







LUCKY RAYS INSTITUTE  
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MODEL PAPER - 1

1. Which cell organelle is found in the plant cell but not in animal cell?
2. DNA stands for \_\_\_\_\_
3. The cell lacking a true nucleus
4. \_\_\_\_\_ is called Suicidal bag.
5. The role of the mitochondria in a living cell is to
6. Animal cells are different from plant cell in not having
7. Chirand in Bihar is a \_\_\_\_\_.
8. The Dockyard has been found in \_\_\_\_\_ city of Indus Valley Civilization.
9. The term Aryans denotes \_\_\_\_\_
10. Both Jainism and Buddhism had no faith in \_\_\_\_\_
11. The Nanda dynasty was founded by \_\_\_\_\_
12. The king of Mauryan empire who in 322 BC uprooted Greeks from Punjab and nandas from the Gangetic plane was \_\_\_\_\_
13. Emperor Ashoka was the successor of \_\_\_\_\_
14. Rath temple at Mahabalipuram were built in the reign of which Pallava ruler ?
15. Which Indian King used naval power to conquer parts of East Asia ?
16. \_\_\_\_\_ dynasty conquered Sri Lanka South-East Asian countries.
17.  $9612X876 - 9612X776 =$
18.  $999^2 - 996^2 =$
19.  $723.81 - ? = 251.36 + 450.478$
20.  $\frac{18}{\sqrt{36}} \times \frac{24}{\sqrt{9}} \times \frac{120}{\sqrt{7}} = 720$
21.  $35\%$  of  $80 = 56 X ?$
22.  $999\frac{1}{7} + 999\frac{2}{7} + 999\frac{3}{7} + 999\frac{4}{7} + 999\frac{5}{7} + 999\frac{6}{7} = ?$
23.  $\frac{1.7X1.7+0.3X0.3-0.51}{1.7X1.7X1.7+0.3X0.3X0.3} \times \frac{5kg600gms}{2kg800gms} = ?$
24.  $\frac{1}{1+\frac{1}{1+\frac{1}{1+\frac{1}{1+\frac{1}{4}}}}}} =$
25. If  $\frac{a}{2} = \frac{b}{3} = \frac{c}{4}$  then the value of  $\frac{a+b+c}{c}$  is \_\_\_\_\_
26. What is the value of  $0.3\overline{75}$
27. What is the value of  $3.\overline{87} - 2.\overline{56}$
28.  $\sqrt{12 + \sqrt{12 + \sqrt{12 + 12 + \dots \dots \dots}}}$
29. how many prime factors are there in  $12^3 \times 5^5 \times 7^2$
30. find the value of One Neel ?
31. Example of Prime Triplet is \_\_\_\_\_

32. By simplifying  $(2 - \frac{1}{3})(2 - \frac{3}{5})(2 - \frac{5}{7}) \dots \dots \dots (2 - \frac{999}{1001})$  the result will be \_\_\_\_\_
33. Example of Imaginary Numbers is \_\_\_\_\_
34. Find the LCM of  $\frac{3}{4}, \frac{6}{7}, \frac{8}{9}$
35. Find the HCF of  $\frac{3}{16}, \frac{5}{12}, \frac{7}{18}$
36. What will be the LCM of  $(2^3 \times 3^3 \times 5^2) \times (2^2 \times 3^4 \times 5 \times 7) \times (2 \times 3^5 \times 7^9)$
37. What will be the HCF of  $(2^3 \times 3^3 \times 5^2) \times (2^2 \times 3^4 \times 5 \times 7) \times (2 \times 3^5 \times 7^9)$
38. Find the sum of HCF and LCM of 4, 20 and 28
39. If product of two numbers is 750 & their LCM is 150 then find HCF ?
40. If LCM of two numbers is 432 & their HCF is 72. If the first no. is 144 then find 2<sup>nd</sup> ?
41. If LCM of two multiples of 12 is 1056 & one of the numbers is 132 then find 2<sup>nd</sup> ?
42. If product of LCM & HCF of 2 Nos. is 24 and difference is 2 then find the numbers ?
43. If LCM of two different nos. is 120. Find their HCF ?
44. The sum of 2 Nos. is 45 & the difference is  $\frac{1}{9}$  of their sum. Find LCM ?
45. Find the smallest no. which when increased by 5 is exactly divisible by 4,5,6 & 7 ?
46. Find the least number which when divided by 8,12,15 and 18 leaves remainders 5,9,12 and 15 respectively ?
47. Find the greatest number which divides 127 and 41 leaving remainders 7 and 5 respectively ?
48. Find the greatest number that divide 132 & 77 leaving 2 in each case ?
49. Find the largest number which when divides 98, 120 and 153 leaves the same remainder ?
50. Three bells toll at the interval of 12,15 and 18 minutes respectively. If all the 3 bells toll together at 8 a.m., when will they toll together again ?
51. Ratio of 2 numbers is 5:9 and their HCF is 3. Find the numbers & LCM ?
52. What is the place value of 5 in 0.06537 ?
53. What is the difference between the place values of 7 and 3 in 527435 ?
54. Find the units digit in the expression  $(123^{456} \times 456^{789} \times 789^{123})$
55. Sum of all even primes is \_\_\_\_\_
56. The total number of prime numbers between 1 and 100 is \_\_\_\_\_
57. Example of Perfect Number is \_\_\_\_\_
58. Sum of natural numbers from 21 to 50 is \_\_\_\_\_
59. Sum of Cubes of first 10 natural numbers is \_\_\_\_\_
60.  $777777 \div 11 =$
61. Find the 307<sup>th</sup> term of the sequence 1,2,5,8,1,2,5,8,1,2,5,8,.....
62. Product of any five consecutive numbers is always divisible by \_\_\_\_\_
63.  $9! - 8! - 7! = ?$  (! Factorial)
64. How is 29 written in binary numeration system ?
65. The value of  $(11011)_2 + (101)_2$  will be \_\_\_\_\_ (in decimal system)
66.  $(11111)_2 - (10001)_2 = ?$
67. In how many digit 129 will be expressed in binary system ?
68. \_\_\_\_\_ is considered as India's first super computer.

69. Computer cannot work without \_\_\_\_\_ -
70. The operating system UNIX is the landmark of \_\_\_\_\_
71. Who is regarded as the world's first programmer ?
72. Debugging is the process of \_\_\_\_\_
73. A compiler is a \_\_\_\_\_
74. Which key on a windows keyboard sets to full screen mode in most browsers ?
75. Which key combination is used for pasting text in MS-Word ?
76. “.docx” file is created with \_\_\_\_\_
77. .css file extension usually refers to what kind of file ?
78. Full form of BIOS is
79. ICT is the common abbreviation of \_\_\_\_\_
80. The process when the computer is switched on and the operating system gets loaded from hard disk to main memory is called \_\_\_\_\_
81. Which state signed MoU with GAME to support MSMEs, in partnership with Omidyar Network India?
82. Which state governor gave assent to 7.5% NEET quota Bill?
83. Who signed ordinance to constitute a Commission for Air Quality Management in NCR and adjoining areas?
84. Which nation's army launched indigenous mobile application SAI?
85. Who inaugurated 4th edition of India Energy Forum?
86. Who launched DST initiative SERB - POWER (Promoting Opportunities for Women in Exploratory Research)?
87. Who launched virtual festival of 'Parampara Series 2020'?
88. When did World Cities Day being observed?
89. Who inaugurated new special store near Statue of Unity?
90. National Unity Day was being observed on which date?
91. Who was awarded Lifetime Achievement Award at IIFFB 2020?
92. Daniel Menaker passed away, he belonged to which profession?
93. India and Maldives got how many new UNESCO Biosphere Reserve?
94. Which country host 19th Meeting of SCO Ministers of Foreign Economy?
95. Feni Bridge is connecting India with which country?
96. Which organisation reported that India remittances will decline by 9% to \$76 billion in 2020?
97. Which movie has received the award for the Best Original Score at 14th Asian Film Awards?
98. Which state CM Chandrasekhar Rao launched 'Dharani' Portal?
99. Keshubhai Patel passed away, he was the CM of which state?
100. Which country extended \$1 bn credit line to Central Asian countries?

**MODEL PAPER - 2**

1. \_\_\_\_\_ is known as powerhouse of cell.
2. Who gave the name cell for the first time ?

3. Largest organelle of an eukaryotic cell is \_\_\_\_\_
4. DNA does not have \_\_\_\_\_
5. RNA plays an important role in \_\_\_\_\_
6. Viruses are made up of \_\_\_\_\_
7. The first Muslim woman ruler of India was \_\_\_\_\_
8. Bijapur is known for its \_\_\_\_\_
9. The capital of the Bahmani kings was \_\_\_\_\_
10. Mughal Emperor Humayun's tomb is in \_\_\_\_\_
11. Babur was succeeded to the Mughal throne by \_\_\_\_\_
12. \_\_\_\_\_ is not a memorial to a dead person, situated in Hyderabad.
13. The only Hindu courtier of Akbar, who accepted Din-E-Llahi was \_\_\_\_\_
14. Which queen of Ahmednagar opposed emperor Akbar ?
15. "khalsa" was founded by \_\_\_\_\_
16. Who was the last Mughal emperor ?
17. 65gms what percent of 2 kg ?
18.  $0.15\%$  of  $33\frac{1}{3}\%$  of Rs.10000 is \_\_\_\_\_
19. The price of onions has been increased by 50%. In order to keep the expenditure on onions the same, the percentage of reduction in consumption has to be \_\_\_\_\_ .
20. If 60% of the students in a school are boys and the number of girls is 972, how many boys are there in the school ?
21. In a college, 25% of male faculties are same in number as  $\frac{1}{3}$ rd of the female faculties. What is the ratio of between them in that college ?
22. In an examination 73% of the candidates passed in aptitude test, 70% passed in general awareness and 64% passed in both. If 6300 failed to both subjects, the total number of examinees was \_\_\_\_\_
23. What rate per cent is 1 minute 12 seconds to an hour \_\_\_\_\_.
24. The population of a town is increased from 25000 to 30000 in a year. Find the rate of increase \_\_\_\_\_.
25. If rate of income tax is increased from 20% to 25%. Find the additional amount of tax, a person has to pay, if his total income is Rs.40000.
26. Salaries of A and B are in the ratio of 3:4. Both of them spend 75% of their salaries and save the rest of the money. Find the ratio of their savings \_\_\_\_\_.
27. In an examination every candidate took Math or English or both. If 65% took Math & 60% English, how many took Math & English both \_\_\_\_\_.
28. If 30% of a number is 90, the number is \_\_\_\_\_.
29. 20% of 30% of a number is 12, the number is \_\_\_\_\_.
30. 15 litres of a mixture contains 20% alcohol and rest water. If 3litres of water added in it, % of alcohol in the new mixture will be \_\_\_\_\_.
31. In an examination, a student has to secure 40% of the maximum marks to pass. One student got 40 marks and failed by 40 marks. The maximum marks in the examination are \_\_\_\_\_.

32. Anil has to secure 40% marks in an examination to qualify. He gets 120 marks & fails by 80 marks. The maximum marks are \_\_\_\_\_
33. A student gets 29% marks in an examination but fails by 24 marks. If the pass percentage is 35%, the maximum marks are \_\_\_\_\_
34. Aha got 42% marks and secured 12 marks more than the minimum passing marks. Ooha got 45% has obtained 30 marks more than the minimum passing marks. The maximum marks are \_\_\_\_\_
35. A student gets 35% marks and fails by 10 marks and another student who gets 31% marks fails by 30 marks. The maximum marks are \_\_\_\_\_
36. A student gets 30% marks and fails by 20 marks and another student who gets 35% marks, gets 10 marks more than minimum passing marks. The maximum marks are \_\_\_\_\_
37. In an examination a student gets 38% of the maximum marks and fails by 6 marks. Another student who gets 45% of the maximum marks, gets 15 marks more than the required passing percentage. Find passing percentage of the marks \_\_\_\_\_
38. A student scores 37% marks and fails by 12 marks and another student who scores 42% marks and got 8 marks more than the minimum passing marks. The passing percentage is \_\_\_\_\_
39. A person saves 10% of his income. If his income is increased by 20% and he saves 15% of the new income, by what percent his savings will increase \_\_\_\_\_
40. A fruit seller sells 30% apples and still has 630 apples in the stock. How many apples had he bought \_\_\_\_\_
41. A man spends 20% of his income on food and 70% on clothing. If he still has a balance of Rs.200, what is his total income \_\_\_\_\_
42. If a man after spending 97% of his income, saves Rs.300 per month his annual income is \_\_\_\_\_
43. In an election contest between A and B, A wins by the margin of 240 votes. If A gets 60% of the total votes, total votes are \_\_\_\_\_
44. If 20% of 250 + 25% of X = 100, Then X = \_\_\_\_\_
45. 60% of 2300 = 30% of \_\_\_\_\_ -
46. If 20% of a number is equal to 25% of the other number, find ratio between two numbers \_\_\_\_\_
47. In a town 40% of the male population and 45% of the female population are married. Find ratio between male and female population in the town assuming that one man marries one woman and vice-versa \_\_\_\_\_
48. Population of a village is 90000, 5/9th of them are males and rest are females. If 40% of the males are married, what is the percent of married females \_\_\_\_\_
49. If present price of sugar after 10% reduction is Rs.18 per kg, find the original price of sugar per kg \_\_\_\_\_
50. Sum of 5% of a number and 9% of other number and 9% of other number is equal to sum of 8% of first number and 7% of the second number. Find ratio between the numbers \_\_\_\_\_

51. If sum of 5% of a number and 9% of another number is equal to  $\frac{3}{4}$  of sum of 8 % of first number and 11 % of the second number . Find ratio between the numbers \_\_\_\_\_
52. A number when decreased by 20% gives 80 . The number is \_\_\_\_\_
53. A number when increased by 25% gives 80.The number is \_\_\_\_\_
54. When 40 is deducted from 40% of a number , the result is 40 . The number is \_\_\_\_\_
55. When 60% of a number is added to 60, the result is same number .the number is \_\_\_\_\_
56. When 75% of a number is added to 75 , the result is same number . The number is \_\_\_\_\_
57. Price of an article increased by 3% .Had it been Rs.16 less , price would have been decreased by 1% of the original price. Find original price of the article \_\_\_\_\_
58. A man spends 10% of his income on food and 80% of the remaining income on clothing . if he saves Rs.180, What is his total income \_\_\_\_\_
59. A man had some eggs .out of them 10% had to be thrown away as they were broken .80% of the remaining eggs were sold and now he left with only 90 eggs . how many eggs had he in the beginning \_\_\_\_
60. If A's salary is 110% of B's, B's salary is 80% of C's. Find C's salary, if A's salary is Rs.440 \_\_\_\_\_.
61. A's salary is 20% more than B's, B's salary is 10% less than C'S. If A's salary is Rs.1080, find C's salary \_\_\_\_\_.
62. In an examination, A gets 20% less marks than B, B gets 30% marks less than C.If a gets 112 marks, find marks obtained by C \_\_\_\_\_.
63. In an examination, 35% students failed in English and 30% in Math. If 10% students failed in both the subjects, students passed in both the subjects are \_\_\_\_\_.
64. In an examination, 50% students failed in English and 40% in Math and 15% students failed in both the subjects. If 200 students passed in both the subjects, find the number of students appeared in the exam ?
65. In an examination, 35% of the candidates failed in Math and 25% in English while 15% failed in both the subjects, how many candidates passed in one subject both not in other ?
66. Principal Scientific Adviser to the GoI stated that in order to succeed against the COVID-19 pandemic, a large number of parallel efforts are being taken. Who is Principal Scientific Adviser to the GoI?
67. Which country approves sanctions on Chinese officials involved in ill-treatment of Uighurs in Xinjiang?
68. Which organisation release the report "Children in monetary poor households and COVID-19: Technical Note"?
69. Who is appointed as a member of the Olympic Channel Commission from India?
70. What is the new name of the Central Institute of Plastics Engineering & Technology after Centre has been renamed it on 28 May, 2020?
71. Who launched the facility of instant PAN through Aadhaar based e-KYC on 28 May?



72. Governor of Maharashtra has made certain modifications in Section 6 of the Scheduled Tribes and Other Traditional Forest Dwellers Act, 2006, in its application to the Scheduled Areas of the State of Maharashtra. Who is the Governor of Maharashtra?
73. Government has ceased the 7.75% Savings Bonds scheme commonly known as RBI Bonds or GOI bonds for subscription due to the declining interest rates. Where is the headquarters of RBI?
74. Who has been appointed as one of the co-founder of Zomato by Deepinder Goyal, Founder and Chief Executive Officer?
75. Who has been appointed as Chief Secretary of Kerala?
76. The Asian Development Bank & the GoI signed a \$177 million loan to upgrade 450 km of state highways & major district roads in which state?
77. Vakrangee Limited has entered into the Corporate Agency partnership with which company to distribute latter's micro insurance products through its Nextgen Vakrangee Kendra network spread across India?
78. The Indian Air Force operationalised its 2nd squadron No. 18 'Flying Bullet' equipped with Light Combat Aircraft Tejas Final Operational Clearance at its Sulur Air Force Station in Coimbatore, Tamil Nadu. Who is the Chief of the Air Staff India?
79. International Day of UN Peacekeepers is observed on every year?
80. The Union Minister for Agriculture & Farmers' Welfare held a high-level meeting to review the Locust Control Operations. Who is current Union Minister for Agriculture?
81. Indian Space Research Organisation has received a patent for its method of manufacturing highland lunar soil simulant or moon soil. This soil is made from anorthosite rocks of which state?
82. Who will take charge as the chairman of JP Morgan, South and Southeast Asia after Kalpana Morparia retirement in 2021?
83. S&P Global Ratings , an American credit rating agency, has projected India's GDP growth for the current fiscal year FY 21 to contract by how much percent from 1.8 % growth projected in April 2020?
84. World Menstrual Hygiene Day observed on which date?
85. Statue of Unity is situated in \_\_\_\_\_
86. The S I unit of electric charge is \_\_\_\_\_
87. Kilowatt-hour is the unit of \_\_\_\_\_
88. Electric current is measured in \_\_\_\_\_
89. A light year is a unit of \_\_\_\_\_
90. Knot is a measure of \_\_\_\_\_
91. The dimension of \_\_\_\_\_ is the same as that of Impulse.
92. \_\_\_\_\_ is a vector quantity.
93. Which instrument measures blood pressure.
94. \_\_\_\_\_ is the first technological invention.
95. Physical Research Laboratory was founded by \_\_\_\_\_
96. Antonio Meucci is associated with the invention of \_\_\_\_\_

97. Thomas Clifford Allbutt is associated with the invention of \_\_\_\_\_
98. When an object thrown straight upwards gets to the top of its path, its \_
99. Velocity of a car does not depend on \_\_\_\_\_
100. The angle, in which a cricket ball should be hit to travel maximum horizontal distance, is \_\_\_\_\_

**MODEL PAPER - 3**

- The average of 99 items is 27. If 3 is added to each number of the series then the new average is \_\_\_\_\_
- The average of 18 numbers is 24. If each item of the series is multiplied by 3, the new average is \_\_\_\_\_
- The average of first 47 natural number is \_\_\_\_\_.
- If the average of 5 consecutive numbers is 23, find the smallest number.
- If the sum of 3 consecutive odd number is 63, find the first term ?
- Average of first seven multiples of 7 is \_\_\_\_\_.
- Find the average of first eight multiples of 6 \_\_\_\_\_.
- Average of first five odd of 3 is \_\_\_\_\_.
- If the average of 5 observations is 46 and that of 5 other observations is 50, find the average of all the 10 observations \_\_\_\_\_.
- Average of 'n' observations is 35, average of 'n' other observations is 37 and average of remaining 'n' observations is 42. Average of all the observations is \_\_\_\_\_.
- The population of a town was 12000, one year ago. In one year, male population is increased by 8% and female population by 6% but the total population is increased by 7%. What was the size if the male population one year ago \_\_\_\_\_.
- Sum of three consecutive even numbers is 32 more than the average of the numbers. Find the middle number in the series \_\_\_\_\_.
- The average age of 40 students in a class is 15 years. If the age of teacher is also included, the average becomes 16 years, find the age of teacher \_\_\_\_\_.
- The average of 11 numbers is 70 and that of first 10 numbers is 69. Find 11<sup>th</sup> No ?
- The average marks obtained by ten students is 45 and that of eleven students is 48. How many marks did the eleventh student obtain ?
- A cricketer has an average of 28 runs in 24 inning. How many runs must he score in the 25th inning to make his average 29 ?
- The average age of 25 students of a class is 13 years. If the age of teacher is also included, the average age is increased by 5 years. Find the age of teacher ?
- The average age of 4 brothers is 6 years. If age of their father is included, the average age is increased by 5 years. Find the age of the father ?
- Average age of 6 persons is decreased by 1 year when one new person is included in the group. Find the age of new man, if average age of 6 persons was 39 years ?
- Out of 10 terms, the average of first 5 terms is 34 and that of last five terms is 38. If the average of first 9 terms is 35, find the 10th term ?
- The average marks obtained by a group of 10 students is 41 marks. Find the new average if a new student who scored 63 marks is also included in the group ?

22. The average of 9 items is 79. If one new item whose value is 59 is also included in the series, find average of all the 10 items ?
23. Average age of 9 members of a club is 29 years . If 2 more persons with the average age of 40 years have become the members of the club , find average age of all ?
24. A batsman has a certain average of runs for 16 inning. In the 17<sup>th</sup> he scores 85 runs , thereby increases his average by 3 runs . What was his average before 17th inning
25. Average age of 12 men is increased by 2 years when one man whose age is 43 years is replaced by a new man. Find the age of the new man ?
26. Average age of 18 men is decreased by 1 year when one man whose age is 49 years is replaced by a new man . Find age of the new man ?
27. The average weight of 12 persons is 50 kg. On replacing a man whose weight is 53 kg. with a new man , new average becomes 49 kg . Find the weight of the new man ?
28. On replacing an old member of a group with a young member, the average age of 10 members of the group remains same as it was 2 years ago . How much is the new member younger than the old one \_\_\_\_\_.
29. Average age of 6 persons in a group is same as it was 5 years ago , when an old man in the group is replaced by a young man , what is the age of the new person if the man replaced of 70 years \_\_\_\_\_.
30. Average weight of 30 students in a class is increased by 200 grams when one student whose weight is 20 kg . is replaced by a new student . Find the weight of the new student admitted \_\_\_\_\_.
31. The average age of 12 men in a group is increased by 2 years when two men whose ages are 20 years and 22 years ,are replaced by new members .What is the average age of the new men included \_\_\_\_\_.
32. The average marks obtained by 9 students was calculated to be 65.Later it was found that the marks of one student was wrongly read as 76 instead of 67 . the correct average is \_\_\_\_\_.
33. Average marks of 100 students is 58. Later on it is found that marks of one student is misread as 47 instead of 87. Find the correct average \_\_\_\_\_.
34. Average age of 15 men is increased by 1 year when one man in the group is replaced with other man whose age is 49 years .Find the age of the man replaced \_\_\_\_\_.
35. 4 years ago , the average age of 4 persons A,B,C and D was 38 years .With Joining of E , now the average age of 5 persons becomes 36 years .Find E's present age
36. Average age of 7 members of a family is 29 years .If present age of the youngest member is 5 year , find average age of the remaining members at the time of birth of the youngest member \_\_\_\_\_.
37. Average weight of 8 persons is 48 kg. If one man weighing 34 kg . is died ,what is average age of the remaining 7 persons \_\_\_\_\_.
38. Average runs scored by 11 players of a cricket team is 23 runs. If the first player scored 113 runs. Find the average runs of the remaining players \_\_\_\_\_.
39. The average expenditure of a man for 10 days is Rs. 45 per day . If his average expenditure for the first 3 days is Rs. 52 per day , find his average expenditure for the remaining 7 days \_\_\_\_\_.

40. Average age of 12 persons in a group is 25 years . On including 3 more persons in the group , the average age is decreased by 1 year .Find the average age of the three new members \_\_\_\_\_.
41. The average weight of the students of a class is 40 kg .5 new students with the average weight of 46 kg . having joined the class ,the average weight of the class is increased by 2 kg. Find the number of students in the class originally \_\_\_\_\_.
42. The average age of 5members of a family was 22 years ,4 years ago. A baby having been born , the average age of the family is the same today . Find the age of the baby
43. Average marks obtained by first 10 students out of 11 students in a class is 189. If the first student has obtained 163 marks and the 11th student 193 marks , find the average marks of the last 10 students \_\_\_\_\_.
44. Average temperature for Monday ,Tuesday and Wednesday is  $35^{\circ}\text{C}$  and that for Tuesday ,Wednesday and Thursday is  $36^{\circ}\text{C}$  .What is the temperature on Thursday , if temperature on Monday is  $31^{\circ}\text{C}$  \_\_\_\_\_.
45. Average temperature from 9th to 16th of a month is  $30^{\circ}\text{C}$  and that from 10th to 17th is  $31^{\circ}\text{C}$ . What is the temperature on 17th , if temperature on 9th is  $35^{\circ}\text{C}$  ?
46. Average temperature from Monday to Saturday is  $39^{\circ}\text{C}$  & from Tuesday to Sunday is  $37^{\circ}\text{C}$ . What is the temperature on Monday, if temperature on Sunday is  $32^{\circ}\text{C}$
47. The average temperature from Monday to Friday is  $38^{\circ}\text{C}$  and that from Tuesday to Saturday is  $35^{\circ}\text{C}$  .Find temperature on Monday , if ratio between the temperatures on Monday and Saturday is 8:5 \_\_\_\_\_.
48. On replacing 2 men weighing 45 Kg and 31 Kg . with two new members the average weight of 10 men in a group is increased by 3Kg .Find the average weight of two new members \_\_\_\_\_.
49. The average of 11 observations is 72 .If average of first 5 observations is 70 and that of last 5 observations is 71 , then the 6th observation is \_\_\_\_\_.
50. The average of 9 numbers is 25.The average of first 5 numbers is 22 and that of last 3 numbers is 27.Find the 6th number \_\_\_\_\_.
51. The average of 10 numbers is 16. If average of first 6 numbers is 17 and that of last 3 numbers is 13.Find the 7th number \_\_\_\_\_.
52. The average marks obtained by 24 students of a class is 64. If the average marks of the first 6 students is 72 and that of the next 17 students is 62, find the marks obtained by the last student \_\_\_\_\_.
53. The average of 11 observations is 50. If average of first 6 observations is 49 and that of last 6 observations is 52, then the 6th observation is \_\_\_\_\_
54. Retinol is mainly related to .....
55. Vitamin \_\_\_\_\_ is crucial for blood clotting
56. \_\_\_\_\_ is does not directly refer to cholesterol
57. \_\_\_\_\_ disease is caused by iodine deficiency
58. A disease caused by the deficiency of vitamin-B is \_\_\_\_\_
59. Goiter or abnormal enlargement of the thyroid gland is caused by the deficiency of \_
60. The National Aeronautics and Space Administration renamed its Wide Field Infrared Survey Telescope as?

61. Who was the first CM of Chhattisgarh who passed away at the age of 74 in Raipur, Chhattisgarh?
62. Which state launch a project that aims to provide free internet access to the poor in the State?
63. What is the name of a multi-purpose decontamination device developed by Devaditek that can sanitize items ranging from N95 masks to vegetables by using ultraviolet germicidal irradiation technology?
64. What is name of the Director-General of Sports Authority of India who has been given an extension for a period of 2 years?
65. Centre has approved which State's Jal Jeevan Mission Annual Action Plan which provided 100% coverage of all households with functional tap water connections by 2020-21?
66. Which company launched an experimental app named 'Collab' that lets users make short music videos?
67. The Indian Navy has set up an Ultraviolet sanitisation Bay at which dockyard to decontaminate the coveralls, tools, personal gadgets, masks, cloths?
68. What is the name of artificial intelligence based chatbot, launched by National Payment Corporation of India to create awareness around its products like FASTag, RuPay, Unified Payments Interface, Aadhaar Enabled Payment System?
69. Which state announced the development of 800 km herbal roads along the state and national highways through the state?
70. Which state launched the scheme named "Mukhyamantri Swarozgar Yojana" to retain the migrants who have returned to the state during the lockdown?
71. BSE and National Stock Exchange announced that they will reduce the annual listing fee by how much percent for MSMEs, as a part of their attempts to lower the compliance costs for companies during the ongoing COVID-19 pandemic?
72. Who has detected a new species of silver colored small freshwater fish "Puntius sanctus" of the Cyprinidae family in Velankanni ,Tamil Nadu?
73. Who has been appointed as the new Chief Executive Officer and Managing Director of Wipro effective from 6th July 2020?
74. According to Estimates of National Income for the financial year 2019-20 by NSO, Ministry of Statistics and Programme Implementation India's GDP growth has slowed to an 11-year low of how much percent in 2019-20?
75. The World Athletics anti-doping body handed a four year ban to which indian sports person?
76. Which space agency has partnered with NASA to host a deep-space ground station to support human spaceflight missions to the Moon, Mars and beyond?
77. International Day of Innocent Children Victims of Aggression is observed on which day every year?
78. Which CSIR Institute have indigenously developed a ventilator to provide help and support to the COVID-19 patients?

79. World Pest Day or World Pest Awareness Day is celebrated every year on which day to raise awareness of how pest management helps preserve the quality of life?
80. Which Bank has created a separate Financial Inclusion and Micro Market vertical within the bank with an exclusive focus to provide financial services to people in the interior of the country?
81. Which state government has launched "Raj Kaushal Portal" and "Online Shramik Employment Exchange"?
82. Who has been appointed as non-executive chairman of the Larsen & Toubro company for a period of three years from October 1, 2020?
83. Who became the first brand ambassador of the IIFL Finance?
84. The Army Commanders' Conference, an apex level biannual event's First phase of the Conference was conducted in which city?
85. Who is the head of taskforce to examine matters pertaining to the age of motherhood, imperatives of lowering maternal mortality rate?
86. The first country which discovered sea route of India was \_\_\_\_\_
87. When did Vasco-da-gama land in India ?
88. The Battle of Plassey was fought between \_\_\_\_\_
89. The Treaty of Allahabad is associated with \_\_\_\_\_
90. The revolt of 1857 was started by \_\_\_\_\_
91. Who was the British commander at Delhi during 1857 revolt?
92. Liyaqat led the 1857 revolt at \_\_\_\_\_
93. The founder of the "Brahma samaj" was \_\_\_\_\_
94. The Rama Krishna mission was established by \_\_\_\_\_
95. Who was called as the "Prophet of new India"?
96. Who started the servants of India society?
97. "Go back to Vedas" this call was given by \_\_\_\_\_
98. Who was the founder of the prardhana samaj?
99. What is swadesi?
100. During India's freedom struggle the news paper young India was published by \_\_\_

**MODEL PAPER - 4**

1. Find the compound interest on Rs.1600 at 2.5% p.a. for 2 years \_\_\_\_\_.
2. Find the compound interest on RS.8000 at 5% p.a. for 3 years \_\_\_\_\_.
3. Rs.10000 is borrowed at 20% p.a., interest compounded half yearly. Find the amount repayable after one year \_\_\_\_\_.
4. Find the compound interest on Rs.8000 at 20% p.a. for 9 months interest being compounded quarterly \_\_\_\_\_.
5. Find the compound interest on Rs.25000 at 20% p.a. for 2 ½ years, if interest is compounded annually \_\_\_\_\_.
6. Find the compound interest on Rs.10000 at 10% p.a. for 4 years, if interest is compounded annually \_\_\_\_\_.

7. Find compound interest on Rs.10000 for 3 years if rate of interest is 5% ,10% and 20% for first, second and third years respectively \_\_\_\_\_.
8. If compound interest for second year on a certain sum at 10% p.a. is Rs.132, find the principal \_\_\_\_\_.
9. If a certain sum of money invested at a certain rate of compound interest doubles in 5 years. In how many years will it become 4 times \_\_\_\_\_.
10. If a certain sum of money invested at a certain rate of compound interest doubles in 6 years. In how many years will it become 8 times \_\_\_\_\_.
11. An amount is lent at 15% p.a. compound interest for 2 years. Find the percent increase in the amount at the end of 2 years \_\_\_\_\_.
12. A person returns Rs.1331 after 3years from the date of borrowing. If the rate of interest is 10% p.a., interest compounded annually, find the amount borrowed \_\_\_\_\_.
13. In how many years will Rs.400 amount to Rs.441 at 5% compound interest \_\_\_\_\_.
14. The population of a village increases @5% p.a. If present population is 8000, after how many years the population will be 9261 \_\_\_\_\_.
15. If Rs.8000 amounts to Rs.8820 in 2 yrs at compound interest, find rate of interest p.a.
16. At what rate per cent of compound interest, a sum of Rs.2000 will amount to Rs.2662 in 3 years \_\_\_\_\_.
17. A man invested Rs.16000 at compound interest for 3 years, interest compounded annually. If he got Rs.18522 at the end of 3 years, what is rate of interest \_\_\_\_\_.
18. Height of a tree is 1210 cm. What was its height two years ago, if it increases at the rate of 10% p.a. \_\_\_\_\_.
19. Cost of a machine is Rs.10000 and it depreciates 20% annually. Its value two years hence will be \_\_\_\_\_.
20. The value of a machine depreciates @25% p.a. If its present value is Rs.14400, what will be its worth after 2 years \_\_\_\_\_.
21. The value of a machine depreciates @25% p.a. If its present value is Rs.14400, find the value of machine 2 years ago \_\_\_\_\_.
22. If a certain sum on compound interest becomes Rs.2000 in 2 years and Rs.2200 in 3 years, find rate of interest p.a. \_\_\_\_\_.
23. Compound interest on a certain sum for two successive years is Rs.150 and Rs.153 respectively. Find rate of interest \_\_\_\_\_.
24. If a certain sum on compound interest becomes Rs.2000 in 2 years and Rs.2420 in 4 years. Rate of interest p.a. is \_\_\_\_\_.
25. A sum of money amounts to Rs.2880 in 2 years and 3456 in 3 years at compound interest. Find the sum \_\_\_\_\_.
26. Find the rate percent of compound interest at which a sum of money will amount to  $\frac{9}{4}$  times of itself in 2 years \_\_\_\_\_.
27. Find the rate percent of compound interest at which a sum of money will become 1.44 times of itself in 2 years \_\_\_\_\_.
28. A man borrows Rs.2100 and undertakes to pay back with compound interest @10% p.a. in 2 equal yearly instalments at the end of first and second year. What is the amount of each instalment \_\_\_\_\_.

29. A man borrows Rs.820 and undertakes to pay back with compound interest @5% p.a. in 2 equal yearly instalments at the end of first and second year. What is the amount of each instalment\_\_\_\_\_.
30. A man borrows Rs.1820 and undertakes to pay back with compound interest @20% p.a. in 3 equal yearly instalments at the end of first and second year. What is the amount of each instalment\_\_\_\_\_.
31. A certain sum is to be divided between A and B so that after 5 years the amount received by A is equal to the amount received by B after 7 years. The rate of interest is 10%, interest compounded annually. Find the ratio of amounts invested by them?
32. A father wants to divide Rs.5100 between his two sons, mohan and sohan who are 23 and 24 at present. Divide the amount in such away that if their shares are invested at compound interest @4% p.a., they will receive equal amount on attaining the age of 26 years. Find Mohan's share\_\_\_\_\_.
33. A certain sum, invested at compound interest becomes Rs.3000 in 3 years and Rs.6000 in 6 years. Find the amount after 9 years\_\_\_\_\_.
34. Population of a town increases at a certain rate percent p.a. present population of the town is 3600 & in 5 years time it becomes 4800. How much it will be in 10 years?
35. Present population of a town is 12000. Increasing at a certain rate, the population becomes 27000 after 6 years. What will the size of population after 3yrs from now?
36. Find the difference between compound interest on Rs.1000 for 1 ½ years at 20% p.a. When interest is compounded annually and half yearly respectively\_\_\_\_\_.
37. Find compound interest on Rs.50000 for two years at the rate of interest 8% per annum ?
38. Find compound interest on Rs.2000 for 2 years at an interest rate of 10% per annum. If the interest is compounded haif-yearly?(Approximately)
39. Difference between simple interest and compound interest on a certain sum will be Rs. 4.00 at the end of 2 years. If rate of interest is 5% then, find the sum.
40. The difference between compound interest and simple interest on a certain money for 2 years at a ratte of 5% is Rs. 20. Principal is
41. Difference between simple interest ansd compound interest on Rs. 1200 at a rate of 10% for halfy-yearly will be
42. Difference between compound interest and simple interest on a certain sum of money for two years is Rs. 160. If simple interest in two years is Rs. 2880. Then find the rate of interest ?
43. Compound interest on certain sum for 2 continuous years is Rs. 225 and Rs. 238.50 interest rate per annum is
44. Simple interest on a certain sum for 3 years is Rs. 1200 and Compound interest for two years is Rs. 812. Then, find the rate of interest
45. A certain sum at a compound interest rate becomes Rs. 3472.87 in 3 years and Rs. 3307.50 in 2 years. Then find the approximate interest rate.
46. Rs. 500 amounts to Rs. 583.20 in 2 years when interest is compounded annually then, find the rate of interest? (approximate)
47. \_\_\_\_\_ is not a rich source of calcium.



48. \_\_\_\_\_ is does not contain carbohydrates
49. Richest source of vitamin-A is . \_\_\_\_\_
50. \_\_\_\_\_ is the component of balanced diet
51. All of the molecules are carbohydrates except \_\_\_\_\_
52. Milk : Protein :: Bread : \_\_\_\_\_
53. An object covers distance which is directly proportional to the square of the time. Its acceleration is \_\_\_\_\_
54. If the velocity-time graph of particle is represented by  $v=mt$ , then the particle is moving with \_\_\_\_\_
55. When an object thrown straight upwards gets to the top of its path its \_\_\_\_\_
56. Velocity of a car does not depends on \_\_\_\_\_
57. Distance of moving object may \_\_\_\_\_
58. The angle, in which a cricket ball should be hit to travel maximum horizontal distance, is \_\_\_\_\_
59. The working of a rocket is based on the principle of \_\_\_\_\_
60. Fat can be separated from milk in a cream separator because of \_\_\_\_\_
61. When a running car stops suddenly, the passenger tends to lean forward because of \_\_\_\_\_
62. Newton's first law is based upon \_\_\_\_\_
63. An external force is required to keep a body in motion. Who gives this idea?
64. The earth moving around the sun in a circular orbit, is acted upon by a force and hence work done on the earth by the force is \_\_\_\_\_
65. A lamp consumes 1000J of electrical energy in 10s .The power is given by \_\_\_\_\_
66. Energy that is produced commercially from coal is called \_\_\_\_\_
67. The energy stored in a watch spring is \_\_\_\_\_
68. Direct of solar energy with the use of a photovoltaic cell result in the production of \_\_\_\_\_
69. A body in motion essentially acquires \_\_\_\_\_
70. A stone is dropped from the roof of a house towards the ground. The kinetic energy of the stone will be maximum \_\_\_\_\_
71. Who is called the Frontier Gandhi ?
72. Who advocated the introduction of western education and English language in India ?
73. The rowlatt act was passed in which year ?
74. Who is the author of the book "Poverty and Unbritish rule in India ?
75. Who is considered as the father of Modern India Renaissance ?
76. The Indian National Congress was formed during the Governor general ship of \_\_\_\_\_
77. Who was the first president of the Indian National Congress ?
78. Which revolutionary took his own life ?
79. The non-cooperation movement started in \_\_\_\_\_
80. Who founded the Indian National Congress ?
81. Who launched the India's 1st indigenou wireless physiological parameters monitoring system "COVID BEEP" for the COVID-19 affected patients?
82. The World Archery committee decided to postpone the 2020 World Archery Field Championships to which year?

83. Which Kannada actor passed away at 39 due to a cardiac arrest at a private hospital in Bengaluru on 9 June?
84. Which state govt. approved the proposal to give the status of State anthem to "Bande Utkala Janani", a poem written by Kantakabi Laxmikanta Mohapatra in 1912?
85. Who topped the 2nd State Food Safety Index for 2019-20 of Food Safety and Standards Authority of India among larger states?
86. Which state launched Street Vendor Registration Portal and "Mukhyamantri Shahri Path Vyavasayi Utthan Yojana" & transferred Rs 300 crore to the urban local bodies?
87. Which State launched Meghasandesha App & Varunamitra web portal to provide real-time information and alerts on weather, rainfall, flooding?
88. Which State has started a plantation drive named "Thank Mom" on the premises of its Social Justice and Disabled Welfare Directorate on World Environment Day?
89. Scientists from the which institute has developed a magnetocaloric material that can be used in the treatment of cancer?
90. Which Abu Dhabi based sovereign wealth funds, has invested Rs 5,683.50 crore for a 1.16 % stake in Jio platforms, a subsidiary Reliance Industries Ltd?
91. Which State's Chief Minister launched the Online Shramik Employment Exchange, 'Raj Kaushal Portal' developed by the department of Information and Technology?
92. What is India's rank according to the biennial Environment Performance Index 2020 released jointly by Yale University and Columbia University?
93. Which Indian company has joined 155 global companies by inking a joint declaration with United Nations Global Compact urging governments to align their COVID-19 recovery efforts with the latest climate science?
94. ASI monuments having places of worship to remain shut in how many states despite centre's nod to reopen them from June 8?
95. World oceans day is celebrated on which day every year?
96. Which day is annually celebrated as the World Brain Tumor Day?
97. Which company has bagged the world's largest solar bid of USD 6 billion?
98. The World Bank has projected that the Global Economy will witness the deepest ever recession & the economy is expected to shrink by around how much percent in 2020?
99. In accordance with the revised Public Procurement Order 2017, the government has modified public procurement norms for giving maximum preference to companies whose goods and services have how much percent local content?
100. Western Coalfields Ltd, the subsidiary of Coal India Ltd has opened new coal mines in which state recently?

**MODEL PAPER - 5**

01. Whole Numbers are denoted by \_\_\_\_\_.
02. \_\_\_\_\_ is the least Integer.
03. \_\_\_\_\_ is the largest Integer.
04. Integers are denoted by \_\_\_\_\_.

05. \_\_\_\_\_ is the least Positive Integer.
06. \_\_\_\_\_ is the largest Positive Integer.
07. \_\_\_\_\_ is the least Negative Integer.
08. \_\_\_\_\_ is the largest Negative Integer.
09. How many Integers between 2 and 9 ?
10. Example of Rational Numbers ?
11. Example of Irrational Numbers ?
12. If S denotes Irrational Numbers then  $R =$  \_\_\_\_\_
13. Example of Imaginary Numbers ?
14. Complex Numbers are set of \_\_\_\_\_
15. General form of an Even Number is \_\_\_\_\_
16. General form of an Odd Number \_\_\_\_\_
17. The difference between 2 Consecutive Even Numbers is \_\_\_\_\_
18. The difference between 2 Consecutive Odd Numbers is \_\_\_\_\_
19. The Prime Number has only \_\_\_\_\_ Factors.
20. \_\_\_\_\_ is the factor of every Prime Number.
21. \_\_\_\_\_ is neither Prime nor Composite.
22. \_\_\_\_\_ is the least even prime number.
23. \_\_\_\_\_ is the least Odd prime number.
24. \_\_\_\_\_ is the least prime number.
25. The sum all even primes is \_\_\_\_\_.
26. The least Composite number is \_\_\_\_\_.
27. The least Even Composite number is \_\_\_\_\_
28. The least Odd Composite number is \_\_\_\_\_.
29. The difference between Twin primes is \_\_\_\_\_ .
30. Example of Twin Primes Is \_\_\_\_\_ .
31. Total Prime Numbers from 1 to 50 is \_\_\_\_\_ .
32. Total Prime Numbers from 1 to 100 is \_\_\_\_\_ .
33. The only Prime Triplet is \_\_\_\_\_ .
34. \_\_\_\_\_ is suggested a simple method for finding Prime Numbers.
35. Example of Co-Primes is \_\_\_\_\_ .
36. Example of perfect number \_\_\_\_\_ .
37. The Largest Prime Number is \_\_\_\_\_ .
38. The largest Prime Number contains \_\_\_\_\_ digits.
39. Product of two positive numbers is always \_\_\_\_\_ number.
40. Product of two negative numbers is always a \_\_\_\_\_ number.
41. Product of a negative number and a positive number is always a \_\_\_\_\_ number.
42. Any number multiplied by '0' gives \_\_\_\_\_ .
43. Product of any five consecutive numbers is always divisible by \_\_\_\_\_ .
44. Sum of the first 10 natural numbers is \_\_\_\_\_
45. Sum of the first 18 consecutive numbers is \_\_\_\_\_ .
46. Sum of the first 10 even numbers is \_\_\_\_\_ .

47. Sum of the first 18 odd numbers is \_\_\_\_\_.
48. Sum of the squares of the first 9 natural numbers \_\_\_\_\_.
49. Sum of the cubes of the first 10 natural numbers \_\_\_\_\_.
50. What is the least number to be subtracted from 6321, which makes it completely divisible by 14 ?
51. What should be replaced by R in 143R65 to make it divisible by 9 \_\_\_\_.
52. A photoelectric cell converts \_\_\_\_\_
53. A sitar is used to convert \_\_\_\_\_
54. Shock absorbers are usually made of steel as it \_\_\_\_\_
55. The SI unit of pressure is \_\_\_\_\_
56. Pressure is a \_\_\_\_\_
57. The pressure inside the cabin of the aircraft flying at an altitude is \_\_\_\_\_
58. A spherical ball made of steel when dropped in mercury container \_\_\_\_\_
59. A piece of wood is held under water. The upthrust on it will be \_\_\_\_\_
60. The building up and movement of ships is based on \_\_\_\_\_
61. A solid needle placed horizontally on the surface of the water floats due to \_\_\_\_\_
62. Iron which is necessary for the body has the richest source in \_\_\_\_\_
63. The deficiency of vitamin-A causes \_\_\_\_\_
64. Maximum absorption of food takes place in \_\_\_\_\_
65. Gastric juice contains \_\_\_\_\_
66. Digestive system makes the \_\_\_\_\_ into simple form.
67. The gland in the human body which secretes both enzymes and hormones is \_\_\_\_
68. Saliva helps in the digestion of \_\_\_\_\_
69. Milk teeth are \_\_\_\_\_
70. Sleep apnea is related to \_\_\_\_\_ while sleeping.
71. Mahatma Gandhi started his Dandi march from \_\_\_\_\_
72. The 'Quit India' movement was launched by Mahatma Gandhi in the year \_\_\_\_\_
73. \_\_\_\_\_ is the features of nagara style of temple means 'womb chamber'
74. \_\_\_\_\_ style of painting is done on the cloth using vegetable colours
75. \_\_\_\_\_ dance form has MATKA as its most important element, the dancer dances on a bronze plate.
76. Ghoomar is the popular folk dance of \_\_\_\_\_
77. Maanch is a folk dance from \_\_\_\_\_
78. Nautanki is a folk dance from \_\_\_\_\_
79. The dance form kuchipudi originated from \_\_\_\_\_ of India.
80. Madhubani painting style is native to which state?
81. What is madhubani art?
82. What denotes learned and shared beliefs and behaviours?
83. In which state is Karla, famous for its Buddhist caves, located?
84. Who is Anjali Ela Menon?
85. Which state launched mobile based app 'Ghar ghar nigrani' app through video conference to conduct house-to-house surveillance in the state to eliminate the COVID-19 pandemic?

86. The National Anti-Doping Agency has issued notices to which Indian cricketers for not disclosing their whereabouts?
87. An earthquake of 5.5 magnitude hit which Indian state on June 14?
88. Which company will buy 0.93% equity stake in Jio Platforms Ltd for Rs. 4,546.80 crore?
89. Who is appointed as C E O of the UTI Asset Management Company?
90. Prime Minister Narendra Modi will hold 6th virtual meeting with the Chief Ministers of all States/UTs on which date through video conferencing?
91. Which Bollywood Actor was found dead at his residence in Mumbai's Bandra?
92. NCLT allows which company to sell its premises in Bandra Kurla Complex in Mumbai to settle debts?
93. Who has been appointed as the new Associate Administrator of Human Exploration and Operations Mission Directorate of NASA?
94. Which Indian bank has provided a line of credit of \$215.68 million to the Malawi government?
95. Who became the first woman to reach the Challenger Deep, the deepest point in the ocean?
96. Which city Railway Protection Force has launched a Robot 'CAPTAIN ARJUN' to intensify the screening and surveillance?
97. Raja Parba which is celebrated for three days during the mid of June is celebrated in which state?
98. A green frog with slender body, webbed feet known as Malabar gliding frog a rare amphibian was spotted in which state?
99. China reports fresh new cases of novel coronavirus in which city ?
100. Who is appointed as the brand ambassador of Bihar's Khadi by the Government of Bihar?

**MODEL PAPER - 6**

1. Five years ago, A was 10 years younger than B. what will be the difference between their ages after 2 years from now \_\_\_\_\_.
2. If the ratio of ages of A and B is 2:3. After 6 years, ratio of their ages is 3:4. Find the present age of A \_\_\_\_\_.
3. In 30 years, age of a person becomes 3 times of his present age. Find his present age
4. Mohan got married 9 years ago. Today his age is  $1\frac{1}{3}$  times of his age at the time of his marriage. Find his present age.
5. Sum of present ages A,B and C is 72 years. If 4 years ago, their ages were in the ratio of 1:2:3, find A's present age\_\_\_\_\_.
6. Sum of the ages of A and B is 60 years. 5 Years hence their ages will be in the ratio of 3:4. Find A's present age\_\_\_\_\_.
7. Present age of Ram's father is 4 times Ram's age .5 years from now father's age will become 3times of Ram's age, find present age of Ram's father \_\_\_\_\_.

8. If ratio of Mohan's age to that of his father is 1:5. After 10 years, their ages will be in the ratio of 1:3. What is the father's present age \_\_\_\_\_.
9. Ratio of present ages of father and son is 8:3. If 10 years from now, the ratio becomes 2:1, find present age of the son \_\_\_\_\_.
10. 3 years ago, the age of a father was 7 times of his son's age. If the present age is 5 times his son's age. Find the present age of the father \_\_\_\_\_.
11. Ratio between present ages of A & B is 3:4. Find the present age of A, if 5 years ago, ratio between their ages was 5:7
12. 5 years ago, the father's age was 3 times of his son's age. 5 years hence the ratio between the ages of father and the son becomes 11:5. Find the father's present age
13. 2 years ago, the father's age was 6 times of his son's age. 6 years hence the ratio between the ages of father and the son becomes 10:3. Find the father's present age
14. The ratio of the ages of the father and his son is 17:7 respectively. 6 years ago the ratio of their ages was 3:1 respectively. Find the present age of the son \_\_\_\_\_.
15. A person is 3 times older than his son. 6 years hence, the ratio of their ages will be 5:2. What is the present age of the person \_\_\_\_\_.
16. A man is twice as old as his son. 18 years ago the man was 3 times as old as his son. Find the present age of the son \_\_\_\_\_.
17. The sum of ages of A, B and C is 93 years. 10 years ago, the ratio of their ages was 2:3:4. Find the present age of the A \_\_\_\_\_.
18. Difference between compound interest and simple interest on Rs.8000 for 2 years at 10% p.a. is \_\_\_\_\_.
19. Find the difference between compound interest and simple interest on Rs.4000 for 1 year at 10% p.a., if the interest is compounded half yearly \_\_\_\_\_.
20. If difference between compound interest and simple interest on certain amount at 2 years at 5% p.a. for two years is Rs.30. Find the principal \_\_\_\_\_.
21. Two persons lent equal amount of money at 10% p.a., first at compound interest and second simple interest. If first person gets Rs.20 more than the second after a period of 2 years. Find sum lent by each of them \_\_\_\_\_.
22. Find the difference between compound interest and simple interest on Rs.1000 for 3 years at 10% p.a., if interest is compounded annually \_\_\_\_\_.
23. Find the difference between compound interest and simple interest on Rs.10000 for 4 years at 10% p.a., if interest is compounded annually \_\_\_\_\_.
24. If simple interest on a certain sum at 10% p.a. for 2 years is Rs.80. The compounded interest on the same sum for the same period is \_\_\_\_\_.
25. If simple interest on a certain sum for 2 years @10% p.a. is Rs.200. The compounded interest will be \_\_\_\_\_.
26. If simple interest and compound interest on a certain sum for 2 years are Rs.400 and Rs.440 respectively. What is the rate of interest \_\_\_\_\_.
27. If simple interest and compound interest on a certain sum for 2 years is Rs.160 and Rs.168 respectively. What is the principal \_\_\_\_\_.
28. On a certain sum, compound interest and simple interest for two years are Rs.500 and Rs.520 respectively. Find the principal \_\_\_\_\_.

29. The difference between compound interest and simple interest on a certain sum of money for 3 years at 5% p.a. is Rs.16. Find the principal\_\_\_\_\_.
30. If simple interest for 3 years @10% is Rs.300, then compound interest is \_\_\_\_\_.
31. If simple interest for 3 years @5% is Rs.1200, then compound interest is \_\_\_\_\_.
32. If compound interest on a certain sum for 2 years @ 5% p.a. is Rs.328, the simple interest will be\_\_\_\_\_.
33. If compound interest on a certain sum at 10%p.a. for 2years is Rs.210, find the simple interest for the same period on same amount \_\_\_\_\_.
34. If compound interest on a certain sum at %5 p.a. for 2 years is Rs.492, find the simple interest for the same period \_\_\_\_\_.
35. If compound interest on a certain sum at 10%p.a. for 3 years is Rs.331, find the simple interest for the same period on same amount \_\_\_\_\_.
36. If compound interest on a certain sum for 2years at 10% is Rs.662, find the simple interest for the same period on that sum for 3 years \_\_\_\_\_.
37. If compound interest on a certain sum at for 3 years at 20% is Rs.728, find the simple interest on for the same sum \_\_\_\_\_.
38. What is the volume of blood in a human adult ?
39. The body organ which is not present in pair is \_\_\_\_\_
40. What is Rh in blood ?
41. In one minute, heartbeats \_\_\_\_\_
42. Veins carry blood \_\_\_\_\_
43. Pacemaker of heart is \_\_\_\_\_
44. The normal blood pressure of human beings is in the range of \_\_\_\_\_
45. The shape of a rain drop is spherical due to
46. Who defined the law of gravitation
47. Intensity of gravitational field of the earth is maximum at
48. The period of revolution of a geostationary satellite is
49. Astronauts inside spaceship feel \_\_\_\_\_ weight
50. A small gap is left at joins of rails in a railway track to
51. Lakes freeze in cold countries in winter, leaving the water underneath at
52. China's Great Wall Motor Company signs MoU with which Indian state govt. to invest \$1 billion in the state?
53. What is the name of novel written by Nobel Prize winner Kazuo Ishiguro?
54. The Khadi and Village Industries Commission launched a project in Palghar district of Maharashtra, a state with more than 50 lakh palm trees. Headquarters of KVIC is located in which city?
55. Sanitary Napkin is being made available in more than 6,300 Pradhan Mantri Bhartiya Janaushadhi Kendras across the country at what price?
56. According to the report titled "Policy Brief: The Impact of COVID-19 on Food Security and Nutrition" released by FAO, how many people fell into acute food insecurity since February 2020?
57. Which country was second biggest growth driver of primary energy consumption in the world, behind China, in 2019?

58. The Sports Ministry prepared to establish Khelo India State Centres of Excellence under the Khelo India Scheme and identified how many sports facilities to upgrade as KISCE?
59. The All India Football Federation recommended which former Indian football team captain for Padma Shri?
60. The tenure of which former supreme court judge as the ethics officer and ombudsman of BCCI got a 1 year extension in June 2020?
61. Indian Railways' Central Railway zone has installed an Automated Ticket Checking & Managing Access machine, 1st of its kind at which station?
62. Sustainable Gastronomy Day is observed on which day?
63. World day to combat desertification and drought to educate the general public on the international efforts to fight against desertification is observed on which day?
64. Which indian company partnered with Amazon and Global Optimism and signed the Climate Pledge to become net-zero carbon by 2040, ten years ahead of the Paris Agreement?
65. According to the 32nd edition of World Competitiveness Index 2020 which country is on 1st position?
66. Which insurance provider has joined hands with UK based tech firm TropoGo Limited to launch India's 1st 'Pay as you Fly' insurance for drone-owners in India?
67. In order to strengthen the SEBI's enforcement mechanism the SEBI committee headed by which former Supreme Court Judge has proposed a method of quantification of profit made by the defaulter and loss caused to investors?
68. Serum Institute of India, signs a new supply agreement with UNICEF and Vaccine alliance Gavi's procurement partner to supply which vaccine to low income countries all over the world?
69. Which Indian startups were featured in the List of Technology Pioneers of 2020, released by the World Economic Forum?
70. Finance Minister of Andhra Pradesh Buggana Rajendranath presented the AP state budget for Rs 2.24 lakh crore for the FY20-21. Who is the Governor of Andhra Pradesh?
71. The Asian Paralympic Committee announced that the 4th Asian Youth Para Games will take place in which country?
72. Which is the brightest star in our night sky ?
73. Which planet in our solar system is as big as the Earth ?
74. \_\_\_\_\_ galaxy is closest to Milky way.
75. What is the shape of the earth ?
76. All the planets move around the sun in a \_\_\_\_\_
77. How many moons does the planet Mars have ?
78. \_\_\_\_\_ is igneous rock.
79. What is the name of second layer of Earth's atmosphere ?
80. Arctic ocean is located in \_\_\_\_\_
81. Where is the island of Seychelles located ?
82. Mistral is a local wind of \_\_\_\_\_



83. The milky way galaxy was first observed by \_\_\_\_\_
84. International date line is situated on \_\_\_\_\_
85. The time difference between IST and GMT is \_\_\_\_\_
86. Tropic of Cancer is situated in \_\_\_\_\_
87. Lithosphere is the \_\_\_\_\_
88. Quartzite is a \_\_\_\_\_
89. Lime stone is a \_\_\_\_\_
90. Fossils are commonly found in \_\_\_\_\_
91. Marble is the metamorphosed form of \_\_\_\_\_
92. Block mountains are caused by \_\_\_\_\_
93. Air is a \_\_\_\_\_
94. The deepest ocean in the World is \_\_\_\_\_
95. Tropical storm in Chinese sea is known as \_\_\_\_\_
96. Ground water is a part of a \_\_\_\_\_
97. Dover strait belongs to \_\_\_\_\_
98. Which continent has largest amount of countries ?
99. Which country has largest coastline ?
100. What is the called as the "Roof of the World ?

<b>MODEL PAPER - 7</b>
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1. If cost price and selling price of an article are Rs.12 and Rs.15 respectively, profit percentage is \_\_\_\_\_.
2. An article costing Rs.400 is sold at 20% profit. Find the selling price \_\_\_\_\_.
3. An article costing Rs.500 is sold at 10% loss. Find the selling price \_\_\_\_\_.
4. An article is sold for Rs.900 & hence gaining 10% of the SP. Find the cost price
5. If selling an article for Rs.990 causes 10% loss on the selling price, find its cost price
6. On selling an article for a certain amount, a man gains 20%. What is the profit percent ,if he sells the article for double the amount \_\_\_\_\_.
7. On selling an article for a certain amount ,a man losses 30%. What is his profit / loss percent ,if he sells the article for double the amount \_\_\_\_\_.
8. A man gains 10% by selling an article for a certain price. What is profit and loss if the article sold for half the price \_\_\_\_\_.
9. A retailer buys goods at 10% discount on its marked price and sells them at 20% higher than the marked price. What is his profit percent \_\_\_\_\_.
10. A dishonest merchant professes to sell his goods at cost price, but uses a weight of 900 grams for one kg. weight. What is his profit percent \_\_\_\_\_.
11. A merchant professes to sell goods at the loss of 5% but uses weight of 900 grams in place of one kilogram. What is his profit percent \_\_\_\_\_.
12. A merchant professes to sell goods at the 20% profit but uses weight of 900 grams in place of kilogram. What is his profit percent \_\_\_\_\_.

13. A shopkeeper buys some pens. If he sells them @Rs. 13 per pen, his total loss is Rs.150 but on selling them @Rs.15 per pen, his total gain is Rs.100. How many pens did he sell \_\_\_\_\_.
14. If selling price of the commodity is increased by Rs.35, the profit is increased by 7%. Find cost price of the article \_\_\_\_\_.
15. A machine is sold at 20% profit. If it had been sold at 25% profit, it would have fetched Rs.35 more. The cost price of the machine is \_\_\_\_\_.
16. A man sold an article at 10% profit. Had it been sold for Rs.50 more, he would have gained 15%. Cost price of the article is \_\_\_\_\_.
17. A machine is sold at 10% loss. If it had been sold at 15% profit, it would have fetched Rs.50 more. The cost price of the machine is \_\_\_\_\_.
18. Profit margin of a merchant is increased by 10%, if he sells an article for Rs. 650 instead of Rs.600. What is the cost price of that article \_\_\_\_\_.
19. A bicycle is sold at 10% profit. Had it been sold for Rs.10 less, the profit would have been 5% only. What is the cost price of the bicycle is \_\_\_\_\_.
20. An article is sold at 10% loss. Had it been sold for Rs.30 more, the loss would have been 5% only. What is the cost price of the article is \_\_\_\_\_.
21. An article is sold at 5% loss. Had it been sold for Rs.30 more, he would have been gained 10%. What is the cost price of the article is \_\_\_\_\_.
22. On selling an article for Rs. 600, a man gains 20% of the selling price. Find profit %
23. On selling an article for Rs. 250, a shopkeeper gains Rs.50. His gain percent is \_\_\_\_\_.
24. On selling an article for Rs. 200, a man gains 20. Find his profit percentage \_\_\_\_\_.
25. On selling an article for Rs. 200, a man losses 20, then his loss percentage \_\_\_\_\_.
26. On selling an article for Rs. 250, a shopkeeper losses Rs.50. His loss percent is \_\_\_\_\_.
27. Selling price of an article is Rs.330. Find cost price of the article, if gains is 10% on cost price \_\_\_\_\_.
28. On selling an article for Rs.300, a shopkeeper gains 20% of the cost price. Find cost price of the article \_\_\_\_\_.
29. On selling an article for Rs.900, a shopkeeper loses 10% of the cost price. Find cost price of the article \_\_\_\_\_.
30. If an article costing Rs.1000 is sold gaining 20% of its selling price. Find selling price of the article \_\_\_\_\_.
31. A retailer buys goods at  $\frac{9}{10}$  of its marked price and sells them at  $\frac{12}{10}$  of the marked price, Find his profit percent \_\_\_\_\_.
32. A shopkeeper purchases goods at  $\frac{19}{10}$  of its marked price and sells them at 14% more than its marked price. Find his profit percent \_\_\_\_\_.
33. A merchant sold 20 kg of rice for Rs.240 and thus earned profit equal to the cost price of 4kg. Find the cost price of rice per kg. \_\_\_\_\_.
34. A man brought 25 kg of rice for Rs.750. On selling them for a certain price, he suffered loss equal to the selling price of 5kg. Find the selling price of 1kg of rice ?
35. Some quantity of tea is sold at Rs.22 per kg, making 10% profit. If total gain is Rs.88, What is the quantity of tea sold \_\_\_\_\_.

36. A merchant sells sugar at Rs.10 per kg, there by gaining 25%. If he gains Rs.100 on a particular day, find the quantity of sugar he sold that day\_\_\_\_\_.
37. On selling an article for Rs.550, a man gains 10%. What will be the selling price, if desired profit is 20% \_\_\_\_\_.
38. On selling an article for Rs.400, a man loses 20%. What will be the selling price, if desired profit is 10% \_\_\_\_\_.
39. On selling an article for Rs.291, a man loses 3%. What should be the selling price, if desired profit is 10% \_\_\_\_\_.
40. A merchant fixed selling price of his articles at Rs.700 after adding 40% profit to the cost price. As the sale was very low at this price level, he decided to fix the selling price at 10% profit. Find the new selling price\_\_\_\_\_.
41. A shopkeeper bought some eggs at the rate of Rs.16 per dozen. Due mishandling 20% of the eggs bought were broken during the transportation. At what rate of per dozen should he sell the remaining eggs so as to gain 30% on the total cost price \_\_\_\_\_.
42. A trader buys apples at 7 apples for a rupee and sells them at 40% profit. How many apples does he sell for a rupee \_\_\_\_\_.
43. A man purchases 5 pens for a rupee. How many pens should he sell for a rupee if he wants to earn 25% profit \_\_\_\_\_.
44. On selling apples at 36 for a rupee, a shopkeeper loses 10%. How many apples should he sell for a rupee in order to gain 8% \_\_\_\_\_.
45. On selling 7 pens for Rs.44, a man gains 10% of the cost price, what should be the selling price of 10 pens, if desired profit is 40% \_\_\_\_\_.
46. A man sells eggs @ 10 for Rs.7, gaining 30%. How many eggs did he buy for Rs.7
47. On selling an article for Rs.600, a man gains 20%. What will be the profit if the article is sold for Rs.800 \_\_\_\_\_.
48. On selling an article for Rs.630, a man loses 10%. What will be his profit if the article is sold for Rs.749 \_\_\_\_\_.
49. On selling an article for Rs.50, a man loses 1/6 of his outlay. Find his profit percentage, if the article is sold for Rs.66 \_\_\_\_\_.
50. On selling an article for Rs.64, a man gains 1/7 of his outlay. Find his profit percentage, if the article is sold for Rs.63 \_\_\_\_\_.
51. Smallest blood vessel in the body is \_\_\_\_\_.
52. Blood plasma of the pH of \_\_\_\_\_.
53. \_\_\_\_\_ is the protein, present in human blood.
54. \_\_\_\_\_ type of blood cells is responsible for clotting of blood.
55. Kidney is a part of \_\_\_\_\_.
56. \_\_\_\_\_ is not the cause of kidney stone formation.
57. The shape of a rain drop is spherical due to \_\_\_\_\_.
58. Who defined the law of gravitation \_\_\_\_\_.
59. Intensity of gravitational field of the earth is maximum at \_\_\_\_\_.
60. The period of revolution of a geostationary satellite is \_\_\_\_\_.
61. Astronauts inside spaceship feel \_\_\_\_\_ weight \_\_\_\_\_.
62. A small gap is left at joins of rails in a railway track to \_\_\_\_\_.

63. Lakes freeze in cold countries in winter, leaving the water underneath at \_\_\_\_\_
64. What changes will happen to a bowl of ice & water kept at exactly  $0^{\circ}$  Celsius?
65. Boiling point of water is \_\_\_\_\_
66. Heat transfer horizontally within the atmosphere is called \_\_\_\_\_
67. Under sea earthquakes can cause a \_\_\_\_\_
68. Harbor wave also known as \_\_\_\_\_
69. What is an archipelago ?
70. Gulf stream is a \_\_\_\_\_ current.
71. Sunda trench is a part of \_\_\_\_\_.
72. Nile river flows in \_\_\_\_\_
73. Which is the largest continent in the World ?
74. Which is the highest mountain in Africa ?
75. Which is the largest desert of the World ?
76. What is the desert adjoining the Thar desert called in Pakistan ?
77. Which river has the greatest flow of water in the World ?
78. Which river flows from maximum number of countries ?
79. Which country is the smallest in area and population both ?
80. As depth increases wave energy \_\_\_\_\_
81. Who is the writer of book, "Legend of Suheldev: The King Who Saved India" published by Westland Publications Pvt Ltd?
82. The Fifteenth Finance Commission commission has recommended the grant of how much Rs. for the period FY 2020-21 for Rural Local Bodies?
83. The United Nations World Food Programme India have joined hands with institute to support state and national governments in achieving food and nutrition security?
84. Which bank partnered with four insurers namely, SBI Life Insurance Company, the Oriental Insurance Company and Religare Health Insurance Company, Star Health and Allied Insurance Company to offer various insurance products for its customers?
85. International Olympic Day is observed on which day?
86. Who has been re-nominated as a Part-Time Non-Official Director on RBI Central board for 2 years from 3rd March 2020?
87. On June 19, 2020 A meteorite-like object weighing around 2.78kg has fallen from the sky in which Indian state resulting in a one-foot deep crater in the earth?
88. Which state government has signed a tripartite agreement with the Power Grid Corporation of India and the Educational Consultants India Limited to set up smart classrooms in 100 schools with a cost of Rs 1.85 crore?
89. Which Bank has joined hands with Delhi-based fintech startup Affordplan, to launch co-branded healthcare card called 'Swasth Card'?
90. International Widows' Day is observed on which day?
91. Who has been selected for 2020 Peace Prize by the Board of Trustees of the Peace Prize of the German Book Trade?
92. United Nations Public Service Day is observed on which day?

93. Union Minister of State of Development of North Eastern Region Dr Jitendra Singh has sanctioned how much fund for augmentation of healthcare facility in the eight North Eastern States?
94. United Nations International Day of the Celebration of the Solstice is globally observed on which day?
95. Who has been appointed as the Chairman of the Indian Financial Technology & Allied Services?
96. Which Indian company has announced the launch of its generic version of antiviral drug Remdesivir for emergency use in the treatment of the COVID-19 patients?
97. The Indian Space Research Organisation has initiated a 10,000 crore project-Gaganyaan to send humans to space by which year?
98. The Supreme Court asked the government to treat a writ petition, for setting up expert panels to improve India's performance in which index?
99. Who inaugurate Virtual India Pavilion at the Cannes Film Festival 2020?
100. Which organisation in collaboration with International Transport Forum will launch the "Decarbonising Transport in India" project on 24 June?

**MODEL PAPER - 8**

1. A manufacturer sells a TV at 10% profit to wholesaler who in turn sells it to a retailer at 20% profit. If the price paid by the retailer is Rs. 13200, how much the TV costs to the manufacturer\_\_\_\_\_.
2. A sells an article to B at a profit of 20%. B sells it to C at a profit of 30%. If C has paid Rs.780, the cost price of the article to A is \_\_\_\_\_.
3. A watch is sold at 10% discount on its marked price o Rs.480. If the retailer makes 20% profit on the cost price , find the cost price of the watch\_\_\_\_\_.
4. A shopkeeper allows 25% discount on the marked price of his articles and hence gains 25% of the cost price. What is the marked price of the article on selling which he gains Rs.120\_\_\_\_\_.
5. A man brought a horse for Rs.10000 and sold it to B at 10% profit and B sold it to C at 10% loss. Find the amount paid by C\_\_\_\_\_.
6. A man purchased two articles for total cost of Rs.9000. He sold first article at 15% profit and the second at 12% loss. In the bargain, he neither gained nor lost anything. Find cost price of the first article\_\_\_\_\_.
7. A man two articles for Rs.10000 each. On selling first, he gains 20% and on the other, he loses 20%. What is the profit/loss in the transaction\_\_\_\_\_.
8. A man two articles for Rs.10000 each. On selling first, he gains 10% and on the other, he loses 10%. What is the profit/loss in the transaction\_\_\_\_\_.
9. A shop keeper marks price of his articles 12% above the cost price and then allows 12% discount on the marked price. What is his loss per cent\_\_\_\_\_.
10. On increasing price of an article by 20%, number of articles sold fell by 20%. What is effect on the on total sales of the articles\_\_\_\_\_.

11. A merchant marks price of his articles 20% above the cost price and allows 10% discount to the customers. What per cent profit does he make \_\_\_\_\_.
12. A merchant marks price of his articles 25% above the cost price and allows 12% discount to the customers. What per cent profit does he make \_\_\_\_\_.
13. A sells an article to B at a profit of 20%. B sells to C at a profit of 10%. How many percent will C pay more than what A pays \_\_\_\_\_.
14. Two tables are purchased for the total cost of Rs.5000. First table is sold at 40% profit and second at 40% loss. If selling price is same for both the tables, what is the cost price of the table that was sold at profit \_\_\_\_\_.
15. A shopkeeper brought 2 pens for Rs.480. He sold the first at a loss of 15% and the second at a profit of 19%. Find the cost price of the second pen, if selling price of both the pens are same \_\_\_\_\_.
16. A man sold two articles for Rs.600 each. On selling first, he gains 20% and on the other 30%. What is the profit percent in the transaction \_\_\_\_\_.
17. A man sold two articles for Rs.2500 each. On selling first, he gains 20% and on the other he loses 10%. What is the profit percent in the transaction \_\_\_\_\_.
18. A fruit seller buys oranges @3 for Rs.2 and sells them @4 for Rs.3. His profit % is \_
19. A fruit seller buys oranges @3 for Rs.2 and sells them @2 for Rs.3. His profit % is \_
20. A fruit seller buys oranges @8 for Rs.10 & sells them @10 for Rs.8. His profit/loss %
21. A merchant buys oranges at the certain price for dozen and sells them charging 9 times that price for 100 oranges. Find his profit per cent \_\_\_\_\_.
22. A fruit seller buys oranges @3 for Re.1 and sells them @ Rs.3. His profit%
23. A retailer bought some apples @ 7 apples for Rs.4 and sold them @8 apples for Rs.5. If he gains Rs.30 on that day, find the quantity of apples sold by him on that day\_.
24. A retailer bought some oranges at the rate of 3 oranges for one rupee and equal number of oranges at the rate of 2 oranges for one rupee. What is his profit , if he sells 2 oranges for one rupee \_\_\_\_\_.
25. By selling 4 articles, a shopkeeper gains equal to the CP of 1 article. His gain%
26. If the selling price of 10 articles is same as CP of 12 articles, find profit %
27. If the cost price of 11 oranges is equal to selling price of 10 oranges. Find profit %
28. By selling 10 articles, a shopkeeper gains equal to the. Find selling price of 2 articles his gain per cent \_\_\_\_\_.
29. On selling 10 articles, a merchant loses equal to cost price of 2 articles his loss %
30. If the cost price of 15 tables is equal to selling price of 20 tables. Find profit/loss %
31. By selling 18 articles, a shopkeeper loses the SP of 2 articles. Find his loss%
32. A milk seller purchased milk at the rate of Rs.10 per litre and adds one fifth of water to it. What per cent profit does he make by selling the mixture at Rs.12 per litre.
33. The profit earned on selling an article for Rs.575 is equal to loss suffered when the article is sold for Rs.325. Find the cost price of the article \_\_\_\_\_.
34. An article is sold for Rs.500 and hence lost something. Had the article is sold for Rs.700, the merchant would have gained three times the former loss. Find the CP.

35. On selling an article for Rs.270, the amount of loss suffered is as much as profit earned on selling the article at 10% profit. What is the selling price if the desired profit is 20% ?
36. On selling an article for Rs.440, the amount of loss suffered is double of profit earned on selling the article at 6% profit. What is the cost price of the article \_\_\_\_\_.
37. An article is sold for Rs.190, hence gaining a certain amount. Had the article been sold for Rs.175, he would have suffered loss equal to 50% of the gain in the first case. Find cost price of the article \_\_\_\_\_.
38. If selling price of an article is  $\frac{4}{3}$  of the cost price, then profit percent is \_\_\_\_\_.
39. If cost price of an article is  $\frac{3}{2}$  of its selling price, the profit or loss percent is \_\_\_\_\_.
40. If selling price of  $\frac{4}{5}$  of the stock of oranges is equal to cost price of the whole stock, Find profit per cent \_\_\_\_\_.
41. Find the profit per cent made on selling an article for a certain amount, if on selling the article for  $\frac{3}{4}$  of the amount causes 10% loss \_\_\_\_\_.
42. A man sold two articles for Rs.990 each. On selling first, he gains 10% and on the other, he loses 10%. Find his total gain or loss \_\_\_\_\_.
43. A man sold two articles for Rs.120 each. On selling first, he gains 20% and on the other, he loses 20%. Find his total gain or loss \_\_\_\_\_.
44. A merchant marks price of his articles 20% above the cost price and allows some discount on the marked price and makes a profit of 8%. Find the rate of discount ?
45. A merchant marks price of his articles 25% above the cost price and allows some discount on the marked price and makes a profit of 10%. Find the rate of discount?
46. A merchant earns 20% profit, even after allowing 20% discount on the marked price of an article. How much the marked price above the cost price \_\_\_\_\_.
47. A merchant earns 60% profit, even after allowing 20% discount on the marked price of an article. How much the marked price above the cost price \_\_\_\_\_.
48. A profit of 20% is earned even after allowing 4% discount on the marked price. How much the marked price above the cost price \_\_\_\_\_.
49. A merchant makes a profit of 12%, after allowing 30% discount on the marked price of an article. How much the marked price above the cost price \_\_\_\_\_.
50. On allowing 20% discount, 12% loss is suffered. How much the marked price is above the cost price ?
51. Who inaugurated a two-day digital conference on the defence & aerospace manufacturing sector Defence Conclave 2020, Gujarat via video conference on 26 June?
52. The CCEA has approved additional investment of how much by ONGC Videsh Ltd towards further development of blocks A-1 and A-3 Blocks of Shwe oil & gas project in Myanmar?
53. Who hosted the Russia-India-China Foreign Minister-level virtual conference following the cross border clash between Indian and Chinese troops in Galwan Valley?
54. 45th edition of Toronto International Film Festival 2020, which is to be held virtually will be held on which dates?

55. Who has launched 'eBloodServices' mobile app developed by the ERaktkosh team of C-DAC India for easy access to blood needed for transfusion?
56. The International Day of the Seafarer is observed annually on which date as a tribute to the Seafarers and sailors who are essential to global trade and transport?
57. The Cabinet has also approved a scheme for interest subvention of how much percent for a period of 12 months to all Shishu loan accounts under Pradhan Mantri Mudra Yojana to eligible borrowers?
58. IMF in the June 2020 update "A Crisis Like No Other, An Uncertain Recovery" of its flagship World Economic Outlook, has predicted that the Indian economy will have how much percent contraction in 2020?
59. Who has been appointed as Chief Secretary of Maharashtra government?
60. Who becomes the 1st female president of Marylebone Cricket Club in 233 years?
61. Cabinet has approved the further extension of the term of the Commission formulated to examine the issue of Sub-categorization of Other Backward Classes by how many months?
62. Researchers from which institute has traced the paleoclimatic history of the Indus River in Ladakh Himalaya?
63. Which day is observed as World Vitiligo Day as a campaign to raise awareness about vitiligo?
64. According to the Annual "India TB (Tuberculosis) Report 2020" there was about how much percent increase in TB patients as compared to the year 2018?
65. Which Airport becomes the 1st airport in India to get an indigenously-developed Aviation Weather Monitoring System at both ends of the runway?.
66. Financial Action Task Force in its 3rd and final plenary meeting under the Chinese Presidency of Xiangmin Liu retained Pakistan on the grey list till which month?
67. Which state government has launched Mukhyamantri Matru Pushti Uphaar scheme to provide nutrition kits to pregnant and lactating women?
68. The Cabinet has approved an ordinance to bring nearly 1,482 urban and 58 multi state cooperative banks under whose supervision?
69. Which country is the first country in the world to control desert locusts using drones?.
70. Directorate General of Training with which company have jointly launched free digital learning platforms 'SkillsBuild Reignite' and 'SkillsBuild Innovation Camp'?
71. \_\_\_\_\_ is the most common kidney stone formation compound
72. The total no. of bones in man is
73. Which function of the body is not carried out by long bones
74. Which muscle type is moved voluntarily
75. How many bones does a new born human baby have
76. Which part has the largest muscle is found in human body
77. \_\_\_\_\_ is not a type of heat
78. Metal tea pots have wooden handles because - \_\_\_\_\_
79. Velocity of sound in air does not depends on \_\_\_\_\_
80. In which medium, velocity of sound is maximum \_\_\_\_\_
81. The sounds having a frequency of 20Hz to 20000Hz are known as \_\_\_\_\_



82. Sound cannot pass through \_\_\_\_\_
83. The sound produced by a bat is \_\_\_\_\_
84. The persistence of a sound in a big hall due to repeated reflection from walls, ceiling, floor is known as \_\_\_\_\_
85. Longitudinal waves cannot travel through \_\_\_\_\_
86. Why are we able to hear short wave broadcasts better than long wave broadcasts?
87. Sound waves cannot travel in \_\_\_\_\_
88. The total geographical area of India is \_\_\_\_\_
89. The southern most latitude of India is \_\_\_\_\_
90. What is the share of population of India in the World ?
91. The southern most point of Indian main land is \_\_\_\_\_
92. Where is the only active volcano of India located ?
93. India lies in which of the hemisphere ?
94. Eastern most point of India is \_\_\_\_\_
95. Which is the youngest folded mountain in the World ?
96. Which is the oldest Himalayan range ?
97. Mt.Everest is located in \_\_\_\_\_
98. The North of Great Himalayas is known as \_\_\_\_\_
99. What is the rank of India in terms of geographical area in the World ?
100. Kullu and Kangra valleys are located in \_\_\_\_\_.

**MODEL PAPER - 9**

1. A man's expenditure on food is  $\frac{3}{5}$  of his expenditure on clothes , find ratio between his expenditure on the two items \_\_\_\_\_.
2. Mean proportional of 32 and 2 is \_\_\_\_\_.
3. 3rd proportional to 16 and 4 is \_\_\_\_\_.
4. 4th proportional to 6,9 and 20 is \_\_\_\_\_.
5. 40 chocolates were distributed among the students of a class. If each student got as many chocolates as the number of students in the class . Find the number of students in the class \_\_\_\_\_.
6. 2700 chocolates were distributed among the students of a class . If each student got 3 times as many chocolates as the number of students in the class .Find the number of students in the class \_\_\_\_\_.
7. If 21 pens cost Rs. 35, Find the cost of 30 pens \_\_\_\_\_.
8. A 6 meter long pole casts 15 meter long shadow . Find the length of second pole if its shadow is 25 meter \_\_\_\_\_.
9. If 5 times a number is equal to 3 times another number . Find ratio between them ?
10. If  $a : b = 2 : 3$  ,  $b : c = 4 : 5$  and  $c : d = 6 : 7$  , then  $a : d =$  \_\_\_\_\_
11. If  $a : b = 2 : 3$  ,  $b : c = 4 : 5$  then  $a : b : c$  \_\_\_\_\_
12. If  $a : b = 3 : 4$  and  $b : c = 8 : 9$  then  $a : b : c =$  \_\_\_\_\_.
13. If  $a : b = 3 : 4$  and  $b : c = 6 : 7$  then  $a : b : c =$  \_\_\_\_\_.
14. A's share is twice of B's. 3times B's share is equal to 4times C's share. Find A:B:C

15. If  $a/b = b/c = 2/3$ , then  $a : b : c$  \_\_\_\_\_.
16. If  $A/2 = B/3 = C/4$ , then  $A:B:C =$  \_\_\_\_\_.
17.  $1/2 : 1/3 : 1/4 = ?$  \_\_\_\_\_.
18.  $1/2 : 2/3 : 3/4 =$  \_\_\_\_\_?
19. If  $2A = 3B = 4C$  Then  $A:B:C = ?$  \_\_\_\_\_
20. Rs.700 is divided between A and B in the ratio of 3:4. Find A's share?
21. If Rs.700 is divided between A and B in the ratio 1/3:1/4. Find the A's share ?
22. Rs.561 is to be divided among A,B,C in the ratio of 2:4:5. How much will C get more than B?
23. A certain sum of money is divided between A and B in the ratio of 3:7. If B gets Rs.800 more than A, Find the total sum
24. Rs.430 is divided among A,B,C in such a way that if A gets Rs.2,B gets Rs.3 and if B gets Rs.5,C gets Rs.6 Find the share of B \_\_\_\_\_.
25. A sum of Rs.1200 is divided among A,B,C. So that A receives half of what B and C receive together. What is A's share? \_\_\_\_\_
26. Rs.7000 is divided among A,B, and C in such a way that A receives 3/7 of what B and C receive together. What is the share of A \_\_\_\_\_.
27. Rs.4060 is to be divided among A, B and C in such a way that A gets 1/4 of what B and C together get. Find A's share \_\_\_\_\_
28. A certain sum divided among A,B, and C in such a way that A gets three times as much as B, B receives 2 times as much as C. If A receives Rs.1500 more than C What is the sum divided \_\_\_\_\_.
29. Divide Rs.1570 between A and B So that Rs.25 being deducted from A's share and Rs.45 From B.share, their share becomes 2:3. Find the amount received by A?
30. When a ball bounces it rises to 2/3 of the height from which it falls. If the ball is dropped from a height of 27 metre, how high will it rise in the 3rd bounce ?
31. If  $A/B = 5/2$  then  $A+B/A-B =$  \_\_\_\_\_
32. If  $a:b = 4:3$  Then  $(5a+2b) : (5a-2b) =$  \_\_\_\_\_
33. If  $a/b = 4/3$ , then  $(3a+2b) : (3a-2b) =$  \_\_\_\_\_
34. If  $a/2 = b/3 = c/5$ ; then  $(a+b+c)/c = ?$
35. If  $a/b = 2/3$  and  $b/c = 4/5$ , then  $(a+B) : (b+c) = ?$ .
36. If  $a:b = c:d = e:f = 1:2$ , then  $(ra+sc+te) : (rb+sd+tf) = ?$
37. If ratio of boys and girls in a class is 7:5, which of the following cannot be the total number of students in the class ?
38. A man spends 3/5 of his income and still saves Rs.600. His income is. \_\_\_\_\_
39. A man spends 1/5 of his income on food and 3/5 on clothing. If he still saves Rs.100, What is his total income? \_\_\_\_\_
40. A man spends 2/5 of his income on food and 4/5 of the remaining income on clothing. If he still saves Rs.600, what is his total income ?
41. A and B joined a partnership business by investing Rs.30,000 and Rs.50,000 respectively. If they earn a profit of Rs.4000, find A's share in the profit ?

42. A man gives  $\frac{1}{3}$  of his money to his wife ,  $\frac{1}{4}$  of the remaining to his son and  $\frac{2}{5}$  of the remaining to his daughter . If he still have a balance of Rs.3000, how much does he had originally \_\_\_\_\_
43. A vessel contains 100 litres of pure milk.10 litres milk is taken from the vessel and is replaced by 10 litres of water . now 20 litres of mixture is taken from the vessel and is replaced by water .what is the quantity of milk left in the vessel \_\_\_\_\_
44. A and B joined a partnership business .In which A invested Rs.10,000 for 6 months and B invested Rs.5,000 for 8 months. If they earn a profit of Rs.3000,find B's share in profit \_\_\_\_\_ .
45. A,B,C rented a pasture ,A puts in 15 cows for 4 months , B puts in 14 cows for 5 months and C puts in 20 cows for 2 months .if they pay Rs.170 towards rent of the pasture , find the amount A will pay as his share of rent \_\_\_\_\_
46. Ratio between 2 numbers is 3:4 and sum of their squares is 625 the numbers are \_\_\_\_\_
47. Sum of two numbers is 48 and difference between the numbers is 8. Find ratio
48. If the sum of two numbers is 30 and their difference is 12. Find ratio
49. Ratio between sum and difference of two numbers is 5:1. Find ratio
50. The sum of two numbers is twice the difference between them. If the smaller number is 20. Find the bigger number ?
51. \_\_\_\_\_ is made up of muscular walls
52. Tendons are made up of \_\_\_\_\_
53. Muscular tissue is differentiated into \_\_\_\_\_
54. The human spinal column is made up of ..... bones
55. The unit of nervous system \_\_\_\_\_
56. The working of human eye is like that of a \_\_\_\_\_
57. Which unit is used to measure noise?
58. What does SONAR stands for ?
59. Echocardiogram is more directly related to \_\_\_\_\_
60. Speed of light in vacuum is approximately equal to \_\_\_\_\_ -
61. We see the colour of grass as green because \_\_\_\_\_
62. Rainbow formation is due to \_\_\_\_\_
63. The phenomenon of light associated with the appearance of blue colour of the sky is \_\_\_\_\_
64. When a strong beam of light is passed through a colloidal solution, the light will \_\_\_\_\_
65. Optical fibres are based on the phenomenon of \_\_\_\_\_
66. Convex mirrors are used as a rear view mirror in motor cycles because \_\_\_\_\_
67. Persons suffering from myopia are advised to use \_\_\_\_\_
68. The peak K2 is located in \_\_\_\_\_
69. The mount Godwin Austin lies in \_\_\_\_\_
70. \_\_\_\_\_ is the oldest mountain range in India.
71. Dodabeta peak situated in \_\_\_\_\_ hills range.
72. \_\_\_\_\_ river was known as the "sorrow of Bengal".
73. India's longest train runs between \_\_\_\_\_ and \_\_\_\_\_ stations.
74. Karbi anglong Plateau ia an extension of \_\_\_\_\_
75. Thar desert is in \_\_\_\_\_

76. \_\_\_\_\_ is not a tributary of river Indus.
77. Lakshdweep Island lies in the \_\_\_\_\_
78. Kalindi is another name of the \_\_\_\_\_ river.
79. Koyna dam located in \_\_\_\_\_ state.
80. Where does the river Indus rise ?
81. National Chartered Accountants Day is celebrated annually on which day?
82. Initiative 'Sabuja Odisha' launched in Odisha state is related to which mission?
83. Which scientist from India has been named as members of International Scientific group to offer foremost scientific evidence for sustainable food systems for global food summit 2021?
84. According to the report "Annual Marine Fish Landings in India for 2019" by Central Marine Fisheries Research Institute, India's marine fish production has increased marginally by how much percent in 2019?
85. Which company has decided to acquire about 25% stake in India's second largest telecom company Bharti Airtel's data centre business -Nxtra Data Ltd- for \$235 million?
86. Which bank in partnership with Computer Age Management Services launched 'Insta Loans against Mutual Funds', a facility for retail customers to avail loans upto Rs 1 crore?
87. Who is the head of central Committee for reforms in Criminal Law constituted by Ministry of Home Affairs & is going to start a 3 months long online consultation exercise?
88. Carnegie Corporation of New York has named which 2 renowned Indian-Americans among '2020 Great Immigrants' honourees?
89. Who is the head of nine member working Group to study the suitability of insurers offering surety bonds for contractors formed by IRDAI?
90. The Swedish Institute of Space Physics will explore Venus for the second time through the India's 1st Venus Mission. What is the name of India's 1st Venus Mission?
91. What is the theme of World Allergy Week 2020 celebrated from 28 June - 4 July 2020?
92. AIIMS doctor along with a team of IIT-Delhi students have developed which app which enables users to track willing plasma donors who have recovered from Covid-19?
93. India Celebrates which day as the National Doctors Day?
94. The District Administration of Mon, from which state received 2020 SKOCH awards under three categories?
95. The Governor of Telangana has amended the Telangana Fiscal Responsibility and Budget Management Act-2005 which will enable the State to increase the borrowing limit by how much percent from earlier 3%?
96. Who virtually released a book, "Future of Higher Education - Nine Mega Trends"?
97. World Sports Journalists Day is observed annually on which day?

98. Who is appointed as the New Managing Director of the Cholamandalam MS General Insurance Company promoted?
99. Who will take charge as interim chairman of International Cricket Council?
100. Who was appointed as India's Permanent Representative /Ambassador to the United Nations and the other International Organisations in Geneva?

**MODEL PAPER - 10**

01. The sum of two numbers is twice the difference between them. If the smaller number is 20, find the bigger number\_\_\_\_\_.
02. A spends 90% of his salary and B spends 85% of his salary. But saving of both are equal. Find the income of B, if sum of their incomes is Rs.5000\_\_\_\_\_.
03. A man has some hens and some cows. If the number of heads is 50 and number of feet is 142. The number of cows is\_\_\_\_\_.
04. A sum of Rs.350 made up of 110 coins, which are of their Re.1 or Rs.5 denomination. How many coins are of Rs.5\_\_\_\_\_.
05. A sum of Rs.80 made up of 100 coins, which are either of Re.1 or 50 paise denomination. How many coins are of 50 paise\_\_\_\_\_.
06. 20 is divided into two parts in such a way that 6 times of first part when added to 4 times of second part gives 104. Find the first part\_\_\_\_\_.
07. The population of a village is 10000. In one year, male population increase by 6% and female population by 4%. If population at the end of the year is 10520, find size of male population in the village (originally)\_\_\_\_\_.
08. A group of 15 persons spends Rs.4500 in 6 months, find total expenditure of a group of 25 persons in 4 months, if expenditure person is same in both the cases\_\_\_\_\_.
09. Two numbers are in the ratio of 5:6. If 7 is added to each number, new ratio becomes 6:7. The original numbers are\_\_\_\_\_.
10. Two numbers are in the ratio of 8:11. If we subtract 6 from each number, then new ratio becomes 7:10. The numbers are\_\_\_\_\_.
11. Ratio of milk and water in a mixture is 4:1. If 5 litre of milk is added in the mixture, new ratio becomes 5:1. The quantity of milk in the mixture originally was\_\_\_\_\_.
12. Students in class I ,II and III of a school are in the ratio3:5:8. Had 15 more students admitted to each class, the ratio would have become 6:8:11. How many total students were there in the beginning\_\_\_\_\_.
13. Ratio between the annual income of A and B is 9:8 and between their expenditure is 8:7. If they save Rs.500 each. Find A's annual income\_\_\_\_\_.
14. Income of A and B in the ratio of 3:2 and their expenditure are in the ratio of 5:3. If they save Rs.400 each, find A'S income\_\_\_\_\_.
15. A mixture of 70 litres contains milk and water in the ratio of 3:4. How many litres of milk must be added to the mixture so as to make the ratio 5:4\_\_\_\_\_.
16. 70lts of a mixture contains milk & water in the ratio of 7:3. Find the quantity of the water must be added to mixture to make the resultant mixture in the ratio of 7:5 ?

17. The ratio of males and females in a group is 3:2. How many females must join the group so that the ratio becomes 1:1, if there were 195 members originally.
18. The ratio of boys and girls in a class of 80 students is 5:3. How many more girls should join the class to make the ratio 1:1 \_\_\_\_\_.
19. 132 litres of a mixture contains milk and water in the ratio of 8:3. How much water is to be added to the mixture so as to make the ratio of milk and water 2:1 \_\_\_\_\_.
20. A mixture of 36 lts contains milk & water in the ratio of 5:4. On adding some water in the mixture the ratio becomes 2:3, find the quantity of water added to the mixture.
21. A mixture of 40 lts contains milk & water in the ratio of 5:3. How many lts of milk must be added to the mixture, the ratio becomes 2:1 in the resultant mixture?
22. A mixture of 50 lts contains milk & water in the ratio of 3:2. On adding some water in the mixture the ratio becomes 2:3, find the quantity of water added to the mixture.
23. In a mixture of 48 litres, milk and water are in the ratio of 5:3. Find the quantity of water to be added to make the ratio 3:5 \_\_\_\_\_.
24. The ratio of males and females in a party is 3:2. When 20 more females joined, the ratio was reversed. How many males were there at the party \_\_\_\_\_.
25. The ratio between two numbers is 5:3. If 3 added to both the numbers, the ratio becomes 14:9. Find the smaller number \_\_\_\_\_.
26. The ratio between two numbers is 2:3. If 3 is added to both the numbers, the ratio becomes 5:7. Find the smaller number \_\_\_\_\_.
27. The ratio between two numbers is 5:8. If 8 is subtracted from both the numbers, the ratio becomes 1:2. The original numbers are \_\_\_\_\_.
28. A mixture of 55 litres contains milk and water in the ratio of 7:4. How many litres of milk and water each must be added to the mixture to make the ratio 3:2 \_\_\_\_\_.
29. A vessel contains milk and water in the ratio of 5:7. Had it contained 2 litres more of milk and 2 litres less of water, the ratio would have become 4:5. What is the quantity of milk in the vessel \_\_\_\_\_.
30. Two numbers are in the ratio of 3:5. If 2 is added to the first number and 5 to the second, the ratio between the numbers becomes 4:7, find the smaller number
31. Two vessels A and B contain milk and water in the ratio of 5:3 and 8:7 respectively. Find the ratio in which the quantities be taken from the two vessels so that the ratio of milk and water in the new mixture is 13:10 \_\_\_\_\_.
32. Two vessels contain mixture of milk and water in the ratio of 5:2 and 3:1 respectively. Find the ratio of milk and water in the new solution, if two mixtures are mixed in equal amount \_\_\_\_\_.
33. Three equal vessels are filled with milk and water in the ratio 2:1, 3:2 and 3:1 respectively. The contents of the three vessels are emptied into a big vessel, what is the ratio of milk and water in the big vessel \_\_\_\_\_.
34. A bag contains coins of Re. 1, Rs. 2 and Rs. 5 denomination in the ratio of 2:3:4. If the total amount is Rs.280 find the number of coins of Rs.5 denomination in the bag
35. A sum of Rs.600 is divided among 8men, 9 women and 12 boys. If share of one man, one woman and one boy is in the ratio of 6:4:3, find the share of each boy
36. A satellite air time bill costs Rs. 8 for 1 min40sec. what is the cost in Rs for 4m20s

37. In a map drawn to a scale of  $1\text{cm} = 18.5\text{ km}$ , the distance between places A and B =  $22.25\text{CM}$ . Find the actual distance in km \_\_\_\_\_.
38. If 3 numbers are in the ratio  $2:3:5$  and the twice their sum is 100. Find the square of the largest of the 3 numbers \_\_\_\_\_.
39. Divide 3740 in three parts in such a way that half of the first part,  $\frac{1}{3}$ rd of the second part and  $\frac{1}{6}$  th of the 3rd part are equal \_\_\_\_\_.
40. Two numbers are in the ratio  $7:11$ . If 7 is added to each then the ratio becomes  $2:3$ . Find the larger \_\_\_\_\_.
41. Divide Rs.288 in the ratio  $2:3:5:6$ . The rupees in the respective ratios are given by \_\_\_\_\_.
42. The price of the 12 kg of sugar is equal to that of 6 kg of rice. The price of 10 kg of sugar and 8 kg of rice Rs.1040. Find the price of 1 kg sugar \_\_\_\_\_.
43. Jalal, Amit and Feroz enter into partnership. Jalal invests 4 times as much as amit and amit invests three fourth of what Feroz invests. At the end of the financial year, the total profit earned is Rs. 19000. Find the share for Jalal \_\_\_\_\_.
44. Ramadas invested Rs. 90000 in a cosmetic business. After few months, Shymdas joined him with Rs.30000. At the end of the year the total profit was divided between them in the ratio  $4:1$ . After how many months did Shrymdas joined business?
45. The longest irrigation canal in India is \_\_\_\_\_.
46. What is the total length of Indus river?
47. \_\_\_\_\_ river does not originate in Indian territory?
48. Where does Bhagiradhi rise from?
49. What is the most cultivated crop in india?
50. Which river in India flows in a rift valley?
51. Which is the second largest river basin in India?
52. The longest river of peninsular river of India is \_\_\_\_\_.
53. The river Narmada has its source at \_\_\_\_\_.
54. Which river is known as Ganga of south?
55. Where can you find the Kunchikal waterfalls?
56. Koyna river is a part of which river?
57. The river Thungabhadra is a tributary of the \_\_\_\_\_ river.
58. Golden fibre refers to \_\_\_\_\_.
59. Most wide spread vegetation in India is \_\_\_\_\_.
60. Which is India's longest river that does not flow into the sea?
61. The most abundance soil of India is \_\_\_\_\_.
62. Which is the most fertile soil of India?
63. Hypermetropia or long sight can be corrected by using \_\_\_\_\_.
64. In a laser (say neon laser), all the atoms emit light waves of \_\_\_\_\_.
65. Safety fuse wire used in domestic electrical appliances is made of metal of low \_\_\_\_\_.
66. Keeping voltage constant, if more lamps are put into a series circuit, the overall current in the circuit \_\_\_\_\_.
67. The filament of a light bulb is made up of \_\_\_\_\_.
68. Moving electric charge produces \_\_\_\_\_.
69. Magnetism in materials is due to \_\_\_\_\_.

70. In the process of magnetization of a bar \_\_\_\_\_
71. A pure semiconductor behaves as a good conductor at \_\_\_\_\_
72. At absolute zero, Si acts as \_\_\_\_\_
73. If input frequency of a full wave rectifier be  $n$ , then output frequency would be \_\_\_\_\_
74. In electronics, what comes under tank circuit?
75. The master control centre of the human body in \_\_\_\_\_
76. The brain is the main control centre of the \_\_\_\_\_
77. Memory is the responsibility of \_\_\_\_\_
78. \_\_\_\_\_ is not a sensory organ
79. \_\_\_\_\_ is the correct group of sense organs
80. Nervous system control our \_\_\_\_\_
81. According to the COVID-19 and Tourism: Assessing the Economic Consequences published by UNCTAD the World Tourism sector could lose how much money?
82. Which Insurance Company associated with BOB Financial Services Limited a wholly owned subsidiary of Bank of Baroda to offer a group insurance cover?
83. Which country has reported a suspected case of Bubonic Plague on July 5, 2020?
84. Which US private equity giant has agreed to acquire a 54% stake in Mumbai-based drug manufacturer JB Chemicals & Pharmaceuticals for approximately Rs 3100 crore?
85. Who has inaugurated Unique "Urban Forest" at the Office of the Comptroller and Auditor General of India(CAG) in New Delhi?
86. In accordance with "3rd edition of The Global E-waste Monitor 2020 report-Quantities, flows, and the circular economy potential" report, the world dumped a how much million tonnes of e-waste in 2019?
87. Syama Prasad Mookerjee Port has started a new shipping service between Kolkata Dock System and which country?
88. PM Narendra Modi will on July 10, 2020 inaugurate the Asia's largest solar power plant in which state?
89. Who inaugurated the celebrations for the Dharma Chakra Day 2020 Organized by International Buddhist Confederation?
90. The Indian Railways and RailTel signed a MoU for installation of an IP-based video surveillance system at how many railway stations across the country?
91. What is India rank in the 2020 Sustainable Development Goals Index?
92. Who has been appointed as the new Chief Secretary of Rajasthan replacing incumbent D.B. Gupta in the bureaucratic reshuffle amid COVID-19 pandemic?
93. Edelweiss Asset Management Company, a subsidiary of Edelweiss Capital Limited has decided to bring the second installment of the Bharat Bond ETF with two new series to raise how much fund in July 2020?
94. What is the name of India's first social media app named launched by Vice President Venkiah Naidu?
95. World's largest 10,000-bed Sardar Patel COVID Care Centre is inaugurated in which city?



96. The Indian Army is soon going to place emergency orders for cold weather tents for soldiers at the Line of Actual Control. Who is current Chief of the Army Staff?
97. ISRO released the picture of the closest and biggest moon of Mars named "Phobos". Who was the founder of ISRO?
98. What was the theme of International Day of Cooperatives 2020?
99. The Administration of the Union Territory of Ladakh launched the Ladakh Food Security Scheme. Who is current Lieutenant Governor of Union Territory of Ladakh?
100. The UK India Business Council signed a Memorandum of Understanding with which state Industrial Development Corporation?

**MODEL PAPER - 11**

1. Simple interest on Rs.5000 at 10% per annum for 4 years is \_\_\_\_\_
2. Find simple interest on Rs.1500 for 2 years at the rate of 1 paise per rupee per month?
3. Find the simple interest on Rs.2000 at 5% p.a. for 2 ½ years?
4. Find simple interest on Rs.7300 for 35 days at 10% p.a. \_\_\_\_\_.
5. Find simple interest on Rs.500 for 3 years. If the rate of interest for 3 years is 4%, 6%, and 7% respectively \_\_\_\_\_.
6. If simple interest on a certain sum at 4% per annum for 4 years is Rs.80, the sum is \_\_\_\_\_.
7. In how many years will Rs.5000 amount to Rs.6500 at 10% p.a. simple interest.
8. Rs.600 amounts to Rs.735 in 5 years at a certain rate of simple interest. If the rate of interest is increased by 2%, what will be the amount then \_\_\_\_\_.
9. A sum of Rs.500 becomes Rs.600 in 2 years at certain rate of interest. What will be amount if rate of interest is increased by 3% \_\_\_\_\_.
10. A sum of money is invested for 3 yrs at a certain rate of simple interest. Had the rate of interest be 1% more, It would have fetched Rs.18 more than before. Find the sum ?
11. Simple interest on Rs. 3500 at 10% p.a. for a certain period is Rs.400 more than the interest on Rs.2500 at 10% p.a. for the same period. Find the time
12. At what rate % of simple interest p.a. will a sum of money double itself in 8 years
13. At what rate per cent of simple interest per annum will a sum of money become three times in 10 years \_\_\_\_\_.
14. If difference between simple interest on a certain sum at 4% for 6 years and at 5% for 4 years is Rs.28, find the sum \_\_\_\_\_.
15. At what rate per cent of simple interest per annum will a sum of money earn interest equal to  $\frac{3}{5}$  of the principal in 4 years \_\_\_\_\_.
16. A certain sum of money at a certain rate of interest becomes double in 10 years. It will become three times in \_\_\_\_\_.
17. A certain sum of money at a certain rate of interest becomes double in 5 years. It will become four times in \_\_\_\_\_.
18. A man borrowed Rs.700 for 3 yrs at certain rate of interest and Rs.400 for 5 yrs at the same rate of interest. He pays total interest Rs.246 for both, find the rate of interest.
19. A man borrowed Rs.2500 at 4% p.a. and Rs.180 at 5% SI for the same period. If he pays Rs.570 as total interest, find the time for which the sums were borrowed.

20. At what rate percent of simple interest per annum, Rs.500 lent for 7 years will earn same interest as Rs.700 earns in 6 years at 10% p.a. \_\_\_\_\_.
21. In how many years a sum of Rs.2500 at 18% simple interest per annum will earn same interest as Rs.1500 earns at 10% p.a. in 12 years \_\_\_\_\_.
22. If simple interest on Rs.300 for 4 years at certain rate of interest is Rs.100. What will be the interest on Rs.600 for 8 years at the same rate of interest \_\_\_\_\_.
23. What sum of money lent at 4% p.a. for 3 years will earn same interest as Rs.1200 ears in 4 years at 5% p.a. of simple interest \_\_\_\_\_.
24. If a sum of Rs.500 amounts to Rs.575 in 3 years will earn same interest as Rs.1200 earns in 4 years at 5% p.a. of simple interest \_\_\_\_\_.
25. A sum of Rs.29000 is divided into two parts and invested at simple interest in such a way that first part invested at 5% p.a. for 6 years earns the same interest as the second part for 7 years @ 4% p.a. Find the amount invested in first part \_\_\_\_\_.
26. A man invested Rs.4000 into two parts at simple interest- one at 4% and other at 5% p.a. If interest on first part for 5 years is equal to interest on second part for 6 years, Find amount invested at 4% \_\_\_\_\_.
27. A man invested Rs.600 into three parts at simple interest – first part at 3% for 4 years, second part at 4% for 5 years and the third part at 5% for 3 years. If interest received on each part is equal, find amount invested at 5% \_\_\_\_\_.
28. A sum of Rs.5500 is divided into two parts and invested at 4% p.a. for 3 years at 5% p.a. for 6 years respectively. If interest earned on the second part is three times of that on the first part, find the amount invested in second part \_\_\_\_\_.
29. Rs.4310 is invested into three parts at simple interest so that the amounts received after 1, 2, and 3 years respectively in each part are equal. Find the amount invested for 3 years, if rate of interest is 10% p.a. \_\_\_\_\_.
30. What sum will amount to Rs.660 in 4 years 8% p.a. of simple interest \_\_\_\_\_.
31. What sum will amount to Rs.2300 in 3 years at simple interest of 5% p.a. \_\_\_\_\_.
32. A sum amounts to Rs.5750 in 3 years at 5% p.a. simple interest. In how many years will the sum amount to Rs.7000 at the same rate of interest \_\_\_\_\_.
33. A sum of money amounts to Rs.1800 in 3 years and Rs.2000 in 5 years at simple interest. Find the principal \_\_\_\_\_.
34. A certain sum of money amounts to Rs.600 in 2 years and Rs.700 in 4 years at a certain rate of simple interest. Find the rate of interest \_\_\_\_\_.
35. If simple interest on a certain sum is  $\frac{1}{4}$ th of the principal and the number of years are equal to the rate per cent per annum, the rate of interest per annum is \_\_\_\_\_.
36. If simple interest on a certain sum of money is  $\frac{1}{9}$ th of the principal and the number of years are equal to the rate per cent per annum, the rate of interest per annum is \_\_\_\_\_.
37. A man invested  $\frac{1}{3}$  of his income at 5% p.a.,  $\frac{1}{4}$  of the income at 4% and the remaining  $\frac{5}{12}$  income at 3%. If his annual income is Rs.470, find total money invested by him \_\_\_\_\_.
38. A man lent Rs.2000- partly at 5% and the balance at 4%. If he receives Rs.92 towards annual interest, find the amount lent at 5% \_\_\_\_\_.

39. A man invested Rs.3500 into two parts at simple interest-one at 4% and other at 6% p.a. If his yearly income from investment is Rs.170, how much did he invest at 6%.
40. A person lent a sum of money @ 6% p.a. In 8 years, the simple interest was Rs.260 less than the sum lent \_\_\_\_.
41. Two equal sums of money are deposited in different banks-first part at 5% p.a. simple interest for 4 years and second part at 4% p.a. simple interest for 6 years. If difference between the two interests is Rs.100, find the sum deposited in each bank \_\_\_\_.
42. Find the amount of equal investments, annual payment of which will discharge a debt of Rs.848 due in 4 years at 4% p.a. of simple interest \_\_\_\_.
43. Find the amount of debt that will be discharged by 5 equal instalments of Rs.200 each, if the debt is due in 5 year at 5% p.a. \_\_\_\_.
44. How many muscles are used to control the eyeball
45. How much does a human brain weight
46. Which hormone is produced by the testes of male
47. Which gland secretes the most kinds of hormones
48. The hormone which is not directly associated with reproduction is
49. \_\_\_\_\_ is not a type of Asexual reproduction
50. Iodine is separated from sand by
51. One of the techniques used for desalination of sea water is
52. Conversion of liquid to gas is called
53. Boiling point of water is
54. LPG (Liquefied Petroleum Gas) is a
55. 'Milk of Magnesia' is a suspension of
56. A substance which readily forms colloidal solution in contact with water is called
57. Cloud is a colloidal dispersion of \_ in a dispersion medium of air.
58. What particles move around the nucleus of an atom and are negatively charged?
59. The atomic number of carbon is 6 and its atomic mass is 12. How many protons are there in the nucleus of carbon?
60. Who coined the term Ecology ?
61. Ecosystem is the smallest unit of \_\_\_\_
62. Each step of food chain represents \_\_\_\_\_
63. Which is a human made environment ?
64. Which gas is responsible for green house effect ?
65. Which fuel causes minimum air pollution ?
66. Acid rain is caused by release of \_\_\_\_\_ and \_\_\_\_\_ into the air.
67. Acceptable noise pollution level in India ranges between
68. Which factor is more harmful cause of oceanic water pollution?
69. The gas produced in marshy places due to decomposition of vegetation is
70. Air pollution level is considered to be moderate if air quality index between
71. IUCN headquarters is at \_\_\_\_\_
72. Ex-situ conservation includes \_\_\_\_\_
73. Ranganathittu Bird Sanctuary is located at \_\_\_\_\_
74. The Dibru-saikhowa Nameri and orang National Park are all found in which state?

75. In which state is the valley of flowers National Park situated?
76. The only ape of India found in Assam and Nagaland?
77. First National Park of India is \_\_\_\_\_
78. Kyoto protocol deals with \_\_\_\_\_
79. COP-21 was held in \_\_\_\_\_
80. Who is incharge of NAPCC?
81. Which state has launched a television-based learning programme for the Tenth standard students?
82. In accordance with the United Nations'(UN) annual report, what percent of the world's population, went hungry in 2019?
83. Jyotsna Bhatt, who recently passed away, belongs to which profession?
84. According to the United Nations report on The State of Food Security and Nutrition in the World, number of undernourished people in India has declined to which figure in 2017-19?
85. Who received the first award in professional category in the video blogging contest 'My Life, My Yoga'?
86. Wim Suurbier, who passed away recently, belongs to which game?
87. Who is the author of book "If It Bleeds"?
88. Brahm Vasudeva, who passed away recently, belongs to which profession?
89. Which state has topped among the other states in the implementation of PM Street Vendor's AtmaNirbhar Nidhi?
90. NABARD has provided credit support of Rs 1,607 crore to which state during the COVID-19 pandemic?
91. World Youth Skills Day is observed on which date?
92. In which state, NABARD has extended a grant assistance of 221.89 crore rupees to support 298 watershed projects?
93. How much money has been approved to improve the firefighting facilities on five jetties of Haldia Dock Complex of Kolkata Port?
94. Mile Jedinak, who has recently announced his retirement, belongs to which sport?
95. 'APSTAR-6D' telecommunication satellite has been launched by which country?
96. The Bloomberg Billionaires Index has ranked which Indian Personality as the World's 6th richest man?
97. Reimagine Campaign" to support of most vulnerable populations and children during the ongoing COVID-19 has been started by which organization?
98. Who has been appointed as the next Ambassador of India to Turkmenistan?
99. World Wildlife Crime Report has been released by which organisation?
100. Which place is included in UNESCO's list of World Heritage sites ?

<b>MODEL PAPER - 12</b>
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1. A train is running at the average speed of 90 km/h, its speed in meters per second is \_
2. A train running at the average speed of 30 km/h covers a distance in 6 hrs. Find the speed of another train which covers the same distance in 5 hours \_\_\_\_\_.

3. A train is running at the average speed of 10 m/s , its speed in km/h is \_\_\_\_\_.
4. Train A took 35 minute to cover a distance of 50 km. If the speed of train B is 25% faster than train A, it will cover the same distance in \_\_\_\_\_.
5. Two persons start walking in opposite directions at 5 km/h and 4 km/h respectively. After how many hours will they be 45 km apart \_\_\_\_\_.
6. Two persons start walking in the same direction at 5 km/h and 4 km/h respectively . In how many hours will they be 45km apart \_\_\_\_\_.
7. A man takes 8 hrs in walking to a certain place and riding back. He would have gained 2 hours by riding both ways .What time would he take to walk both ways
8. A 100 meter long train takes 5 second to pass a standing man. Find the time taken by the train in crossing a railway platform of 260 meter in length \_\_\_\_\_.
9. A train running at the average speed of 45 km/h passes a standing man in 10 seconds. Find the length of the train \_\_\_\_\_.
10. Find the time taken by a 200 meter long train , running @ 72 km/h in crossing a standing man \_\_\_\_\_.
11. A 250 meter train is running at the average speed of 90 km/h . How long will it take to pass a standing man \_\_\_\_\_.
12. Find the time taken by a 100 meter long train to cross a platform of 400 meter in length , if the train is running @ 90 km/h \_\_\_\_\_.
13. A train running at the speed of 15 m/s takes 20 seconds to pass a man running at the speed of 5 m/s in the same direction . Find the length of the train \_\_\_\_\_.
14. A train running at the speed of 25 m/s takes 10 seconds to pass a man running at the speed of 10 m/s in the opposite direction. Find the length of the train ?
15. A 150 meter long train running at an average speed of 52 km/h crosses a man walking in the same direction at an average speed of 7 km/h in \_\_\_\_\_.
16. A 150 meter long train running at an average speed of 36 km/h takes 30 seconds to cross a platform completely . Find the length of the platform \_\_\_\_\_.
17. A 150mt train crosses a 150mt long platform in 15 sec.What is the speed of the train?
18. A train running at uniform speed passes a standing man in 2 seconds and platform of 50 meters in 3 seconds.Find the length of the train ?
19. A train crosses the pole in 10 seconds and 150 meter long platform in 16 seconds. The speed of the train in km/h is \_\_\_\_\_.
20. Two trains of the length of 139 meter and 111 meter are running in the opposite directions at the speed of 53 km/h and 37 km/h respectively. In what time will they completely cross each other \_\_\_\_\_.
21. Two trains of length of 123 mt & 147 mt are running in the same direction at the speed of 59 km/h & 23 km/h respectively. In what time will they completely cross each other ?
22. A 100 meter long train passes a man going in the opposite direction at the speed of 5 km/h in 9 seconds. Find the speed of the train in km/h \_\_\_\_\_.
23. A man is walking at a speed of 10 km/h. After every km, he takes rest for 4 min. How much time will he take to cover a distance of 10 km \_\_\_\_\_.

24. A man has to cover a distance of 30km in 8 hours . He could cover only  $\frac{2}{3}$ rd of the distance in  $\frac{3}{4}$ th of the time . At what speed should he cover the remaining journey so as to reach his destination on time \_\_\_\_\_.
25. A 200 meter long train is running at an average speed of 75 km/h and the other 250 meter long train is running in the opposite direction at an average speed of 33 km/h. Find the time they will take to cross each other \_\_\_\_\_.
26. A and B walk around a circular path of 900 meter in circumference , starting together from the same point in the same direction . If their speeds are 150 meter per minute and 200 meter per minute respectively, after how many minutes will they be again at the starting point \_\_\_\_\_.
27. A and B walk around a circular path of 5 km in circumference , starting together from the same point in the same direction . If their speeds are 4 km/h and 3 km/h respectively, after how many minutes will they be again at the starting point ?
28. A and B can walk around a circular path in 4 hours and 6 hours respectively . If they start from the same point in the same direction , When will they be together at the starting point again \_\_\_\_\_.
29. Two men A and B walk from P to Q, a distance of 21 km at 3 km/h and 4 km/h respectively . B reaches at point Q and returns immediately and he meets A at point R. Find the distance from P to R \_\_\_\_\_.
30. Two men A and B walk from P to Q, a distance of 36 km at 7 km/h and 5 km/h respectively . A reaches at point Q and returns immediately and he meets B at point R. Find the distance from P and R \_\_\_\_\_.
31. Train A takes 6 hours more than train B to cover a distance of 800 km. If the speed of the train A is doubled it takes 2 hours less than train B . What is the speed of train B?
32. A man standing on a railway platform notices that a train going in one direction takes 10 seconds to pass him and other train of the same length takes 15 seconds to pass him. Find the time taken by the two trains to cross each other when they are running in the opposite directions \_\_\_\_\_.
33. A man standing on a railway platform notices that a train going in one direction takes 9 seconds to pass him and other train of the same length takes 6 seconds to pass him. Find the time taken by the two trains to cross each other when they are running in the same directions ?
34. Two trains running in the opposite direction at the speeds of 44 km/h and 55 km/h take 12 seconds to cross each other. If the length of one train is 150 meter ,What is the length of the other train \_\_\_\_\_.
35. Two trains running in the same direction at the speeds of 68 km/h and 48 km/h take 36 seconds to cross each other. If the length of one train is 85meter ,What is the length of the other train \_\_\_\_\_.
36. A 220 meter long train is running at 90 km/h crosses a 180 meter train coming from the opposite direction in 9 seconds. The speed of the second train is \_\_\_\_\_.
37. Two trains of the lengths 200 meter and 250 meter running in the opposite direction at the speeds of 35km/h and 55 km/h respectively.Find the time in which the faster train will pass a man sitting in the slower train \_\_\_\_\_.

38. Two trains start at the same time from the station A and B towards station B and A at the speed of 50 km/h and 55 km/h respectively. When the two trains meet it is found that the faster train has travelled 30 km more than the slower one. What is the distance between the two stations \_\_\_\_\_.
39. Two trains start at the same time from two stations and proceed towards each other at the speed of 15 km/h and 20 km/h respectively. When the two trains meet, it is found that the faster train has travelled 50 km more than the other. Find the distance between the two stations \_\_\_\_\_.
40. A 150 meter long train passes a standing man in 15 seconds. While it crosses another train of the same length coming from the opposite direction in 12 seconds. Find the speed of the second train \_\_\_\_\_.
41. A train is running at the average speed of 70 km/h but due to stoppages it could cover a certain distance at 63 km/h. How much time the train stops on an average (per hr)
42. Two trains measuring 120 meter and 180 meter cross each other completely in 10 seconds when running in opposite directions and the faster train takes 30 seconds to cross the slower train when the two trains are running in the same direction. Find the speed of the faster train \_\_\_\_\_.
43. The distance between the two stations A and B is 30 KM. one train leaves station A towards station B at the average speed of 40 km/h. At the same time, another train left station B towards A at the average speed of 80 km/h. The distance from station A where the two trains meet is \_\_\_\_\_.
44. The distance between the two stations A and B is 550 KM. one train leaves station A towards station B at the average speed of 100 km/h. After half an hour, another train left station B towards A at the average speed of 150 km/h. The distance from station A where the two trains meet is \_\_\_\_\_.
45. A man starts walking from A to B. At the same time another man starts from B to A. After passing each other, they complete their journey in 9 & 4 hours respectively. At what speed is the second man walking, if the first man walks at 6 km/h
46. A theft is reported to a policeman. The thief starts running and the policeman chases him. When the policeman starts chasing, the thief was at a distance of 250 meter. The thief and policeman run at the speed of 8 km/h and 9 km/h respectively. Find the time the policeman will take to catch the thief \_\_\_\_\_.
47. A train leaves station A towards B at an average speed of 60 km/h at 9 a.m. After 2 hours another train leaves station A at an average speed of 10 km/h. When the two trains will meet \_\_\_\_\_.
48. A train leaves station A towards B at an average speed of 80 km/h. After 3 hours another train leaves station A at an average speed of 110 km/h. Find the distance from station A where the two trains meet \_\_\_\_\_.
49. A man walking at  $\frac{3}{4}$ th of the speed, reaches his office late by 2 hours. What is the usual time \_\_\_\_\_.
50. Walking at  $\frac{5}{4}$ th of the usual speed, I reach my office 12 minutes too early. What is the usual time \_\_\_\_\_.
51. The mass number of a nucleus is sometimes more/equal to its \_\_\_\_\_

52. Uranium eventually decays into a stable isotope of \_\_\_\_\_
53. In nuclear reactors, graphite is used as a/an \_\_\_\_\_
54. Elements with different atomic number but same mass number is called \_\_\_\_\_
55. A radioactive substance has a half life of six months. Three-fourth of the substance will decay in \_\_\_\_\_
56. \_\_\_\_\_ is not a chemical change
57. Anions are formed by \_\_\_\_\_
58. Process of losing electrons is known as \_\_\_\_\_
59. Process of gaining electrons is known as \_\_\_\_\_
60. To prevent rancidity of oil (due to oxidation) in which potato chips are fried, the bags of chips are flushed with the gas \_\_\_\_\_
61. \_\_\_\_\_ is a waterborne disease causing acute gastrointestinal infection
62. World AIDS day is held every year on \_\_\_\_\_
63. \_\_\_\_\_ was the first antibiotic discovered by Alexander Fleming in 1928
64. HIV is passed from one person to another in all of the following ways except \_\_\_\_\_
65. Bloodless surgery is done with \_\_\_\_\_
66. World No-tobacco day falls on \_\_\_\_\_
67. Which country records the largest reduction in the no. of People living in poverty as around 273 million people moved out of the multidimensional poverty over 10 years?
68. The connectivity of all capitals of North-Eastern (NE) states through rail network has been announced by which year?
69. Which state has announced the Energy Export Policy 2020, which permits the sale of power to the other states of India?
70. Barry Jarman has recently passed away. He belongs to which country?
71. Union Minister of Petroleum and Natural Gas and Minister of Steel and United States (US) Secretary of Energy co-chaired the 2nd ministerial meeting of the U.S.-India Strategic Energy Partnership (SEP) virtually? Who is the Union Minister of Petroleum and Natural Gas and Minister of Steel?
72. Ramesh Tikaram, who has passed away of coronavirus, belongs to which game?
73. Azad Pattan Hydel Power Project is an agreement b/w Pakistan and which country?
74. According to the New World Bank country classifications by income level 2020-2021, what is the status of India?
75. Indian Navy conducted major naval exercises in the Andaman and Nicobar Islands. Who is the chief of Naval staff?
76. As per the research report of India Ratings and Research (Ind-Ra), Centre's fiscal deficit is estimated to increase to how much in FY21?
77. Who will receive the 2020 Nelson Mandela Prize?
78. Income Tax Department rolls out which form to assist Tax payers in filing quick and correct Income Tax Return?
79. India has established individual bilateral 'air bubbles' with France and \_\_\_\_\_.
80. C S Seshadri, who passed away, belongs to which profession?
81. When is Mandela International Day celebrated?
82. The cabinet mission plan for India envisaged a \_\_\_\_\_



83. How many princely states were there in india at the time of independence ?
84. Who was the president of the Drafting Committee?
85. The constitution was adopted on \_\_\_\_\_
86. Which act suggested for the post of Comptroller and Auditor General (CAG)
87. The concept of concurrent list in Indian Constitution is borrowed from the constitution of \_\_\_\_\_
88. Which is called "Soul of the Constitution"
89. The concept of single citizenship is adopted from \_\_\_\_\_
90. \_\_\_ schedule to the constitution of India is the list of states and union territories given.
91. How can Indian citizenship be acquired ?
92. Free and compulsory education for all children is provided until they attain the age of
93. Citizen of India can vote at the age of \_\_\_\_\_
94. \_\_\_\_\_ act under the Indian Constitution is described by Article 21A.
95. Right to education became a fundamental right on \_\_\_\_\_
96. Who is the guardian of fundamental rights ?
97. The right to vote in election to a parliament is a \_\_\_\_\_
98. Promotional of international peace and security is included in the \_\_\_\_\_
99. Which are fundamental for the governance of the country ?
100. Which article of the constitution of India relates to uniform civil code ?

**MODEL PAPER - 13**

1. If 20 men can do a piece of work in 40 days, In how many days will 40 men do the same work ?
2. If 30 men can do a piece of work in 30 days, In how many days will 15 men do the same work?
3. 12 men can do a work in 25 days. How long will 10 men take to complete the work ?
4. 12 men can do a piece of work in 15 days. How many men are required to complete the work in 10 days?
5. A work can be done by certain number of workers in 8 days. How many days will they take to finish a work four times the original work\_\_\_\_\_.
6. A and B together can type 35 pages in 5 minute whereas A alone can type 20 pages in 4 minute. How many pages can B type in 1 minute\_\_\_\_\_.
7. A can do a piece of work in 15 days and B can do it in 10days. Working together how long will they take to finish the work\_\_\_\_\_.
8. A alone can do 1/2 of work in 5 days and B alone can do 1/3 of the same work in 4 days. In how many days working together will they finish the work\_\_\_\_\_.
9. A alone can do 1/5th of a piece of work in 3 days and B alone can do 1/5th of the same work in 6 days. In how many days working together will they finish the work?
10. Two pipes A and B can fill a tank in 12 hours and 16 hours respectively. While a third pipe C can empty the tank in 8 hours. If all the three pipes are opened simultaneously, The tank will be filled in \_\_\_\_\_.

11. A and B can do a piece of work in 10 days while B alone can do it in 15 days. How long will A alone take to finish the work?
12. A and B can do a piece of work in 12 days while A alone can do it in 20 days. How long will B alone take to finish the work \_\_\_\_\_.
13. A, B and C together can do a piece of work in 12 days. A and B together can do the same work in 20 days. In how many days C working alone can finish the work ?
14. A alone can do a piece of work in 21 days. B who is 40% more efficient than A, will finish the work in \_\_\_\_\_.
15. A, B and C did a work together and earned Rs.729 for the work. If the ratio of work done by A, B and C is 2:3:4, find C's share \_\_\_\_\_.
16. A alone can do a piece of work in 12 days and B alone in 10 days. They undertook to do the work for Rs.330. How much will A get \_\_\_\_\_.
17. A, B and C together undertook a work for Rs.550. A and B together done  $\frac{7}{11}$  of the work. Find C's share \_\_\_\_\_.
18. A can do a piece of work in 10 days. With the help of B, he finished the work in 6 days. If they earn Rs.200 for doing the job, find A's share \_\_\_\_\_.
19. A, B and C can do a piece of work in 12, 18 and 30 days respectively. If they do a work together, find the ratio in which the amount is to be distributed \_\_\_\_\_.
20. A, B and C can do a piece of work in 12, 15 and 20 days respectively. In how many days working together will they finish the work \_\_\_\_\_.
21. A and B can do a piece of work in 12 days, B and C in 15 days, A and C in 20 days. In how many days they working together will finish the work \_\_\_\_\_.
22. A & B can do a piece of work in 20 & 15 days respectively. With the help of C ,they finished the work in 5 days. How many days will C alone to take to finish the job
23. A and B together can do  $\frac{11}{19}$  of a work. In the same time, B and C together can do  $\frac{14}{19}$  of the work. Find the ratio of work done by each of them \_\_\_\_\_.
24. A and B can do a piece of work in 20 days. With the help of C, they finished the work in 15 days. Find the time C alone will take to finish the work \_\_\_\_\_.
25. A & B can do a piece of work in 12 days, B & C can do the same work in 15 days. If A is twice as good a worker as C, find the time that C alone will take to do the work
26. A tap can fill a tank in 15 minutes while another tap can empty it in 20 minutes. If the both the taps opened simultaneously fill the tank.If the tank is full \_\_\_\_\_.
27. A pipe can fill a tank in 20 mins. Due to leakage in the bottom of the tank , it takes 25 mins to fill the tank .If the tank is full, how long will the leak take to empty the tank
28. A cistern is normally filled in 9 hours but due to in the leak in the bottom, it takes 1 hour more to be filled. If the cistern is full, in what time will the leak empty it
29. A cistern normally filled in 8 hours but it takes 2 hours longer to fill because of a leak in the bottom . If the cistern is full, in what time will the leak empty it \_\_\_\_\_.
30. A tap can empty tank in 30 minutes while the second tap empty it in 20 minutes. If both the taps are kept open , how much time is required to empty the cistern?
31. Pipe A can fill the tank in 15 hours,B in 20 hours and C can empty the tank in 30 hours. If all the three taps are opened together , how much time required to fill the cistern ?

32. Pipe A can fill a tank in 15 minutes and pipe B can drain 40 litre per minute. If both the pipes are opened together, the cistern is fill in minutes, find the capacity of the cistern \_\_\_\_\_.
33. A,B & C together can do a work in 4days. If A & B can do the work in 5days, B and C in 10 days, find the days taken by A and C to do the work
34. A man & a Woman working together can do a work in 30days. If they can do the work in the ratio 6:7, how many days will a man working alone take to do the work
35. 2 men or 4 women can do a work in 28 days. How long will 4 men and 8 women take to complete the work ?
36. 2 men or 4 women can do a work in 22days. How long will 4 men and 3 women take to complete the work \_\_\_\_\_.
37. If 2 men or 4 women can do a piece of work in 30 days,in how many days can the work to be done by 2 men and 6 women \_\_\_\_\_.
38. 4 men and 7 women can do a piece of work in 8 days. In how many days will 5 men and 2 women finish the work if each woman takes twice the time taken by 1 man ?
39. 8 men can do a piece of work in 5 days where as 6 women can do the same work in 10 days. In how many days can 4 men and 9 women finish the work .
40. If 2 men and 3 women can do a piece of work in 8 days and 3 men 2 women in 7 days. In how many days can the work be done by 4 men and 5 women working together
41. A team consists of 10 men and 9 women can do a piece of work in 9 days, and another team consisting of 8 men and 15 women in 8 days. In how many days can the work be done by 16 men and 12 women \_\_\_\_\_.
42. A team consisting of 2 men and 5 women can do a piece of work in 12 days and another team consisting of 3 men and 7women in 8 days. How many days can the work be done by 5 men and 12 women working together \_\_\_\_\_.
43. 18 men and 12 boys can do a piece of work in 5 days. 9 men and 12 boys can do a piece of work in 8 days how many boys should assist 12 men so that the work is finished in 6 days \_\_\_\_\_.
44. A man ,a woman and a boy can do a work in 3,4 and 12 days respectively. How many boys must assist 1 man and 1 woman so as to finish the work in 1 day \_\_\_\_\_.
45. A ,B and C Working together can do a piece of work in 10 days. If A takes twice as long as B And C together, B takes thrice as long as A and C together, How many days will C alone take to finish the work \_\_\_\_\_.
46. A and B can do a piece of work in 15 and 18 days respectively. A worked at it for 10 days and then B finished the remaining work. Find the time taken by B to finish the remaining work \_\_\_\_\_.
47. A and B together can do a work in 25 days, C alone can do it in 15 days. They work together for 6 days and then C leaves off .In how many days will the remaining work be finished by A and B \_\_\_\_\_.
48. A and B can do a piece of work in 12 days and 20 days respectively. They started work together and then A left after working for some days. The remaining work is finished by B in 12 days, how many days has A worked on it before leaving ?

49. A & B can do a work in 15 days and 10 days respectively. Both work together for 3 days and then A leaves off. In how many days will the work be completed
50. A and B can do a work in 12 and 15 days respectively. They started the work together but A left after 4 days due to illness. Remaining work can be finished by B in \_\_\_\_\_
51. ZIKA virus which causes neurological birth disorder is transmitted by \_\_\_\_\_ -
52. What is most common treatment for bacterial infections in humans \_\_\_\_\_
53. India was removed from the list of Polio-endemic countries by the WHO in the year \_\_\_\_\_
54. Western blot is the diagnostic test for \_\_\_\_\_
55. Penicillin, an antibiotic, is obtained from \_\_\_\_\_
56. Pyorrhea is a disease related to \_\_\_\_\_
57. Metals are good conductors, because \_\_\_\_\_ -
58. German silver, an alloy, does not contain the metal \_\_\_\_\_ -
59. Which metal is responsible for Itai-Itai disease?
60. In order to prevent it from coming in contact with oxygen, sodium metal is kept under \_\_\_\_\_
61. What is galvanized iron?
62. The ore of aluminium is \_\_\_\_\_
63. Heavy metals got their names because compared to other atoms they have \_\_\_\_\_
64. When a helium atom loses an electron it becomes \_\_\_\_\_
65. Silver halides are used in photographic plates because they are \_\_\_\_\_
66. The gas that is used in the manufacture of vanaspathi ghee is \_\_\_\_\_
67. Reserve Bank of India (RBI) has agreed to a USD 400 million currency swap facility for which country?
68. India builds one kilometer long World's first electrified rail tunnel in which state?
69. The Department of Science and Technology under the Ministry of Science and Technology launched Joint Technology Assessment and Accelerated Commercialization Programme with which country?
70. Who heads the committee to suggest measures to ensure that more students study in India?
71. Government of India has extended medical assistance in the form of anti-tuberculosis medicines worth about US\$ 1 million to which country?
72. A five-day Sub-Tropical Fruit Expo 2020 at the Centre for Sub-Tropical Fruit was organised at which state?
73. Union Minister of Agriculture and Farmers' welfare Shri Narendra Singh Tomar inaugurated the 'World Class State of Art Honey Testing Laboratory' in which state?
74. Benjamin Mkapa, who died recently, was former president of which country?
75. According to the Cooling Emissions and Policy Synthesis Report from the United Nations Environment Programme (UNEP), the world can avoid greenhouse gas emissions upto what amount of carbon dioxide equivalent over the next four decades?
76. Macadamisation program' has been launched in which state/UT?
77. Which state has signed 16 Memorandum of Understanding (MoUs) worth Rs 5,137 crore to create employment opportunities for over 6,555 people?
78. Which city has positioned in 16th rank among the list of top 20 cities with the maximum number of Closed-circuit television (CCTV) surveillance cameras?

79. What is India's rank among the top 10 countries that have gained in forest areas during 2010-2020?
80. The gross nonperforming assets (GNPA) ratio of all scheduled commercial banks (SCBs) will increase from 8.5% in March 2020 to what amount by March 2021?
81. Anu Ragavan belongs to which game?
82. The concept of 'Public Interest Litigation' originated in \_\_\_\_\_.
83. How many times the preamble has been amended?
84. A uniform civil code of directive principles ensures \_\_\_\_\_.
85. The National Human Rights Commission was established in \_\_\_\_\_.
86. Which article deals with financial emergency?
87. Who is the commander in chief of the armed forces of India?
88. How many times the President of India can seek re-election to his post?
89. Which President has the longest tenure?
90. Who administers the oath of Chief Justice of Supreme Court?
91. What is the age for the election of President of India?
92. Who was elected President of India unopposed?
93. Which article deals with the impeachment of President of India?
94. Who held office of President for two consecutive terms?
95. The President of India addresses his resignation letter to the \_\_\_\_\_.
96. Who administers the Oath of office to the President?
97. What is the minimum age for getting elected to the Lok Sabha?
98. The members of the Rajya Sabha are elected by the \_\_\_\_\_.
99. Who was the President of India during emergency in the year 1975?
100. Who is the head of the Executive?

<b>MODEL PAPER - 14</b>
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01. A alone can do a work in 6 days and B alone 12 days. They begin together but 3 days before the completion of the work, A leaves. The work will be completed in \_\_\_\_\_.
02. A, B and C can do a piece of work in 10, 12 and 15 days respectively. They started the work together, but B leaves after 3 days. Find the days in which A and C will finish the remaining work \_\_\_\_\_.
03. A, B and C together do the work in 12 days. They started the work together and then A leaves after 4 days. If B and C took 10 days to finish the remaining work, in how many days can A alone do the work \_\_\_\_\_.
04. A, B and C can do a work in 12, 16 and 24 days respectively. They started the work together but A left after working for 3 days and B left 3 days before the completion of the work. In how many days would it take to finish the work \_\_\_\_\_.
05. A alone can do a piece of work in 8 days and B alone can do the same work in 24 days working together they will finish the work in \_\_\_\_\_.
06. Two pipes A and B can fill a cistern in 15 and 20 minutes respectively. While the 3rd pipe C can empty the tank in 30 minutes. If the 3 taps are open successively opened 1 min each. How long will it take to fill the cistern \_\_\_\_\_.

07. A and B can do a piece of work in 15 and 30 days respectively. Working together, they will finish the work in \_\_\_\_\_.
08. A is 4 times as good as a workman as B. If A could finish the work in 15 days less than B, find the time taken by them to finish the work while working together
09. A is twice as good as a workman as B. Working together they can finish a work in 16 days. How many days will A take to finish the work \_\_\_\_\_.
10. A is thrice as good as a workman as B and together they finish a work in 24 days. In how many days it can be done by B \_\_\_\_\_.
11. A and B can do a work in 10, 15 days respectively. If they work at it on alternate days, A starting first, In how many days the work will be completed \_\_\_\_\_.
12. A, B and C can do a piece of work in 10, 30 and 60 days respectively. If A is assisted by B and C on an alternate day, Find the number of days taken to finish the work
13. A & B can finish the work in 8 & 16 hrs respectively. If they work on it alternatively for 1 hr each, A beginning first, in how many hrs will the work be finished
14. Two pipes A and B can fill a cistern in 6 and 8 minutes respectively. If they be turned on alternatively for 1 minute each how long will it take to fill the cistern
15. A and B can do a piece of work in 7 and 6 days respectively. If they work at it on alternate days, A starting first, In how many days the work will be completed
16. Two pipes A and B can fill a cistern in 20 and 30 min respectively. While 3rd pipe C can fill the tank in 15 minutes. If the 3 taps are opened successively for 1 min each, how long will it take to fill the cistern \_\_\_\_\_.
17. A certain no. of men can complete a job in 60 days. If there are 8 more men, the work can be completed in 10 days less. How many men were there originally
18. A certain no. of men can complete a job in 10 days. If 10 men are absent, the remaining men can do the work in 12 days. How many men were there originally
19. If 18 men working 7 hours a day can finish a work in 24 days. In how many days 21 men working 8 hours per day, will finish the same work \_\_\_\_\_.
20. If 16 men working 7 hours a day can do a piece of work in 18 days. In how many days will 21 men working 8 hours a day, finish the same work \_\_\_\_\_.
21. If 100 men can do 100 work in 100 days. Then 1 man will do 1 work in \_\_\_\_\_ days
22. If 15 workers can earn Rs. 1800 in 10 days. Find the earnings of 5 workers in 8 days
23. If 40 men working 9 hours a day can do a piece of work in 24 days. How many men working 8 hours a day, can do double that work in 60 days \_\_\_\_\_.
24. If 30 labours working 5 hours a day can make a road 300 meters long in 32 days, how long will it take 20 labours to make the road 100 meters long working 8 hours a day
25. A contractor agreed to complete a work in 120 days. He engaged 150 men for the work and after 70 days, only half of the work was completed. How many more men must he employ to complete the work in agreed time \_\_\_\_\_.
26. A contractor agreed to complete a work in 40 days he engaged 25 men for the work and after 24 days, only 1/3rd of the work is completed. How many more men must he employ to complete the work 40 days earlier \_\_\_\_\_.
27. A garrison of 850 men has provision for 26 weeks. If at the end of 6 weeks, they are reinforced by 150 men, how long will the provision last now \_\_\_\_\_.

28. A camp has provision of food for 600 persons for 41 days. After 37 days , 360 persons left the camp . how long the food will last for the remaining persons
29. 12 men can do  $\frac{1}{2}$  of a work in 15 days. 10 men finish the work in \_\_\_\_ days.
30. A alone can do a work in 90 days. He works at it for 15 days and then B alone finishes the remaining work in 50 days. Working together, they will finish the work in
31. A can do a piece of work in 80 days. He alone works at it for 20 days and then B alone finished the remaining work in 36 days. In how many days A and B together can complete the work \_\_\_\_\_.
32. A and B can do a piece of work in 30 days. They worked together for 6 days and then A leaves off. If B finishes the remaining work in 36 days , how many days will A alone take to do the work \_\_\_\_\_.
33. 25 men can do a piece of work in 17 days. They worked at it for 5 days and then some more men joined the group and all of them together finished the remaining work in 10 days. How many more men joined the group \_\_\_\_\_.
34. 25 men can finish a work in 150 days . they started the work and at the end of the every 10 days , 25 additional men are employed. In how many days will the work be finished \_\_\_\_\_.
35. A and B working together can do a piece of work in 12 days , B and C together can do the work in 16 days. A alone started the work and worked on it for 5 days. Then , B alone worked on it for 7 days. Now C finishes the remaining work in 13 days. How many days will B alone take to do the work \_\_\_\_\_.
36. S can finish 50% of a work in a day . T can do 25% of the work in a day . Both of them together will finish the work in \_\_\_\_\_ days .
37. Arun and Amit can do a piece of work in 9 days and 12 days respectively. If they work alternative days and Amit starts the work first , then how many days  $\frac{35}{36}$  parts of whole work will be completed \_\_\_\_\_.
38. 12 men and 16 women together can complete a work in 4 days. It takes 80 days for one man alone to complete the same work , then how many days would be required for one women alone to complete the same work \_\_\_\_\_.
39. G is twice as fast as S in doing work . If G can do a work in 30 days less than S, how many days will they take to complete the work together \_\_\_\_\_.
40. Karteek is twice as good a foreman as raju and together they finish a piece of work in 20days. In how many days will raju alone finish the work \_\_\_\_\_.
41. 12 men finished  $\frac{1}{4}$ th part of the whole work in 6 days. Find the number of additional men required to complete the job in next 6 days \_\_\_\_\_.
42. 30 persons can finish a job in 20 days. After 6 days how many persons should leave the job, so that the work is completed in a total of 26 days \_\_\_\_\_.
43. The noble gas used in radiotherapy is
44. Quartz is made of
45. Curd is sour due to presence of
46. pH value of acidic solution is
47. The Colour of methyl orange in strong acidic solution is
48. The process of formation of salts by the combination of acids and bases is known as

49. Which acid is released when an ant bites?
50. pH of the human blood is \_\_\_\_\_
51. Sodium Bicarbonate generally known as \_\_\_\_\_
52. Hardest Allotrope of carbon is \_\_\_\_\_
53. Use of disposable syringes is usually advised to prevent \_\_\_\_\_
54. \_\_\_\_\_ is a fungal disease
55. \_\_\_\_\_ is reason behind the "Leprosy" disease
56. Typhoid causes due to \_\_\_\_\_
57. Who invented the drug called penicillin?
58. Which disease does quinine cure and from which plant is it obtained
59. KamalRaniVarun, who passed away in August2020 is cabinet minister of \_\_\_ state?
60. Which company became the first independent power producer to fully commission the first three wind auctions held by the Solar Energy Corporation of India (SECI)?
61. Which state government launched cybercrime awareness programme named 'E-Raksha Bandhan'?
62. Which among the following department launched pan India 1000 SARS-CoV-2 RNA genome sequencing programme in collaboration with the national laboratories and clinical organization?
63. Amar Singh who passed away recently was belong to \_\_\_\_\_ industry.
64. Who heads the expert committee formulated by International Financial Services Centres Authority (IFSCA) to suggest ways to develop the international retail businesses?
65. Which country is going to host the 13th edition of Indian Premier League (IPL) 2020?
66. Which company partnered with Innoviti Payment Solutions Pvt. Ltd to launch the new credit card Equated Monthly Installments offering on POS terminals?
67. Rajesh Kumar has been appointed as the chief secretary of which state?
68. Who authored the booked titled "Siyasat Mein Sadasyata" which was released by Bihar Chief Minister Nitish Kumar?
69. Who inaugurated Grand Finale of 4th edition of Smart India Hackathon-SIH (Software) 2020?
70. Mohamed Irfaan Ali has become the president of which country?
71. Who wrote the book named "Vishesh: Code to Win"?
72. How much percent reservation was given for More Backward Classes in state judicial service by Rajasthan government?
73. Which ministry in collaboration with MyGov conducts quiz competition on 'Atmanirbhar Bharat - Swatantra Bharat'?
74. Union Ministry of Health and Family Welfare collaborated with Asian Development Bank & UNICEF for thermal screening at Rajiv Gandhi International Airport located at which city?
75. \_\_\_ country the Cotton Corporation of India (CCI) plans to set up its own warehouse.
76. \_\_\_ country Women's World Team Squash Championship2020 scheduled to be conducted
77. Who chairs the joint session of the two houses of the parliament?



78. In India, the residuary power vested with \_\_\_\_\_.
79. The council of ministers is collectively responsible to the \_\_\_\_\_.
80. Presidential ordinance can remain in force for \_\_\_\_\_.
81. The term of comptroller and auditor general of India is \_\_\_\_\_.
82. The attorney general of India has right to audience \_\_\_\_\_.
83. Who can be the ex-officio Chairman of the Niti Aayong?
84. The vice-president is the ex-officio Chairman of the \_\_\_\_\_.
85. Who was the 1<sup>st</sup> deputy prime minister of India?
86. In India who is the executive head of the state?
87. The number of states of lok sabha was increased from 525 to \_\_\_\_\_ in 1973.
88. In 2014, the \_\_\_\_\_ Lok Sabha was elected.
89. Who got the power to create All India Services?
90. The age of rajya sabha member should not be less than \_\_\_\_\_.
91. Who appoints chairman of all the parliamentary committees of lok sabha?
92. The maximum strength of the lok sabha envisaged in the constitution is \_\_\_\_\_.
93. Who certifies a bill as Money Bill?
94. Who appoints the secretary general of the lok sabha?
95. Which is directly elected house of the Indian Parliament?
96. The number of members in public Accounts Committee is \_\_\_\_\_.
97. The speaker of lok sabha is elected by \_\_\_\_\_.
98. Zero hour is the discretion of \_\_\_\_\_.
99. The member of the rajya sabha are elected for a term of \_\_\_\_\_.
100. Right to property is \_\_\_\_\_ Right.

**MODEL PAPER - 15**

1. The length and breadth of a room are 6 metres and  $4\frac{1}{2}$  metres respectively. Find floor area of the room \_\_\_\_\_.
2. If side of a square is 4cm. Find the length of its diagonal \_\_\_\_\_.
3. Area of a square field is 729 square metre, find Its perimeter \_\_\_\_\_.
4. If diagonal of a square is 12 cm, find its area \_\_\_\_\_.
5. The area of a rhombus is 56 cm<sup>2</sup> . If length of one diagonal is 8cm, find length of the other diagonal \_\_\_\_\_.
6. The length and breadth of a rectangle are 8 cm and 6 cm respectively. Find the length of its diagonal \_\_\_\_\_.
7. Area of a square plot is 200 m<sup>2</sup> . Find the length of its diagonal \_\_\_\_\_.
8. Find the area of a triangle whose base is 8 cm and height is 5 cm \_\_\_\_\_.
9. The angles of a triangle are in the ratio of 3:4:5. What is the smallest angle \_\_\_\_\_.
10. The base of the right angle triangle is 8cm & hypotenuse is 10cm. find its area \_\_\_\_\_.
11. If sides of a triangle are 8 cm, 15 cm and 17 cm respectively. Find its area \_\_\_\_\_.
12. If diameter of circle is 28 cm, then area of the circle is \_\_\_\_\_.
13. Two parallel sides of a trapezium are 4 cm and 5 cm respectively. The perpendicular distance between the parallel sides is 6 cm. Find the area of the trapezium \_\_\_\_\_.

14. In a quadrilateral, length of one diagonal is a 15 cm and the lengths of the perpendiculars drawn from the opposite vertices are 7 cm and 9 cm . Find the area of quadrilateral \_\_\_\_\_
15. If circumference of a circle is 88 cm .Find radius of the circle .
16. If area of a circle is 154 cm<sup>2</sup> ,find its radius .
17. The length and breadth of a rectangle are in the ratio of 5:3. If area of the rectangle is 60 cm<sup>2</sup> Find its length \_\_\_\_\_
18. Ratio of length & breadth of a rectangle is 5:3. Find its area, if the perimeter is 64 cm
19. Area of a rectangle plot is 1200 m<sup>2</sup> .Find the perimeter of the plot if its length and breadth are in the ratio of 4:3 \_\_\_\_\_.
20. Perimeter of a rectangle is 28 cm and its area is 48 sq. cm. Find length of its. Find length of its diagonal \_\_\_\_\_.
21. If perimeter and area of square are equal .Side of the square (in cm) is :
22. The diameter of a wheel is 14 cm .How many revolutions the wheel is required to make ,cover a distance of 880 cm?
23. The diameter of the wheel of a vehicle is 5metre It makes 7 revolutions per 9 seconds .What is speed of vehicle in km/h
24. The perimeter of a rhombus is 60 cm and one of its diagonal is 24 cm. find the other diagonal of the rhombus \_\_\_\_\_.
25. If side and diagonal of a rhombus are 5 cm and 8 cm respectively. Find area of the rhombus \_\_\_\_\_.
26. If all the sides of a square are doubled. Ratio of the area of new square and that of the original square is \_\_\_\_\_.
27. The radius of a circle is 7 cm. find the radius of another circle whose area is 25 times of area of the first circle \_\_\_\_\_.
28. A field is 40 meter long and 35 meter wide. The field is surrounded by a path of uniform width of 2.5 metre runs round it on the outside. Find the area of the path
29. A field of 100 meter long and 60 meter wide. A path of uniform width of 5 meter runs round it on the inside. Find the area of the path \_\_\_\_\_.
30. Find area of uniform path of width 2 meter running from centre of each side to the opposite side of a rectangle field measuring 17 metre by 12 metre \_\_\_\_\_.
31. If length of a rectangle is reduced by 20% and width remaining the same. Area of the resulting rectangle will be decreased by \_\_\_\_\_.
32. If length of a rectangle is increased by 50%, by what percent should its width be decreased to get the same area as before \_\_\_\_\_.
33. If length of a rectangle is decreased by 20%, by what percent should its width be increased to get the same area as before \_\_\_\_\_.
34. If the length of a rectangle is increased by 30% and width by 20%, its area will increase by \_\_\_\_\_
35. If all the sides of a square are increased by 20% ,its area is increased by \_\_\_\_\_
36. If radius of a circle is increased by 10%. Area of the resulting circle will be increased by \_\_\_\_\_
37. If all the sides of a square are decreased by 10%, its area will be decreased by \_\_\_\_\_.

38. If length of a rectangle is increased by 10% & width is decreased by 10%, its area will
39. If length of a rectangle is decreased by 20% & width by 30%, its area will decrease by
40. A towel was 40 cm broad and 90 cm long. When bleached, it was found to have lost 20% of its length and 10% of its width. The % decrease in area is \_\_\_\_\_.
41. A square and a rectangle each has perimeter 60 mt. Difference between the areas of the two figures is 16 sqmt. Find the length of the rectangle \_\_\_\_\_.
42. Find the radius of the circle whose area is equal to the sum of areas of 3 circles with radii 8 cm, 9 cm, 12 cm respectively. \_\_\_\_\_.
43. If difference b/w circumference & diameter of a circle is 30cm, find radius
44. The area of the ring between two concentric circles, whose circumferences are 88 cm, and 132 cm is \_\_\_\_\_.
45. Two poles whose heights are 11 mt and 5 mt stand upright in a field. If the distance between their feet is 8 mt, what is the distance between their tops \_\_\_\_\_.
46. What will be the cost of fencing a square field, whose side is 20 mts if the cost of fencing is 10 Rs per meter \_\_\_\_\_.
47. How many tiles of 20 cm X 5 cm are required for paving the floor of a room 25 mts long and 10 mts wide \_\_\_\_\_.
48. The length and breadth of room is 15 mts and 8 mts respectively. Find the length of 3 mts white carpet required to cover the floor of the room \_\_\_\_\_.
49. Find the area of the large circle that can be inscribed in a square of 14 cms, aside
50. The radius of a circle is 5 cms, what is the ratio between its area and circumference
51. The hepatitis-B which effects liver is actually a \_\_\_\_\_
52. Ringworm is caused by \_\_\_\_\_
53. \_\_\_\_\_ reveals, more appropriately, functioning of the hot
54. \_\_\_\_\_ is regarded as helpful to compost
55. What did MS Swaminathan an Indian geneticist, play a leading role in \_\_\_\_\_
56. The crescograph, a device for measuring growth in plants, was invented by \_\_\_\_\_
57. The material used in the manufacture of lead pencil is \_\_\_\_\_
58. When formaldehyde and potassium hydroxide are heated, we get \_\_\_\_\_
59. Which gas used as a fire extinguisher?
60. Which variety of coal contains recognizable traces of the original plant material?
61. Petroleum consists of a mixture of \_\_\_\_\_
62. Tetra ethyl lead (TEL) is \_\_\_\_\_
63. What is dry ice?
64. Chemical decomposition of an organic compound by water is called as \_\_\_\_\_
65. Gas used for artificial ripening of fruits is \_\_\_\_\_
66. The major ingredient of sweetened soft drink is \_\_\_\_\_
67. Who has been appointed as the new Comptroller & Auditor General of India in August 2020?
68. ADB approved USD 200 millions to improve road infrastructure in 34 districts of which state?
69. Which among the following has launched application called "OHE Inspection" for real time monitoring?

70. Which country declares emergency as stranded ship spills fuel?
71. Where will the Kavkaz 2020 strategic command-post exercise take place in September 2020 in which India along with some other countries will take part?
72. How many electric buses sanctioned under FAME scheme?
73. Which country will host ICC Men's T20 World Cup 2021 as announced by the International Cricket Council?
74. Leader Nandi Yellaiah dies at 85 in Hyderabad, belongs to which Political Party?
75. Sadia Dehlvi, who passed away, in August 2020 was related to which profession?
76. Who inaugurates Rashtriya Swachhata Kendra in Delhi?
77. In August 2020, Union Housing and Urban Affairs Ministry approved the construction of how many houses under the Pradhan Mantri Awas Yojana (Urban)?
78. Harmanpreet Kaur and which other cricketer have been signed as the brand ambassadors of WTF Sports-India and Global?
79. Who tops Forbes List Of Highest-Paid Sports Women?
80. Shirley Ann Grau, a Pulitzer Prize-winning fiction writer passed away recently. She hailed from which country?
81. Which state government launched 'Mukhya Mantri Doodh Uphar Yojana' for the children between 1 and 6 years age?
82. The rajya sabha is dissolved every
83. Who is competent to dissolve the lok sabha?
84. The Judge of Supreme Court holds office till they reach the age of
85. Who can interprets the constitution?
86. The writ of habeas corpus is issued in the event of \_\_\_\_\_.
87. Who administers oath to chief Justice of Supreme Court?
88. The judge of the high court holds office till he reaches the age of \_\_\_\_\_.
89. How many types of writs can be issued by the supreme court?
90. Who appoints judges of subordinate courts in a state?
91. Which writs literally means 'what is your authority'?
92. The governor of the Indian state is appointed by the \_\_\_\_\_.
93. The chief minister is appointed by \_\_\_\_\_.
94. The panchayat raj sytem in india was introduced under which articles of the community?
95. When was the panchayati raj system introduced in India?
96. Who was the first woman Governor of a state in free India?
97. The first amendment in the Indian Constitution was enacted in \_\_\_\_\_.
98. The right to property ceased to be a fundamental right by \_\_\_\_\_.
99. The local urban bodies were given the constitutional status by \_\_\_\_\_.
100. Anti-defection Law was passed by the Indian Parliament in the year \_\_\_\_\_.

**MODEL PAPER - 16**

01. The radius of a circle 10 cm, What % is the area of circle is of the circumference
02. The area of a circle and its circumference are equal find its diameter
03. Between a square of perimeter 44 cm, and a circle of circumference 44 cm ,which figure has larger area and by how much \_\_\_\_\_.
04. A horse is tied to one of the corners of a square field whose side is 20 mts. If length of the rope is 14 mts , find the area ungrazed field \_\_\_\_\_.
05. The circumference of two circles are 176 mts and 132 mts respectively what is the difference between their radii \_\_\_\_\_.
06. Find the total surface area of a hemisphere of radius of 7 cms \_\_\_\_\_.
07. Find the curved surface area of a hemisphere whose diameter is 14 cms \_
08. Find the volume of air in a room whose floor area is 40 mt<sup>2</sup> and the height is 5 mts
09. Find the height of a cuboid whose volume and base area are 144 mt<sup>3</sup> and 18 mt<sup>2</sup> respectively
10. Find the length of the longest pole that can be placed in a room 12 mt long, 8 mt broad and 9 meter high \_\_\_\_\_.
11. The length, breadth and height of a room are 7 meters , 6meters and 4 meters respectively. Find the area of 4 walls \_\_\_\_\_.
12. The surface area of a cube is 486 cm<sup>2</sup> find its volume \_\_\_\_\_.
13. If each side of a cube is increased by 30%, then its surface area will be increased by \_
14. If radius and height of a cylinder are increased by 20%, Find % increase in its volume
15. Dimensions of a cuboid are 29 cms, 18 cms and 15 cms . If its sides are increased by 20%, 25% and 40% respectively, Find % increase in its volume \_\_\_\_\_.
16. The diameter and height of a cone are 14 cms, and 24 cms respectively. Find the curved surface area of the cone \_\_\_\_\_.
17. The length and breadth and height of a room are 5mt,4mts, 4 mts respectively. If all the 4 walls of the room are to be covered with 50cm wide wallpaper , Find the length of the paper required \_\_\_\_\_.
18. Volume of two spheres are in the ratio 27:125 . Find radius of the bigger sphere,If radius of small sphere is 27 cms \_\_\_\_\_.
19. Volume of two spheres are in the ratio of 343:8. Find the ratio b/w their surface areas
20. Three solid cubes whose sides are 3cm, 4cm , and 5 cm respectively are melted to form into a single cube.Find the side of new cube formed \_\_\_\_\_.
21. Howmany cubes of 2cm, a side can be made by melting a solid cube of 6 cm,a side is
22. Howmany spheres of diameter 2cm, can be made by melting 1 sphere of radius 4cm
23. Howmany spheres of radius 2cm, can be made by melting 2spheres, radius 12cm each
24. A cube of 9 cm , a side is melted and 27 small cubes are made from that. Find side of the smaller cubes \_\_\_\_\_.
25. A box is made of 1 cm thick wood.If outer dimensions of wood are 12 cm by 10 cm by 7 cm, Find volume of wood \_\_\_\_\_.
26. How much metal is required to make a 20 mt long pipe, if its inner and outer diameter are 6 mt and 8 mt respectively \_\_\_\_\_.

27. A sphere of radius  $r$  cm is put into water contained in a cylinder of  $6r$  cm radius . If the sphere is completely immersed in the water, the water level in the cylinder rises by \_\_\_\_\_.
28. A wire is drawn from a solid iron sphere of radius 6 cms. Find the length of the wire, if its diameter is 6 cm \_\_\_\_\_.
29. A well 2 m in radius has been dug 5 meter deep and the earth dug out was spread to make an embankment 1 meter wide round the well. What is the height of the embankment \_\_\_\_\_.
30. A field is 90 meter long and 50 meter broad. A 25 meter long , 20 meter broad, and 4 meter deep tank dug in the field and the earth taken out is spread evenly over the remaining field . How much the level of field will rise \_\_\_\_\_.
31. A triangle has a perimeter of 200. If two of its sides are equal and the third side is 20 more than the equal sides , What is the length of the third side \_\_\_\_\_.
32. A wire is in the shape of a rectangle . Its length is 42.7 m and breadth is 21.8 m. If the same wire is re-bent in the shape of a square , what will be the measure of the side of the square \_\_\_\_\_.
33. Find the cost in rupees for carpeting a room 65 dm X30 dm at Rs.45 per sq m
34. The difference between length and breadth of a rectangle is 6m. If its perimeter is 64m, then its area is \_\_\_\_\_.
35. The area of a triangle ABC is 63sq units. Two parallel lines DE, FG are drawn such that they divide the line segments AB and AC into three equal parts. What is the area of the quadrilateral DEGF \_\_\_\_\_.
36. The area of a trapezium is 18 sq cm. Its height and base are 3cm and 5 cm respectively. Find the length of the side parallel to the base \_\_\_\_\_.
37. The area of the quadrilateral whose sides measured 9 cm,40 cm,28 cm, and 15 cm and in which the angle between the first two sides is a right angle triangle
38. If the area of a circle is  $9\pi$  sq.cm then its circumference is \_\_\_\_\_.
39. If the heights of two cones are equal and the perimeters of their bases are in the ratio 3:4, then the ratio of their volumes is \_\_\_\_\_.
40. Three cubes of iron whose edge are 6 cm, 8 cm and 10 cm respectively are melted and formed into a single cube. The edge of new cube formed is \_\_\_\_\_.
41. What is geotropism ?
42. Green plants make their food in the presence of \_\_\_\_\_
43. RuBP enzyme is required for \_\_\_\_\_
44. The other term for genetic engineering is \_\_\_\_\_
45. Biotechnology means \_\_\_\_\_
46. In 2013, the first human liver was grown from stem cells in \_\_\_\_\_
47. Relocation of endangered or rare species from their natural habitat to protected areas equipped for their protection and prevention is called \_\_\_\_\_
48. What is Siberian ibex?
49. The Dibru-Saikhowa, Nameri and Orang National park are all found in which state
50. What does '*homo sapiens*' stand for
51. \_\_\_\_\_ is the idea that new species are formed from the sudden and unexpected emergence of alterations in their defining traits

52. The most recently discovered link in human evolution is the discovery of fossils of
53. In 2015, ..... a new species of the genus homo was discovered in the Dinaledi Chamber of the rising star cave system, cradle of humankind, South Africa.
54. \_\_\_\_\_ is the branch of physiology and medicine which deals with diseases and conditions specific to men
55. \_\_\_\_\_ is the study of spiders
56. The branch of science dealing with study of fossils is called
57. Acid rain is caused due to the pollution of atmosphere by
58. Taj mahal is greatly affected due to
59. Ozone layer is the upper parts of the atmosphere serves as a protective shield against harmful
60. Formation of ozone hole is maximum over
61. The function of sedimentation tank in sewage treatment is to
62. Heavy metal pollution of water is caused by
63. Photochemical smog is a resultant of the reaction among
64. Acid rain is caused by release of \_\_\_\_\_ and \_\_\_\_\_ into the air.
65. Chemically soap is a
66. Detergents are
67. Saccharin is made up of
68. Milk sugar is
69. Sucrose is abundant in
70. The addition of gypsum to Portland cement helps in
71. The element which is used for vulcanizing rubber is
72. PVC is obtained by the polymerization of
73. What is the most common treatment for bacterial infections in humans?
74. The major harmful gas emitted by automobile vehicles which causes air pollution is
75. In which type of economy, private sector control economy which is, purely based on demand and supply?
76. Which sector is the largest employer in India?
77. Which sector is the main stay of Indian economy?
78. The net value of GDP after deducting depreciation from GDP is \_\_\_\_\_.
79. Which is the base year used to calculate per capita income of India?
80. Which is the best measure of economic growth of a country?
81. National income in India is defined as \_\_\_\_\_.
82. The Data of estimation of India's national income is issued by
83. National Development council was set up in
84. Who introduced the concept of five year plan in India?
85. Who was the first Deputy Chairman of planning Commission of India?
86. The draft of the five year plan in India is approved by
87. Rolling plan was designed for which period
88. Planning Commission was established in 1950 through
89. When was the first National Human Development Report of India issued?
90. Which institution publishes HDI report for the countries?

91. Who releases the multi-dimensional Poverty Index (MPI)?
92. \_\_\_\_\_ introduced the concept of human development index?
93. For how many days MGNREGA provides employment?
94. Which is the nodal ministry to identify BPL families in urban areas?
95. Which scheme is launched to improve effectiveness of primary education by improving nutritional status of children?
96. Who advocated the adoption of 'PURA' model to eradicate rural poverty?
97. The rolling plan concept in national planning was introduced by
98. Economic planning is in
99. Ericsson partnered with which organisation to map Internet Connectivity in schools of 35 Countries?
100. Which state/UT Government launched 'Healthy Body, Healthy Mind' fitness campaign for students confined in homes?



**MODEL PAPER - 1**

1	Chloroplast	35	1/144	69	CPU
2	Deoxyriboneclic acid	36	$2^3 \times 3^5 \times 5^2 \times 7^9$	70	Apple
3	Prokaryotic cells	37		$2^1 \times 3^2$	71
4	Lysosome	38	144	72	Checking error in program
5	Produce energy for cell	39	5	73	Software
6	cell wall	40	216	74	F11
7	Neolithic site	41	96	75	Ctrl+V
8	Lothal	42	6,4	76	Word Processor
9	a Speech Group	43	1	77	Hypertext related file
10	Rituals	44	100	78	Basic Input Output System
11	Mahapadmananda	45	415	79	Information & communication Tech
12	Chandra Gupta	46	357	80	booting
13	Bindusara	47	12	81	Punjab
14	NarasimhaVarman1	48	5	82	Tamilnadu
15	Rajendra Chola	49	11	83	Ramnath kovind
16	The Cholas	50	11am	84	Indian
17	961200	51	135	85	Narendra Modi
18	5985	52	1/5000	86	Harshavardhan
19	21.972	53	6970	87	Venkayya Naidu
20	16	54	4	88	31-Oct
21	1/2	55	2	89	Narendra Modi
22	5997	56	25	90	31-Oct
23	1	57	6	91	Om puri
24	23/14	58	1065	92	Author & Editor
25	9/4	59	3025	93	3
26	338/900	60	70707	94	India
27	$\overline{131}$	61	5	95	Bangladesh
28	4	62	120	96	World Bank
29	16	63	9X7X7!	97	Gully Boy
30	$10^{12}$	64	11101	98	Telangana
31	3,5,7	65	32	99	Gujarat
32	1003/3	66	1110	100	India
33	$\sqrt{-2}$	67	8		
34	24	68	Param8000		

## MODEL PAPER - 2

1	Mitochondria	35	500	69	Narendra druv batra
2	Robert Hooke	36	600	70	Central Institute of Petro Chemical Engineering & Technology
3	Nucleus	37	40%	71	Nirmala Seetharaman
4	Uracil	38	40%	72	Bhagath singh Kosyari
5	Protien Synthesis	39	80	73	Mumbai
6	Nuclic Acid & Protien	40	900	74	Viswas Mehta
7	Razia Sulthana	41	2000	75	Mohit Gupta
8	Golgumbaz	42	120000	76	Maharastra
9	Gulbarga	43	1200	77	LIC
10	Delhi	44	200	78	Rakesh Kumar Singh b
11	Humayun	45	4600	79	29-May
12	Charminar	46	5:4	80	Narendra Singh Tomar
13	Bridal	47	9:8	81	Tamilnadu
14	Chand Bibi	48	50%	82	Leo puri
15	Guru Gobind Singh	49	20	83	5%
16	Bahadur Shah	50	2:3	84	28-May
17	13/4	51	3:4	85	Md. Raza
18	5	52	100	86	Coloumb
19	33%	53	64	87	Energy
20	1458	54	200	88	Ampere
21	4:3	55	150	89	Distance
22	30000	56	300	90	The Speed of Ship
23	2%	57	400	91	Momentum
24	20%	58	1000	92	Velocity
25	2000	59	500	93	Sphygmomanometer
26	3:4	60	500	94	telescope
27	25%	61	1000	95	Vikram Sarabhai
28	800	62	200	96	Telephone
29	200	63	45%	97	Clinical ThermoMeter
30	16.67%	64	800	98	velocity is 0, Acceleration 10m/s <sup>2</sup>
31	200	65	30%	99	Speedometer
32	500	66	K.VijayaRaghavan	100	45 degree with Horizontal
33	400	67	USA		
34	600	68	UNICEF		

**MODEL PAPER - 3**

1	30	35	12	69	Uttar Pradesh
2	72	36	28	70	Uttarakhand
3	24	37	50	71	25%
4	21	38	14	72	mathews plamooottil
5	91	39	42	73	Thierry delaporte
6	28	40	20	74	4.20%
7	27	41	10	75	kiranjeet kaur
8	15	42	2	76	SANSA
9	48	43	192	77	4th June
10	38	44	34	78	Central mechanical engineering research Institute
11	6000	45	43	79	06-Jun
12	16	46	44	80	SBI
13	56	47	40	81	Rajasthan
14	80	48	53	82	A.M.Nayak
15	78	49	87	83	Rohit Sharma
16	53	50	34	84	New delhi
17	65	51	19	85	Jaya Jaitly
18	31	52	50	86	Portugal
19	32	53	56	87	1498
20	45	54	Vitamin - A	88	East India Company & siraj ud dowla
21	43	55	Vitamin - K	89	battle of buxar
22	77	56	Rhesus factor	90	the sepoy
23	31	57	Goitre	91	John Nicolson
24	34	58	Beri-Beri	92	Allahabad
25	67	59	Iodine	93	Raja Rammohan Roy
26	31	60	Nancy grace roman space telescope	94	Swami Vivekananda
27	41	61	Ajith Jogi	95	Swami Vivekananda
28	20	62	Kerala	96	Gopalakrishna Gokhala
29	40	63	Lumos	97	Dayananda saraswathi
30	26	64	SandeepMukundPradhan	98	Dr. almaram panduranga
31	33	65	Bihar	99	made in india from materials that have also been produced
32	64	66	Facebook	100	mahatma gandhi
33	58.4	67	Mumbai		
34	34	68	Pai		

### MODEL PAPER - 4

1	81	35	18000	69	Kinetic energy
2	1261	36	11	70	just before it touches the ground
3	12100	37	8320	71	Abdul Ghafar khan
4	1261	38	680	72	Raja Rammohan roy
5	14600	39	1600	73	1919
6	4641	40	8000	74	dhadabhai naoraji
7	3860	41	3	75	Raja Rammohan roy
8	1200	42	11 1/9	76	Lord Dufferin
9	10	43	6%	77	UmeshChandra benerji
10	18	44	3%	78	Chandrashekhar Azad
11	32.25%	45	5%	79	1920
12	1000	46	8%	80	Allan Octavian Home
13	2	47	Iodine	81	Dr. Jithendra singh
14	3	48	Carrots	82	2022
15	5%	49	Wax	83	Chiranjeevi Sarja
16	10%	50	Carrots	84	Odisha
17	5%	51	carbohydrates, minerals, water	85	Gujarath
18	1000	52	Haemoglobin	86	Madhya Pradesh
19	6400	53	Constant	87	Karnataka
20	8100	54	Constant acceleration	88	Madhya Pradesh
21	25600	55	Velocity is 0, Acceleration 10m/s <sup>2</sup>	90	ADIA
22	10	56	speedometer	91	Rajasthan
23	2%	57	positive	92	168
24	10%	58	5 degree with Horizont	93	Tech Mahendra ITC
25	2000	59	Conservation of momentum	94	5
26	50%	60	centrifugal force	95	08-Jun
27	20%	61	Inertia of motion	96	08-Jun
28	1210	62	Law of inertia given by galileo	97	Adani Green Energy
29	441	63	aristotle	98	5.20%
30	864	64	zero	99	50%
31	121/100	65	100W	100	Madhya Pradesh
32	2500	66	Thermal Energy	89	International Advanced Research centre for powder metallurgy and new minerals
33	12000	67	potential energy		
34	6400	68	Electrical energy		

## MODEL PAPER - 5

1	W	35	2,9	69	the temporary teeth
2	$\alpha$	36	6	70	snoring
3	$\alpha$	37		71	sabarmathi aasramam
4	Z	38	24862048	72	1942
5	1	39	positive	73	garbha gruha
6	$\alpha$	40	positive	74	phad
7	$\alpha$	41	negative	75	kuchipudi
8	-1	42	0	76	Rajasthan
9	$\alpha$	43	120	77	Madhya pradesh
10	5,9	44	55	78	Rajasthan
11	Root 2, 5	45	171	79	Andhra Pradesh
12	Q U S	46	110	80	Bihar
13	$\sqrt{-2}$	47	324	81	a folk art practiced in bihar
14	Real & Imaginary	48	285	82	culture
15	2n	49	3025	83	Maharashtra
16	2n+1	50	7	84	Indian Female Artist
17	Even	51	8	85	Punjab
18	Even	52	light energy to electric energy	86	chateshwar pujara, Ravindra jadeja
19	2	53	mechanical energy to sound energy	87	Gujarath
20	1	54	has higher elasticity	88	Texas Pacific Group
21	1	55	Newton/m <sup>2</sup>	89	Imtiazur rahman
22	2	56	scalar quantity	90	June 16-17
23	3	57	more than that outside	91	sushanth singh rajput
24	2	58	will be on the surface of mercury	92	Jet Airways
25	2	59	less than weight of wood	93	Kathy Lueders
26	4	60	archimedes principal	94	export import bank of India
27	4	61	surface tension of water	95	Kathy Sullithan
28	9	62	green leafy vegetables	96	Pune
29	2	63	night blindness	97	Odissa
30	3,5 ; 5,7	64	small intestine	98	Kerala
31	15	65	hydrochloric acid&pepsin	99	wuhan
32	25	66	food	100	sri Rajesh Bhushan
33	3,5,7	67	pancreas		
34	eratosthanes	68	starch		

**MODEL PAPER - 6**

1	10	35	300	69	Stellapps & Zestmoney
2	12	36	600	70	Biswabhusan Harichandran
3	15	37	600	71	Bahrain
4	36	38	5-6L	72	Sirius - A
5	14	39	heart	73	Venus
6	25	40	Antigen	74	Andromeda
7	40	41	72 times	75	Oblate Sphere
8	50	42	Towards the heart	76	Elongated Path
9	15	43	SA node	77	2
10	45	44	120/80 mm	78	Granite
11	24	45	surface tension	79	Stratosphere
12	50	46	newton	80	Northern Hemisphere
13	44	47	poles	81	Indian Ocean
14	45	48	24 Hours	82	France
15	54	49	zero	83	Galileo
16	72	50	avoid the tracks being distorted due to seasonal temperature variation	84	180degree east and west
17	24	51	4 degrees C	85	5 hours 30 mins
18	80	52	Maharastra	86	23°27' north to equator
19	10	53	Klara and the sun	87	Upper most part of Earth
20	12000	54	Mumbai	88	Metamorphic Rock
21	2000	55	Rs. 1 per pad	89	Sedimentary rock
22	31	56	45 Million	90	sedimentary rock
23	641	57	India	91	Lime stone
24	84	58	8 state	92	Faulting
25	210	59	I M Vijayan	93	Mixture of booth Elements &Compounds
26	20%	60	D.K.Jain	94	Pacific Ocean
27	800	61	Nagppur Station	95	Typhoon
28	3125	62	18-Jun	96	Hydrosphere
29	8000	63	17-Jun	97	Europe
30	331	64	Infosys	98	Africa
31	1261	65	Singapore	99	Canada
32	320	66	HDFC Bank	100	Pamir kout
33	200	67	Anil Dev		
34	480	68	Pneumococcal Conjugate Vaccine		

## MODEL PAPER - 7

1	25%	35	44	69	Group, Chain, Cluster or Collection of islands
2	480	36	50	70	warm
3	450	37	600	71	Indian Ocean
4	810	38	550	72	Africa
5	1089	39	330	73	Asia
6	140%	40	550	74	Mt. kilimanjaro
7	40%	41	26	75	Sahara Desert
8	45%	42	5apples per Rs.1	76	Cholistan
9	33.33%	43	4 pens per Rs.1	77	Amazon
10		44	30 apples per Rs.1	78	Denuve
11		45	80	79	Vatican City
12	33.33%	46	13 eggs per Rs.7	80	Decreases
13	125	47	60%	81	Amish Tripathi
14	500	48	7%	82	60750 crores
15	700	49	10%	83	IIT Delhi
16	1000	50	12.50%	84	Yuko Bank
17	200	51	capillary	85	23-Jun
18	500	52	7.4	86	Nataraj Chandra Sekaran
19	200	53	Haemoglobin	87	Rajasthan
20	600	54	Thrombo sites	88	Rajasthan
21	200	55	Excretory system	89	Yes Bank
22	25%	56	Drinking more water	90	23-Jun
23	25%	57	Surface Tension	91	Amatya Kumar Sen
24	11 and 1/9	58	Newton	92	23-Jun
25	9 and 1/11	59	Poles	93	190 crores
26	16.67%	60	24 hours	94	21-Jun
27	300	61	zero	95	T.Ravi Shankar
28	250	62	Avoid the tracks being distorted due to seasonal temperature variation	96	Cipla ltd
29	1000	63	4 degree C	97	2022
30	1250	64	No change will happen	98	Rule of law Index
31	33.33%	65	212 degree F	99	Prakash Javedkar
32	20%	66	Advection	100	Neeti Ayog
33	10	67	Tsunami		
34	25	68	Tsunami		

## MODEL PAPER - 8

1	10000	35	360	69	India
2	500	36	500	70	IBM
3	360	37	180	71	calcium oxalate
4	75	38	33.33%	72	206
5	9900	39	33.33%	73	making the neck rotate to body bend on the side
6	4000	40	25%	74	skeletal
7	No profit - No loss	41	20%	75	300
8	1%	42	20	76	Buttocks
9	1.44%	43	10	77	Reflection
10	4% decreased	44	10%	78	Wood is bad conductor of heat
11	8%	45	12%	79	Pressure of Air
12	10%	46	50% higher than CP	80	Metals
13	32%	47	100% higher than CP	81	Audible Sounds
14	1500	48	25% higher than CP	82	Vacuum
15	200	49	60% higher than CP	83	Ultra sonic
16	24.80%	50	10% higher than CP	84	Reverberasion
17	2.86%	51	shripadanayak	85	Vacuum
18	12.50%	52	J\$\$. 121.27 Million	86	Short waves are more energtic than long waves
19	125%	53	Russia	87	Vacuum
20	36% loss	54	Sept 10-19	88	3.28 million on sp. Km
21	8%	55	Harsha vardhan	89	
22	800%	56	25-Jun	90	17.05%
23	560 apples	57	2%	91	Kanyakumari
24	20%	58	4.50%	92	Andaman&Nicobar Island
25	25%	59	Sanjay Kumar	93	Northern & eastern
26	20%	60	Clare Connor	94	Kibithu
27	10%	61	6 Months	95	Himalayas
28	25%	62	Malaviya National Institute of Technology	96	Great or Himalayas
29	20%	63	25-Jun	97	Himadri
30	25%	64	14%	98	Trans-Himalayan zone
31	10%	65	Kempegowda International Airport	99	7
32	50%	66	Oct-20	100	Himachal
33	450	67	Tripura		
34	550	68	RBI		



**MODEL PAPER - 9**

1	3:5	35	20:27	69	Karakoram
2	8	36	1:2	70	Aravalli
3	1	37	50	71	Nilgiri Hills
4	30	38	1500	72	The damodar
5	20	39	500	73	Dibrugarh-Kanyakumari
6	30	40	5000	74	The Peninsular
7	50	41	1500	75	Rajasthan
8	10	42	10000	76	Chambal
9	3:5	43	72	77	Arabian Sea
10	16:35	44	1200	78	Yamuna
11	8:12:15	45	60	79	Madhya Pradesh
12	6:8:9	46	15, 20	80	Kailashgiri in Tibet
13	9:12:14	47	7:5	81	01-Jul
14	8:4:3	48	7:3	82	increase Green Cover
15	4:6:9	49	3:2	83	prof. Rattan lal &Dr. Uma lele
16	2:3:4	50	60	84	2.10%
17	6:4:3	51	Heart	85	Carlyle group
18	6:8:9	52	Collagen	86	ICICI Bank
19	6:4:3	53	Unstripped, striated, cadiac	87	Ranbir Singh
20	300	54	33	88	Siddartha Mukherjee & Raj Chetty
21	400	55	Neuron	89	G. Srinivasan
22	51	56	Camera	90	Shukaryan
23	2000	57	Decibel	91	Allergy care does not stop COVID - 19
24	150	58	Sound Navigation & Ranging	92	COPAL - 19
25	400	59	Doppler effect	93	01-Jul
26	2100	60	$3 \times 10^8$ m/s	94	nagaland
27	812	61	it reflects green light back to our eyes	95	2%
28	2700	62	refraction and reflection of sunlight by water droplets	96	M. Veknkayya Naidu
29	625	63	Scattering	97	02-Jul
30	8	64	Be scattered	98	V. Suryanarayan
31	7/3	65	Total Internal Reflection	99	Imran Khwaja
32	13:7	66	it forms smaller image as compared with objects	100	Indra Mani Pandey
33	3:1	67	Concave lens		
34	2	68	Trans-Himalayan Zone		

**MODEL PAPER - 10**

1	60	35	15	69	Circular motion of electrons
2	2000	36	6.1	70	the entire bulk of the bar gets magnetised
3	21	37	411.625	71	high temperature
4	60	38	25	72	insularor
5	40	39	680, 1020, 2040	73	2n
6	12	40	77	74	Capicitor & Inductancee
7	6000	41	36, 54, 90, &108	75	Brain
8	5000	42	40	76	Body
9	35, 36	43	12000	77	Cerebrum
10	48, 66	44	3	78	Brain
11	20	45	Indira Gandhi Canal	79	Nose, Ear, Eyes, Skin, Tongue
12	80	46	3180 km	80	Actions
13	4500	47	Brahmaputra	81	1.2 Trillion USD
14	2400	48	Nanda Devi Glacier	82	India 1st LIC ltd.
15	20	49	Rice	83	China
16	14	50	Narmada	84	KKR Group
17	39	51	Godavari	85	Prakash Javedkar
18	20	52	Godavari	86	53.6
19	12	53	Amarkantak	87	Bangladesh
20	14	54	Godavari	88	Madhya Pradesh
21	5	55	Karnataka	89	Ramnath kovind
22	25	56	Krishna	90	6,049
23	32	57	Krishna	91	117
24	24	58	Jute	92	rajiv swaroop
25	15	59	Tropical Deciduous Forest	93	14000 crores
26	12	60	Jamuna	94	Elyments
27	20, 32	61	Alluvial Soil	95	delhi
28	10	62	Alluvial Soil	96	Manoj mukund N
29	30	63	Convex lenses	97	Vikram Sarabhai
30	18	64	Same frequency, same amplitude, same phase	98	Cooperative for Climate Action
31	8:15	65	Melting Point	99	RadhaKrishna Madhur
32	41:15	66	Decreases	100	Maharastra
33	121:59	67	Tungsten		
34	40	68	Magnetic Field		

**MODEL PAPER - 11**

1	2000	35	5	69	methane
2	360	36	10/3%	70	151 to 200
3	250	37	12000	71	Gland
4	74	38	1200	72	Zoo,Botanic Garden
5	85	39	1500	73	karnataka
6	500	40	500	74	assam
7	3	41	2500	75	uttarakhand
8	795	42	200	76	gibbon
9	630	43	1100	77	zimcorbett
10	600	44	6	78	greenhouse gas emissions
11	4	45	2% of Body weight	79	parris
12	12.5	46	Testosterone	80	Prime Minister
13	20	47	Pituitary	81	Tamilnadu
14	700	48	Parathormone	82	8.90%
15	15	49	Allogamy	83	Ceremic Artist
16	20	50	Sublimation	84	189.2 million
17	15	51	Distillation	85	hwath Hegde & Rajni Geh
18	6	52	Evoperation	86	Foot ball
19	3	53	212 Degree F	87	Stephen King
20	12	54	mixture	88	Business Man
21	4	55	magnisium hydroxide	89	Madhya Pardesh
22	400	56	hydrophilic colliod	90	West Bengal
23	2000	57	water drops	91	15-Jul
24	720	58	electrons	92	karnataka
25	14000	59	6	93	107 crore
26	2400	60	E Haecket	94	Soccer
27	200	61	biosphere	95	China
28	3000	62	Tropic level	96	Mukesh Ambani
29	1320	63	Road	97	UNICEF
30	500	64	Carbon Dioxide	98	Vidhu P Nair
31	2000	65	hydrogen	99	UNO of Drugs and Crime
32	8	66	Oxygen,water vapour	100	Sanchi, MP
33	1500	67	40-45db		
34	10	68	Oil spills		

**MODEL PAPER - 12**

1	25	35	115	69	AndhraPradesh
2	36	36	70	70	Australia
3	36	37	10	71	Dharmendra Pradhan
4	28	38	630	72	Badminton
5	5	39	350	73	China
6	45	40	54	74	Lower middle income country
7	10	41	6	75	Karambir Singh
8	18	42	36	76	7.60%
9	125	43	100	77	Mariana Vardinoyannis & Morissana Kouyate
10	10	44	250	78	26AS
11	10	45	9	79	USA
12	20	46	15	80	Mathematician
13	200	47	2:00 PM	81	july 18th
14	350	48	880	82	Union of states
15	12	49	6	83	565
16	150	50	60 mins	84	Dr. BR Ambedkar
17	72	51	atomic number	85	26-11-1949
18	100	52	lead	86	Act 1935
19	90	53	moderator	87	USA
20	10	54	isobars	88	Freamble
21	27	55	12 months	89	UK
22	35	56	melting an ice cube	90	1st schedule
23	96	57	gaining of electrons	91	By registration
24	5	58	oxidation	92	14 years
25	15	59	reduction	93	18 years
26	18	60	Nitrogen	94	right to education
27	5	61	cholera	95	04-01-2010
28	12	62	dec 1 st	96	Judiciary
29	18	63	pencillin	97	Constitutional Right
30	30	64	mosquito bite	98	directive principles of state polacy
31	80	65	lasers	99	
32	12	66	31st may	100	44
33	36	67	India		
34	330	68	2023		

**MODEL PAPER - 13**

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

**MODEL PAPER - 14**

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

**MODEL PAPER - 15**

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

**MODEL PAPER - 16**

1		35		69	
2		36		70	
3		37		71	
4		38		72	
5		39		73	
6		40		74	
7		41		75	
8		42		76	
9		43		77	
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