DAV PUBLIC SCHOOL, THANE
SESSION: 2020-2021
PERIODIC TEST-II
SUBJECT: MATHEMATICS

STD: VIII **MAX. MARKS: 40**

DATE: 21/09/2020 **TIME: 2 Hrs**

General Instructions:

1. **The question paper consists of 20 questions divided into 3 Sections A, B and C. Section A comprises of 8 questions of 2 marks each Section B comprises of 6 questions of 3 marks each and Section C comprises of 6 questions of 4 marks each.**
2. **Overall choice has been given in each section.**
3. **In questions on construction, drawing should be neat and exactly as per the given measurements. Use ruler and compasses only.**
4. **Use of calculator is not permitted.**

SECTION-A (Questions 1 to 8 carry 2 marks each)
(Attempt any 6 Questions)

Q1. Show that 2, 00,000 is not a perfect square.

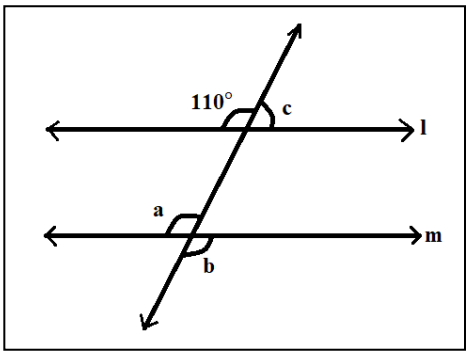
Q2. An electric pole, 25 m high casts a shadow of 15 m. Find the height of the tree that casts a shadow of 24 m under the similar conditions.

Q3. Without actual multiplication find the value of : 1001×999.

Q4. (i) What is the y co-ordinate of a point that lies on the x-axis?
(ii) Write the ordered pair of Origin

Q5. What is the smallest number by which 1323 may be multiplied so that the product is a perfect cube?

Q6. Find the value of angle b in the given figure, if l || m .



Q7. Factorise: $x^2 + 8x + 16$

Q8. 55 cows can graze a field in 16 days. How many cows will graze the same field in 10 days ?

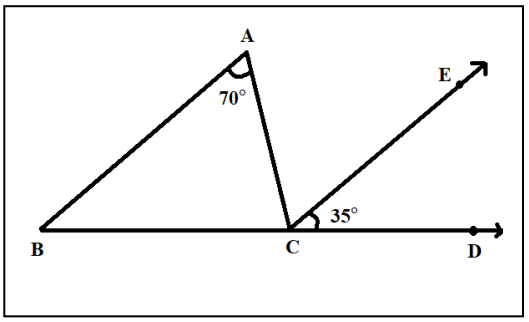
SECTION-B (Questions 9 to 14 carry 3 marks each)
(Attempt any 4 Questions)

Q9. Evaluate: $\sqrt[3]{1728 \times 2197}$

Q10. A garrison of 120 men has provisions for 30 days. At the end of 5 days, 5 more men joined them. How many days can they sustain on the remaining?

Q11. Find the product using correct identity: $(y^2 + 2)(y^2 + 3)$

Q12. In the given figure , $\angle BAC = 70°$ **and CE ∥ AB. If** $\angle ECD = 35°$**, find the other two angles of the triangle.**



Q13. What is the smallest number by which 600 should be divided so that the quotient may be a perfect Square? Also find the square root of the perfect square so formed.

Q14. Expand using the suitable identity: $(2x - 3y)^2$

SECTION-C (Questions 15 to 20 carry 4 marks each)

(Attempt any 4 Questions)

Q15. The area of a square field is 7 square metres. Find the length of one side of the field and correct to two decimal places.

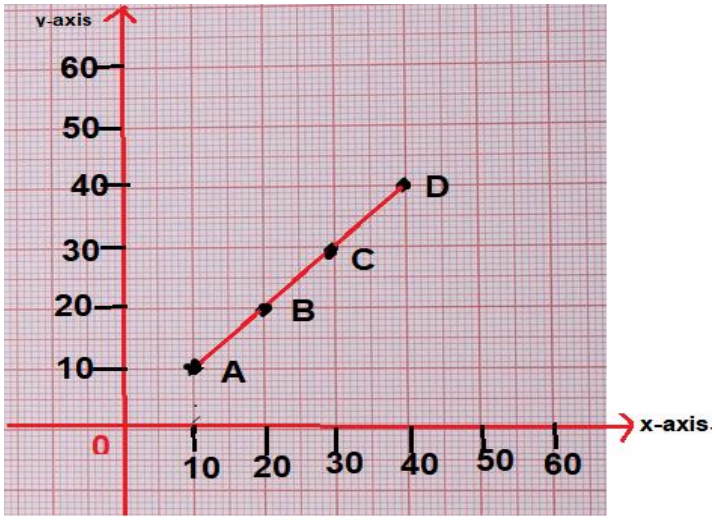
Q16. Factorise: $x^2 + 9y^2 + z^2 - 6xy - 6yz + 2zx$

Q17. Find the smallest number by which 8788 be divided so that the quotient is a perfect cube. Also find the cube root of the quotient so obtained.

Q18. Factorise: $9x^2y - 24xy^2 + 16y^3$

Q19. Draw a line segment AB of length 6 cm and divide it internally in the ratio 2 : 3. Find the length of each part.

Q20. In the given graph , write the co – ordinates of points A, B , C and D.



Q NO. 20