3 8 3 2 5 6 7 4 3 9 5 8 2 0 1 8 7 4 6 3

- (a) Five
- (b) Four
- (c) Six
- (d) Three

Q69. If number 2 is in bottom, then which number is on top on a dice?



- (a) 6
- (b) 5
- (c) 1
- (d) 3

Q70. The process of cell division in Amoeba is termed as

- (a) Mitosis
- (b) Amitosis
- (c) Miosis
- (d) Meiosis

Q71. If time taken to travel between two stations has to be reduced by 20%, then by what per cent would the speed of the train has to be increased?

- (a) 15%
- (b) 25%
- (c) 30%
- (d) 20%

Q72. Who became the first Indian woman to win Two Olympic medals?

- (a) Lovlina Borgohain
- (b) P.T. Usha
- (c) Saikhom Mirabai Chanu
- (d) P.V. Sindhu

Q73. HCF of two numbers is 32 and their LCM is 1760. What is the smaller number?

- (a) 102
- (b) 160
- (c) 152
- (d) 110

Q74. Recently in which state of India, 300 years old Sati Stone was unearthed?

- (a) Tamil Nadu
- (b) Madhya Pradesh
- (c) Haryana
- (d) Gujarat

Q75. Torr is the Unit of

- (a) Work
- (b) Pressure
- (c) Momentum
- (d) Force

Q76. If $\frac{3}{10}$ th of a road is 45 km, what is the length of $\frac{2}{5}$ th of that road?

- (a) 26 km
- (b) 60 km
- (c) 68 km
- (d) 66 km

Q77. Which of the following is not a bacteria related disease?

- (a) Influenza
- (b) Typhoid
- (c) Pneumonia
- (d) Diphtheria

Q78. Using duplicate application to collect user password is called

- (a) E-bombing
- (b) Bullying
- (c) Stalking
- (d) Phishing

Q79. If $1+4=9$, $2+8=18$, $3+6=15$, then the value of $7+8=?$

- (a) 32
- (b) 41
- (c) 30
- (d) 23

Q80. Which of the following is the longest river?

- (a) Godavari
- (b) Ganges
- (c) Brahmaputra-
- (d) Indus04:27 PM

Q81. Who of the following was named 'Jagat Seth' by East India Company?

- (a) Umichand
- (b) Manikchand
- (c) Khoja Wajid
- (d) Fatikchand

Q82.

72	24	6
96	16	12
108	?	18

- (a) 20
- (b) 12
- (c) 18
- (d) 16

Q83. Which Indian actor was recently honoured with the Crystal Award of the World Economic Forum?

- (a) Anushka Sharma
- (b) Priyanka Chopra
- (c) Kareena Kapoor
- (d) Deepika Padukone

Q84. At what rate of compound interest per annum, the amount of Rs. 10,000 for 2 years is Rs. 12,100?

- (a) 11%
- (b) 10%
- (c) 5%
- (d) 20%

Q85. From the given alternative words, select the word which cannot be formed using the letters of the given word:

PHOTOSYNTHETIC

- (a) COTTON
- (b) THOSE
- (c) PRONE
- (d) SCENT

Q86. 4 O'clock rain is prevalent in

- (a) Huang He basin
- (b) Amazon and Congo basin
- (c) Yenisei basin
- (d) Nile basin

Q87. Which state has recently declared and celebrated a particular day as 'Desh Nayak Divas'?

- (a) Odisha
- (b) Bihar
- (c) Jharkhand
- (d) West Bengal

Q88. Mohini is taller than Nita but not shorter than Sarita. Sarita and Malini are of the same height. Mohini is shorter than Hema. Among them, who is the second tallest?

- (a) Can not be determined
- (b) Mohini
- (c) Hema
- (d) Nita

Q89. If a person sells an article at a profit of 5%, he gains Rs. 15 more than if he sells it at a loss of 5%. What is the cost price of the article?

- (a) Rs. 125
- (b) Rs. 150
- (c) Rs. 120
- (d) Rs. 105

Q90. Which National Highway of India is the longest?

- (a) NH 44
- (b) NH 17
- (c) NH 60
- (d) NH 10

Q91. Which state of India has highest percentage of forest area?

- (a) Madhya Pradesh
- (b) Mizoram
- (c) Nagaland
- (d) Meghalaya

Q92. If ACID is written as 1C3D, PAMPER is written as P1MP2R, then how will BOMBAY be written?

- (a) B4MB2Y
- (b) B4MB1Y
- (c) B5MB2Y
- (d) B3MB1Y

Q93. Sportsperson Deepika Kumari, who recently reclaims world no. 1 ranking is associated with

- (a) Wrestling
- (b) Archery
- (c) Table Tennis
- (d) Kabaddi

Q94. Fill in the blanks with appropriate set of letters:

_a_bca_dabba_bac_c_a

- (a) acbdab
- (b) adcdba
- (c) acbdba
- (d) acdbba

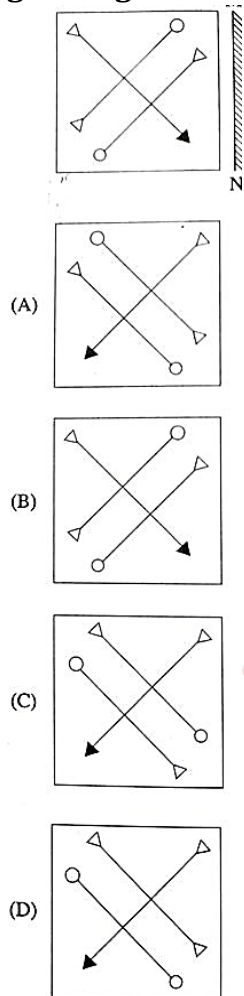
Q95. A tea seller blends Tea A worth Rs. 250 per kg with Tea B worth Rs. 150 per kg in a ratio of 2:5 and sells the mixed blend at Rs. 200 per kg. What will be his percentage of profit?

- (a) 18%
- (b) 12%
- (c) 10%
- (d) 15%

Q96. Who is the highest Law Officer in any state of India?

- (a) Secretary General, Law Department
- (b) Advocate General
- (c) Solicitor General
- (d) Attorney General

Q97. If a mirror is placed on the line MN, then which of the answer figures is the right image of the given figure?



Q98. Bhaba Atomic Research Center is situated in which state?

- (a) Maharashtra
- (b) Madhya Pradesh
- (c) Telengana
- (d) Odisha

Q99. A man standing on the platform finds that an Express train passes him in 15 secs. If the speed of the train is 60 km/hr, what is the length of the train?

- (a) 300 meters
- (b) 250 meters
- (c) 150 meters
- (d) 200 meters

Q100. Who was the Director General of National Government in Tamluk?

- (a) Biren Sashmal
- (b) Ajoy Mukherjee
- (c) Satish Chandra Samanta
- (d) Sushil Dhara

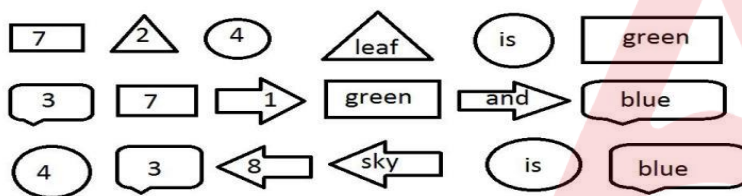
Solution

S1.Ans.(c)

Sol. The Hindalco plant at Muri is located near Chhota Muri on the banks of the Suvarnarekha river, 65 km from Ranchi, the capital of Jharkhand state.

S2.Ans.(d)

Sol.



From the above image it is clear that leaf is 2 and 'is' is 4
So the correct answers are 2 and 4.

S3.Ans.(b)

Sol. Assume principal Rs $5x$ and interest Rs $2x$.

Time t years

According to the terms,

$$\frac{5x \times 4 \times t}{100} = 2x$$

$$\Rightarrow t = 10$$

So, time (t) is 10 years

S4.Ans.(a)

Sol. The Sundarbans were declared a World Heritage Site in 1987 by UNSECO.

UNSECO (United Nations Educational, Scientific and Cultural Organization).

Establishment - 16 November 1947.

Headquarters - Paris, France.

S5.Ans.(d)

Sol. Those industries that develop or grow very quickly are called sunrise industries.

Among the above options, the development of computer industry or information industry is faster so computer industry falls under sunrise industry.

S6.Ans.(a)

Sol. Vallabhbhai Patel was an Indian scholar and nationalist leader. He was popularly known as Sardar Patel. He is called Iron Man of India. He was the first Deputy Prime Minister of independent India.

S7.Ans.(d)

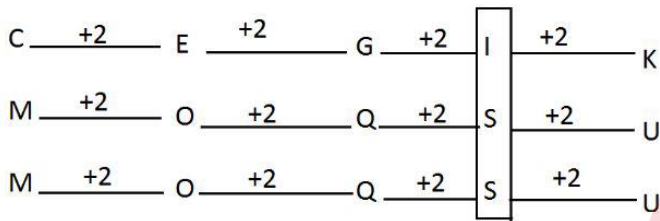
Sol. singer-Can be a musician and can also be a doctor
Musicians - singers and doctors too.
Doctors can be singers and musicians too
Hence our correct answer would be (d)

S8.Ans.(b)

Sol. If the mercury in the barometer falls rapidly, the probability of a storm can be predicted. A barometer is an instrument that measures air pressure. Barometer was invented by Scientist Torricelli.

S9.Ans.(c)

Sol.



S10.Ans.(d)

Sol. Provided

Wheat: Paddy = 2:3

Family needs = 5:4

Product Cost = Product Consumption × Product Rate

Cost of wheat = 2 × 5 = 10 Cost of paddy = 3 × 4 = 12

Therefore,

Cost Ratio = Cost of Wheat : Cost of Paddy

Expenditure ratio = 10 : 12 = 5 : 6

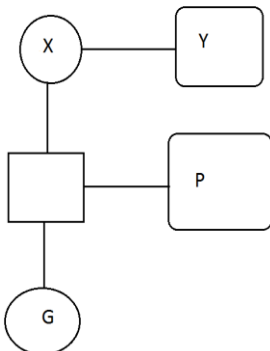
The cost ratio of wheat and paddy is 5 : 6

S11.Ans.(b)

Sol. Genealogy:

G's father is X's son.

Y is X's brother and P is G's uncle.



Here, 'Y' is uncle of 'P'

So, the correct answer is "uncle".

S12.Ans.(a)

Sol. No blood clots in the human brain because RBC contain oxygen. The glycocalyx layer of the endothelium repels clotting agents and platelets, preventing clotting.

S13.Ans.(d)

Sol. given,

ABCDEFGHIJKLMNOPQRSTUVWXYZ.

1) The tenth letter to the left of the last letter of the alphabet is:

ABCDEFGHIJKLMNOPQRSTUVWXYZ **O** PQRSTUVWXYZ

2) The eighth letter to the right of the tenth letter to the left of the last letter of the alphabet is:

ABCDEFGHIJKLMNOPQRSTUVWXYZ **W** XYZ

So, the correct answer is "W".

S14.Ans.(d)

Sol. The capital of Syria, Damascus, is the oldest capital in the world. Damascus was founded in the third millennium BC, making it one of the oldest cities in the Middle East. Archaeologists have been able to show through excavations that the area was first populated between 4,000 and 10,000 BC.

S15.Ans.(d)

Sol. Let son's present age be x years.

Hence father's present age will be 3x years.

After 12 years the father's age will double the son's age.

According to the terms,

$$2(x+12) = 3x+12$$

$$\text{Or, } 2x+24 = 3x+12$$

$$\text{Or, } x = 12$$

Hence son's current age is 12 years.

S16.Ans.(b)

Sol. $(500+300) =$ That food of 800 soldiers will last -

$$\frac{24 \times 500}{800} = 15 \text{ Days}$$

S17.Ans.(a)

Sol.

Letters	C	A	S	T	R	A	P	H	O	N	E
Position	3	1	19	20	18	1	16	8	15	14	5

Anterior pair: ST

Posterior pair: NO, NT, OT, HE, PR

Here, the number of pairs is '6'.

So, the correct answer is "6".

S18.Ans.(c)

Sol. Two digit prime numbers are -11,13,17,19,23,29,31,37,41,43,47,53,59,61,67,71,73,79,83,89,97

Two digits have a total of 21 prime numbers.

S19.Ans.(b)

Sol. Coffee cultivation was first practiced in the Indian state of Karnataka.

Karnataka

Establishment - 01-11-1996

Capital - Bangalore

Biggest - City Bangalore

District - 31

Governor - Bajubhai Bala

Chief Minister – BS Yeddyurappa (BJP)

S20.Ans.(b)

Sol. Absolute Zero is the lowest possible temperature in the universe. Its value on a thermometer is 0 Kelvin or -273.15 degrees Celsius or -460 degrees Fahrenheit. It is not possible for the universe to have a lower temperature than this.

S21.Ans.(b)

Sol. 'Dhumketu' was the pseudonym of Kazi Nazrul Islam.

Author / Poet / Personality - Pseudonym

Vidyasagar - Kasyachit is suitable, nephew.

Bankimchandra Chatterjee - Kamalakant,

Satyendranath Dutta - Navakumar, Kabiratna, Ashitipar Sharma, Trivikram Burman, Kalamgir.

Saratchandra Chatterjee - Anila Devi, Srikanth Sharma.

Saratchandra Pandit - Dadathakur.

Rabindranath Tagore - Annakali Pakdashi, Bhanusingha, Dikshunya Bhattacharya, Aprakta Chandra, Bhaskar.

S22.Ans.(b)

Sol. The name of the highest dam in India is Teheri Dam. This dam is located on the Bhagirathi River in Jharkhand state with height of 260.5 meters and length of 575 meters.

S23.Ans.(d)

$$\begin{aligned} \text{Sol. } & (\sqrt{20} + \sqrt{1125} - \sqrt{567}) (\sqrt{500} + \sqrt{245} + 9\sqrt{7}) \\ & = (2\sqrt{5} + 15\sqrt{5} - 9\sqrt{7}) (10\sqrt{5} + 7\sqrt{5} + 9\sqrt{7}) \\ & = (17\sqrt{5} - 9\sqrt{7}) (17\sqrt{5} + 9\sqrt{7}) \\ & = (172 \times 5 - 92 \times 7) \\ & = 1445 - 567 \\ & = 878 \end{aligned}$$

S24.Ans.(d)

Sol. Neptune is not a 'dwarf planet'.

There are some cosmic objects in the solar system which can neither be called planets nor satellites. Not planets because they are smaller than any normal planet. Neither are satellites because they do not revolve around a planet. These are called dwarf planets. So far, scientists have found a total of five dwarf planets in the solar system. Of these, Pluto is the best known. The other four are: Eris, Ceres, Makemake and Haumea.

S25.Ans.(a)

Sol. Second number - first number = 25 - 12 = 13

Third number - second number = 37 - 25 = 12

Fourth number - third number = 49 - 37 = 12

Hence the fifth number will be 59 + 11 = 60

S26.Ans.(c)

Sol. Principal = Rs 12000

Interest + Principall = Rs.15600

Hence total interest = Rs (15600-12000)

= Rs 3600

Let, Shyam borrowed money for t years

According to the terms,

$$\frac{12000 \times 6 \times t}{100} = 3600$$

$$\Rightarrow t = 5$$

S27.Ans.(b)

Sol. The most important tributary of the Krishna River is the Tungabhadra River, formed by the confluence of the Tunga River and the Bhadra River originating in the Western Ghats. Other tributaries include Koyna River, Bhima, Malprabha, Ghatprabha, Yerla, Warna, Dindi, Musi and Dudhganga.

S28.Ans.(b)

Sol. A complete the work 10 days.

B complete the work 15 days

Complete work = 30 units (10, 15 L.C.M.)

Hence efficiency of A = 3

and efficiency of B = 4

A will work $3 \times 4 = 12$ units in 4 days

B will work $2 \times 5 = 10$ units in 5 days

A and B do total work = $(10+12) = 22$ units

Remaining work ie $(30-22)$ unit

C work 8 unit in 8 days

Hence efficiency of C is 1

Now A,B and C will take time to complete the work $30 \div (3+2+1)$ days

= $30 \div 6$ days

= 5 days

S29.Ans.(a)

Sol. Pancreas is called mixed gland.

Mixed Gland :- All the glands which consist of both endocrine and exocrine glands are called Mixed Gland. For example - pancreas, sperm, ovary.

Endocrine Glands :- Those glands which do not have any secretory ducts and whose secreted chemicals are directly secreted into the blood and reach the target cells are called endocrine glands. Eg - Pituitary gland.

Exocrine Glands :- Those glands which secrete chemical substances are carried to the place of action through their own ducts, are called exocrine glands. For example - salivary gland, pancreas, liver etc.

S30.Ans.(d)

Sol. Given,

$$2 + 27 - 3 + 2 \times 3 \div 2$$

By changing the sign

$$2 \times 27 \div 3 \times 2 + 3 - 2$$

$$= 2 \times 9 \times 2 + 1$$

$$= 36 + 1 = 37$$

S31.Ans.(d)

Sol. Prof. Jyotirmayi Das has received the 'Bhatnagar Award' in Chemistry in 2020.

The Shanti Swarup Bhatnagar Award is given annually for outstanding contributions to science and technology.

List of Shanti Swarup Bhatnagar Awards 2022.

Biological Sciences - Dr. Amit Singh.

Chemical Science - Dr. Kanishk Biswas.

Earth, Atmosphere-Ocean and Planetary Sciences - Dr. Vinay Kumar Saikia.

Engineering Science - Dr. Devdeep Mukherjee.

Mathematical Sciences - Dr. Anish Ghosh.

Medical Sciences - Dr. Jimon Panniamkal.

Physical Science - Dr. Kanak Saha.

S32.Ans.(b)

Sol. 80% water in a mixture of ditol and water in the initial mixture.

Dettol : Water = 20:80 = 1:4

75% water in final mix

Dettol : Water = 25:75 = 1:3

The initial and final mixture proportions are equalized

Initial mixture Dettol : Water = 3:12

Final mixture Dettol : Water = 4:12

Hence 1 part of Dettol change

Total initial volume (3+12) = 15 parts = 60 litres

1 part = 4 liters

So Dettol should be mixed $1 \times 4 = 4$ litres.

S33.Ans.(b)

Sol.

1. Abandon 2. Actuate 3. Accumulate 4. Acquit 5. Achieve

1st - Abandon, 2nd - Accumulate, 3rd - Achieve, 4th - Acquit

5th (Last) - Actuate

S34.Ans.(b)

Sol. Indian Oil Corporation's first 'Green Hydrogen' plant is Mathura Refinery.

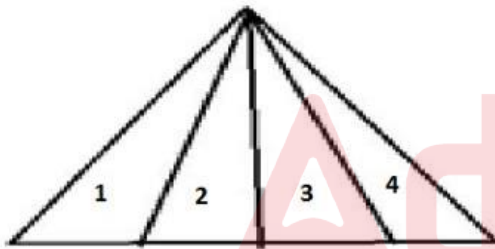
Indian Oil Corporation Limited (IOCL).

Established - 30 June 1959.

Headquarters - New Delhi.

S35.Ans.(b)

Sol.



Triangle = $1+2+3+4 = 10$

S36.Ans(b)

Sol. 80% of India's coal reserves are located in the Damodar Valley.

More than 80% of all reserves of Gondwana-age coal in India lie in the Damodar Valley. Jharkhand tops the list in terms of coal production and reserves. India's primary energy source is coal.

S37.Ans(b)

Sol. The fourth fraction

$$= \frac{\frac{1}{6} \times \frac{1}{9}}{\frac{1}{3}} = \frac{1}{6} \times \frac{1}{9} \times 3 = \frac{1}{18}$$

S38.Ans.(b)

Sol. During the tenure of the Governor General, Lord Cornwallis, every police station in British-ruled India began to be managed under a Sub-Inspector.

Lord Cornwallis' Police System-

Earlier, the responsibility of maintaining law and order in rural areas was in the hands of rural landlords. Cornwallis abolished this system and entrusted the maintenance of law and order to a well-organized police force. He created the post of Police Commissioner to maintain law and order in Kolkata. Several police stations were established in the districts. Constables along with constables were appointed in each police station. A number of posts of Superintendent of Police were created in the cities and given responsibility for law and order. Their expenses were borne by the government. For this he made many rules of conduct. These are known as Cornwallis Code.

S39.Ans.(a)

Sol. Whether D is male or female is not clearly stated in the question, so it is not possible to determine.

S40.Ans.(a)

Sol. 'Pompus' grasslands are found in the South American continent.

Grasslands are known by different names in different parts of the world. Known as the "Prairies" in the Midwest of the United States. Known as 'Pompus' in South America. African grasslands are known as savannas. On the other hand, the grasslands of Central Eurasia are known as steppes.

S41.Ans.(b)

Sol. Total number of days from 27th September to 27th October

$$= (3+27) \text{ days}$$

$$= 30 \text{ days}$$

Now dividing 30 days by 7 gives 2 odd days.

So if 27th September falls on Saturday then 27th October will be two days after Saturday i.e. Monday

S42.Ans.(c)

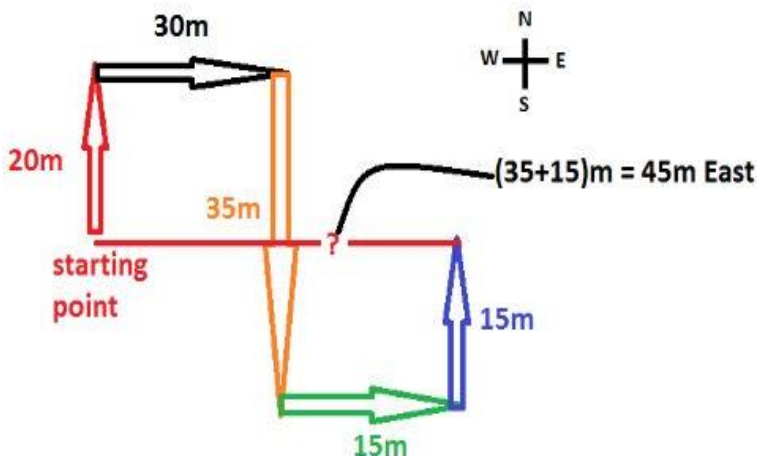
Sol. Mumbai Port is a duty free port in India. India has 13 major ports. Mumbai Port has played an important role in the development of trade and commerce of the country. It is the largest port in India and is located on the west coast of India.

S43.Ans.(d)

Sol. In Singapore, Subhash Chandra Bose formed the first Provisional Government of independent India. On 21 October 1943, Subhash Chandra Bose announced the formation of the Provisional Government of Independent India in Singapore. It was called Azad Hind. The Indian National Army (INA) was the army of the Azad Hind government.

S44.Ans.(a)

Sol.



Rashik is currently 45 meters east of its starting point.

S45.Ans.(d)**Sol.** 'Romancing with life' Dev Anand's biography.

Dev Anand, a well-known Bollywood actor. His full name is Dharam Devdatta Pishorimal Anand. He was an actor, film maker and film director at the same time. Dev Anand entered the world of Bollywood in 1946 with the movie 'Hum Ek Hai'.

S46.Ans.(d)**Sol.** Overall his loss

$$= +20 - 20 - \frac{20 \times 20}{100}$$

$$= -4\%$$

Negative sign means loss.

S47.Ans.(c)**Sol.** Suppose B has done business for x months.

Ratio of A and B's capital

$$2250 \times 12 : 2700x$$

$$= 10 : x$$

According to the terms,

$$\frac{10}{x} = \frac{2}{1}$$

$$\Rightarrow x = 5$$

Therefore, B has done business for 5 months.

Then B joined the business after $(12-5) = 7$ months.**S48.Ans.(b)****Sol.** L.C.M of 12, 15, 20 and 25 = $2 \times 2 \times 3 \times 5 \times 5 = 300$

From the given options, the multiples of 300 are 300 and 600

∴ Least number divisible by 12, 15, 20 and 25 is 300.

S49.Ans.(a)**Sol.** Dark Web can be accessed with the help of Tor Browser.

The dark web is a part of the Internet that is not visible to search engines and requires the use of an anonymous browser called Tor to access.

S50.Ans.(d)**Sol.** Total man required to make 10000 bales in 9 days

$$= \frac{45 \times 12 \times 10000}{9 \times 10000}$$

$$= 60$$

Therefore additional people have to be employed $(60-45) = 15$ people.

S51.Ans.(b)

Sol. The chemical name of 'Fire Ice' is methane clathrate, also known as methane hydrate. Methane hydrate is a white ice-like solid. Methane hydrate is formed when methane gas comes into contact with water at high pressure and low temperature. Methane hydrate is used to transport and store natural gas.

S52.Ans.(a)**Sol.** $2\frac{1}{2}$ times in 6 years

$$= \frac{5}{2}$$

Will be in 12 years

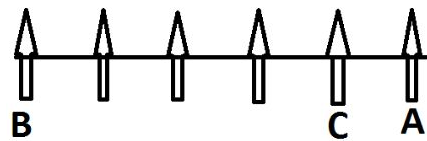
$$\frac{5}{2} \times \frac{5}{2} = \frac{25}{4}$$

Will be in 18 years

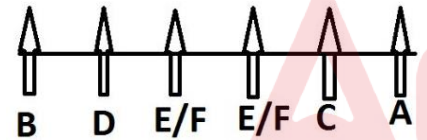
$$\frac{25}{4} \times \frac{5}{2} = \frac{125}{8}$$

S53.Ans.(b)**Sol.** Siraj-ud-Daulah renamed Calcutta as Alinagar. Robert Clive and Siraj-ud-Daulah signed the Treaty of Alinagar on 9 February 1757. During the war, the Nawab named Calcutta as Alinagar.**S54.Ans.(b)****Sol.** Recently, the complaint of using the software called 'Pegasus' for hacking the phone has been prepared in Israel.**S55.Ans.(b)****Sol.** Six friends named A, B, C, D, E, F are sitting on a bench.

1) C sits to the immediate left of A, and A and B sit at the farthest corners.



2) E and F are sitting in the middle.



Here, 'D' sits just to the right of 'B'.

So, the correct answer is "D".

S56.Ans.(a)**Sol.** Fundamental rights, guiding principles of state policy, and fundamental duties are all enshrined in the Indian Constitution. A form of government known as the "welfare state" is one in which the government actively protects and advances the economic and social welfare of its people.**S57.Ans.(b)****Sol.** Given:

'M' number of people agree to buy a product for 'R'

4 people turn away from buying.

Calculation:

$$\text{Each person's contribution} = \frac{R}{M}$$

Contributed by 4 people who moved

$$= \frac{R}{M-4}$$

now,

critical contribution

$$\Rightarrow \frac{RM - RM + 4R}{M(M-4)}$$

$$\frac{4R}{M^2 - 4M}$$

S58.Ans.(b)

Sol. Tripitaka is the name of the holiest book of Buddhism. It is written in Pali.

S59.Ans.(c)

Sol. The term of the members of the Legislative Council is 6 years. Article 169 of the Indian Constitution describes its institutional structure.

S60.Ans.(a)

Sol. NUCLEAR water-image reflection

ИПСГЕВЪ

S61.Ans.(d)

Sol. Given:

The length of the hall is 5 meters more than the width of the hall.

Explanation:

Let the width be x

The length will be $x + 5$

Area of rectangle = length \times width

$$84 = (x+5) \times x$$

$$x^2 + 5x - 84 = 0$$

$$x = -12 \text{ or } x = 7$$

The length of any object will be a positive integer therefore, $x = 7$

If the width is 7, then the length will be 12.

\therefore The length and width of the hall are 12 meters and 7 meters respectively.

S62.Ans.(d)

Sol. Satyendranath Bose was the first recipient of the 'Padma Vibhushan' award. Awarded Padma Vibhushan in 1954.

S63.Ans.(d)

Sol. If the average of the three numbers is 80 then the sum of the three numbers will be = $80 \times 3 = 240$

Let third number = x

Second number will be = $3x-10$

First number will be = $2(3x-10) + 10$

$$= 6x-20+10$$

$$= 6x-10$$

According to the terms,

$$6x - 10 + 3x - 10 + x = 240$$

$$\text{Or, } 10x = 240 + 20$$

$$\text{Or, } x = 26$$

Hence the smallest number will be 26

S64.Ans.(c)

Sol. Indian table tennis player Mouma Das. At the Commonwealth Games, Mouma Das won a gold medal in the women's team event in 2018. He received the Arjuna Award in 2013.

S65.Ans.(b)

Sol. Let principal = P and annual interest rate = r%

According to the terms,

$$\frac{P \times 3 \times (r+1)}{100} - \frac{P \times 3 \times r}{100} = 5100$$

$$\Rightarrow \frac{3P}{100}(r+1-r) = 5100$$

$$\Rightarrow \frac{3P}{100} = 5100$$

$$\Rightarrow P = 170000$$

∴ Principal Rs. 170000.

S66.Ans.(b)

Sol. The 12th INDRA 2021 is a joint Indo-Russian military exercise held from 1st August to 13th August 2021 in Volgograd, Russia.

S67.Ans.(c)

Sol. The play 'Mudrarakshas' is written by Visakhdatta.

S68.Ans.(b)

Sol. 5932174269746132874138325674395820187463

→ The correct answer is four.

S69.Ans.(a)

Sol. On the first and third dice, 1 and 4 are common.

The first dice is rotated 90° counterclockwise, but we get the third dice.



The opposite of 2 is 6

∴ Here, if the number 2 is on the bottom, then the number '6' will be on the top of a die.

So, the correct answer is "6".

S70.Ans.(b)

Sol. Amitosis is a type of cell division process in organisms, mainly seen in lower organisms (eg unicellular organisms - bacteria, yeast, amoeba etc.). This is also called direct cell division.

S71.Ans.(b)**Sol.** The speed of the train should be increased

$$\frac{20}{(100 - 20)} \times 100$$

$$= \frac{20}{80} \times 100$$

$$= 25\%$$

S72.Ans.(d)**Sol.** P.V. Sindhu is an Indian badminton player. He won a bronze medal at the 2020 Tokyo Olympics and a silver medal at the 2016 Rio Olympics. He has received Arjuna Award (2013), Major Dhyan Chand Khel Ratna (2016), Padma Shri (2015), and Padma Bhushan (2020).**S73.Ans.(b)****Sol.** Given:

HCF-32

LCM-1760

LCM is always divisible by HCF

$$= 1760 \div 32$$

$$= 55$$

Co-factors of the obtained number are 11 and 5.

Then, multiply each co-factor with HCF.

$$11 \times 32 = 352$$

$$5 \times 32 = 160$$

The smaller number is 160.

S74.Ans.(a)**Sol.** A Sati stone at least 300 years old has been discovered by construction workers in Tamil Nadu's Tirupur city. The stone was discovered just one meter below the surface. The stone is 45 cm wide and 75 cm high. Which is similar to the ancient practice of Satidaha.**S75.Ans.(b)****Sol.** Torr, unit of pressure.**S76.Ans.(b)**

Sol. $\frac{2}{5}$ part =

$$\frac{45 \times 10 \times 2}{3 \times 5} = 60$$

$$\frac{2}{5} \text{ part} = 60 \text{ km.}$$

S77.Ans.(a)**Sol.** Influenza is a respiratory disease caused by the virus.**S78.Ans.(c)****Sol.** Determining user passwords using duplicate applications is called stalking.

S79.Ans.(d)**Sol.**

$$1 + 4 = 9 \rightarrow 1 + 4 + 4 = 9$$

$$2 + 8 = 18 \rightarrow 2 + 8 + 8 = 18$$

$$3 + 6 = 15 \rightarrow 3 + 6 + 6 = 15$$

$$7 + 8 = ? \rightarrow 7 + 8 + 8 = 23$$

S80.Ans.(d)**Sol.** The length of Godavari river is 1465 km.

The length of river Ganga is 2704 km.

The length of the Brahmaputra river is 2850 km.

The length of Indus river is 3200 km.

S81.Ans.(b)**Sol.** Manikchand was named 'Jagat Seth' by the East India Company.**S82.Ans.(b)**

Sol. $72 \div 6 = 12$, $12 \times 2 = 24$

$96 \div 12 = 8$, $8 \times 2 = 16$

$108 \div 18 = 6$, $6 \times 2 = 12$

S83.Ans.(d)**Sol.** Recently, Indian actor Deepika Padukone won the 'Crystal Award' at the International Economic Forum. Well-known Bollywood star Deepika Padukone received the Crystal Award at the 50th annual meeting of the World Economic Forum in Davos, Switzerland. She received the honor in recognition of her work to raise awareness of the value of mental health.**S84.Ans.(b)****Sol.** Let annual rate of interest = $r\%$

According to the terms,

$$10000\left(1 + \frac{r}{100}\right)^2 = 12100$$

$$\Rightarrow r = 10\%$$

S85.Ans.(c)**Sol.** The word 'PRONE' cannot be formed from the word "PHOTOSYNTHETIC", because the letter 'R' is used in the given word 'PRONE'.**S86.Ans.(b)****Sol.** 4 o'clock rain is seen in the Amazon and Congo basins.**S87.Ans.(d)****Sol.** West Bengal has decided to celebrate Netaji Subhas Chandra Bose's birth anniversary on January 23 as "Desh Nayak Divas". The Central Government has decided to observe Netaji Subhas Chandra Bose's birthday as "Parakrama Divas".

S88.Ans.(b)

Sol. 1) Mohini is taller than Neeta, but not shorter than Sarita.

Mohini > Nita > Sarita

2) Sarita and Malini are of the same height, and Mohini is taller than Hemar.

Hema > Mohini > Nita > Sarita = Malini

Here, 'Mohini' is the second highest among them.

So, the correct answer is "Mohini".

S89.Ans.(b)

Sol. Suppose, Cost price = Rs. x

According to the terms,

$$\frac{105x}{100} - \frac{95x}{100} = 15$$

$$\Rightarrow \frac{10x}{100} = 15$$

$$\Rightarrow x = 150$$

Cost price = Rs. 150.

S90.Ans.(a)

Sol. NH-44 is the longest national highway in India with a length of 3745 km from Srinagar in the north to Kanyakumari in the south. This highway connects 11 states and around 30 important cities.

S91.Ans.(b)

Sol. The Indian state of Mizoram has the highest percentage of forest cover. The top five states are Mizoram, Arunachal Pradesh, Meghalaya, Manipur and Nagaland.

S92.Ans.(b)

Sol. Vowel order value :

A	E	I	O	U
↓	↓	↓	↓	↓
1	2	3	4	5

Here is the logic to follow:

Consonants are represented as the same letter according to their alphabetical positional value.

The vowels in a given word are represented in vowel order.

ACID is written as 1C3D.

A	C	I	D
↓	↓	↓	↓
1	C	3	D

And

PAMPER is written as P1MP2R.

P	A	M	P	E	R
↓	↓	↓	↓	↓	↓
P	1	M	P	2	R

Similarly,

BOMBAY would be written as:

B O M B A Y
 ↓ ↓ ↓ ↓ ↓ ↓
 B 4 M B 1 Y

So, the correct answer is "B4MB1Y"

S93.Ans.(b)

Sol. Deepika Kumari is an Indian female archer. He is currently ranked 5th in the world and is a former No. 1 archer. She won the gold medal in the women's individual event at the 2010 Commonwealth Games. She also won the gold medal in the women's team event along with Dola Banerjee and Bombayla Devi.

S94.Ans.(d)

Sol. _a_bca_dab/ba_bac_c_a
aacbcabdabbadbacbcaa
 = acbdba

S95.Ans.(b)

Sol. Given:

A, Tea = 250 rupees per kg

B, Tea = Rs.150 per kg

Ratio = 2 : 5

Selling price = Rs.200 per kg

Calculation:

Cost price = $(250 \times 2) + (150 \times 5) = 500 + 700 = \text{Rs.}1250$

Selling Price = $200 \times (2 + 5) = 200 \times 7 = \text{Rs.}1400$

Profit = $1400 - 1250 = \text{Rs.}150$

now,

percent gain

$$\frac{150}{1250} \times 100$$

Profit = 12%

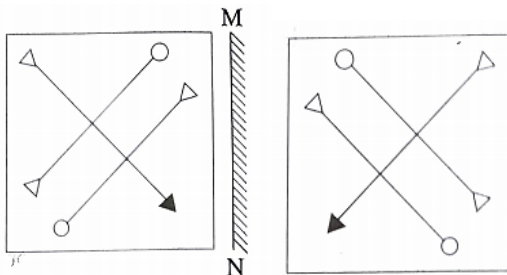
∴ The profit percentage of the tea seller is 12%.

S96.Ans.(b)

Sol. The highest legal officer of the state is the advocate general of the state. Established by Article 165 of the Constitution of India. The State Advocate General is appointed by the State Governor.

S97.Ans.(a)

Sol.



S98.Ans.(a)

Sol. Bhava Atomic Research Center (BARC) – is a premier nuclear research center in India headquartered in Trombay, Maharashtra.

Formed - 3 January 1954.

Founder - Homi J. Bhava

S99.Ans.(b)

Sol. The length of the train

$$= \frac{60 \times 1000}{60 \times 60} \times 15$$

$$= 250$$

The length of the train is 250 meters.

S100.Ans.(c)

Sol. Satish Chandra Samant was the director general of the national government in Tamluk.

