

17.07.19 EVERWIN MATRIC.HR.SEC.SCHOOL Time:45min.  
Std: X (A-E) TT MATHS Marks: 25

I. Answer the following: 3x5=15

1. What is the smallest number that when divided by three numbers such as 35, 56 and 91 leaves remainder 7 in each case?
2. Find the remainder when  $2^{81}$  is divided by 17.
3. Solve  $3x - 2 \equiv 0 \pmod{11}$

II. Answer the following: 3x2=6

4. Compute  $x$ , such that  $10^4 \equiv x \pmod{19}$
5. Is  $7 \times 5 \times 3 \times 2 + 3$  a composite number? Justify your answer.
6.  $a$  and  $b$  are two positive integers such that  $a^b \times b^a = 800$ .  
Find  $a$  and  $b$ .

III. Fill in the blanks: 4x1=4

7. If a composite number  $n$  divides  $ab$ , then  $n$  \_\_\_\_\_.
8. Two integers  $a$  and  $b$  are congruent if \_\_\_\_\_.
9. The remainder when  $7 \times 13 \times 19 \times 23 \times 29 \times 31$  is divided by 6 is \_\_\_\_\_.
10. If the given number is factorized in terms of two primes, then it is a \_\_\_\_\_ number.

17.07.19 EVERWIN MATRIC.HR.SEC.SCHOOL Time:45min.  
Std: X (F-J) TT SCIENCE Marks: 25

I. Fill in the blanks: 5x1=5

1. The size of the image is smaller, when the object is placed at \_\_\_\_\_.
2. Aluminium melting point is \_\_\_\_\_.
3. Caecum contains bacteria that helps in the digestion of \_\_\_\_\_.
4. \_\_\_\_\_ is the simple method of representing the teeth of a mammal.
5. Heart is enclosed by a double layered membrane called \_\_\_\_\_.

II. Answer in short: 5x2=10

- Part - A (any one)
6. Define Astigmatism.
  7. For a person with hypermetropia, the near point has moved to 30cm. Calculate the focal length of the lens.
- Part - B (any one)
8. Write the uses of Aluminium.
  9. i) \_\_\_\_\_ is the chief ore of aluminium.  
ii) Aluminium is deposited at the \_\_\_\_\_ and oxygen gas is liberated at the \_\_\_\_\_.

- Part - C (any three)
10. Write the taxonomic position of rabbit.
  11. What is diphyodont dentition?
  12. Name the three types of nervous system in rabbit.
  13. What is corpus Callosum?

III. Answer in detail: 2x5=10

- Part - A (any one)
14. Differentiate the eye defects: Myopia and Hypermetropia.
  15. Write the advantage and disadvantage of telescope.
- Part - B (any one)
16. What happens when Aluminium reacts.  
i) Air ii) HCl iii) dilute  $H_2SO_4$  iv) Conc.  $H_2SO_4$
  17. How will you extract Aluminium from Bauxite.

17.07.19 EVERWIN MATRIC.HR.SEC.SCHOOL Time:45min.  
Std: X (K-N) TT SOCIAL Marks: 25

I. Choose the correct answer: 5x1=5

1. Under which Article financial emergency can be Proclaimed \_\_\_\_\_.  
a) Article 352 b) Article 356 c) Article 360 d) Article 368
2. How many times has the Preamble to the constitution of India amended? \_\_\_\_\_.  
a) Once b) Twice c) Thrice d) Never
3. The constituent Assembly is set up under \_\_\_\_\_.  
a) Sarkaria Commission b) Rajamannar Commission  
c) Cabinet Mission Plan d) M.N Venkatachaliah
4. We borrowed the fundamental duties from the \_\_\_\_\_.  
a) Canadian Constitution b) Russian Constitution  
c) Irish Constitution d) American Constitution
5. A foreigner can acquire Indian citizenship through \_\_\_\_\_.  
a) Descent b) Naturalisation  
c) Registration d) All of the above

II. Fill in the blanks: 4x1=4

6. \_\_\_\_\_ writs are mentioned in Article 32.
7. The concept of constitution first originated in \_\_\_\_\_.
8. There are \_\_\_\_\_ classical language.
9. \_\_\_\_\_ is the charter of Right issued by king John of England in 1215.

III. Match the following: 5x1=5

- |                          |   |                            |
|--------------------------|---|----------------------------|
| 10. a) Citizenship Act   | - | French Revolution          |
| b) The Mini Constitution | - | 1955                       |
| c) National Emergency    | - | Article 360                |
| d) Fraternity            | - | 42 <sup>nd</sup> Amendment |
| e) Financial Emergency   | - | 1962                       |

IV. Answer the following: 3x2=6

11. What is a writ?
12. What is national Emergency?
13. List out the three heads of the relations between the centre and the states.

V. Answer in detail: 1x5=5

14. Explain the salient features of the constitution of India.