

KENDRIYA VIDYALAYA GACHIBOWLI, HYDERABAD
SAMPLE PAPER 02 FOR FA – 3 (2016 – 17)
CLASS – VIII
MATHEMATICS

T.T. 1:30

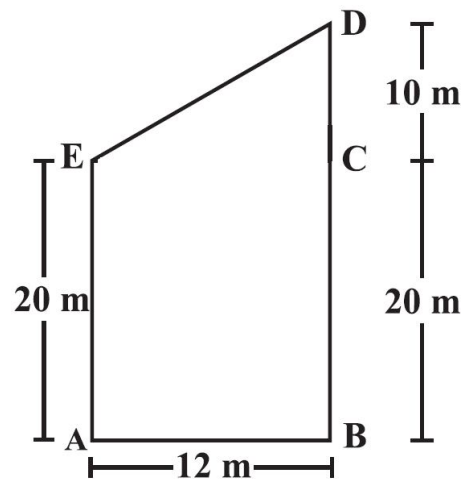
M.M. 40

General Instructions:

1. All questions are compulsory.
2. Question paper is divided into four sections: Section A contains 4 questions each carry 1 mark, Section B contains 4 questions each carry 2 marks, Section C contains 4 questions each carry 3 marks and Section D contains 4 questions each carry 4 marks.

SECTION – A(1 marks each)

1. Find the product : $2x(3x + 5xy)$
2. Find the area of the given trapezium:
3. Find the value of $(5^{-1} \times 3^{-1})^{-1}$
4. Find the area of a rhombus whose diagonals are of lengths 10 cm and 8.2 cm.



SECTION – B(2 marks each)

5. Subtract: $3a(a + b + c) - 2b(a - b + c)$ from $4c(-a + b + c)$
6. The area of a trapezium shaped field is 480 m^2 , the distance between two parallel sides is 15 m and one of the parallel side is 20 m. Find the other parallel side.
7. Find the value of m for which $5^m \div 5^{-3} = 125$.
8. Simplify and write the answer in the exponential form: $(-4)^{-3} \times (5)^{-3} \times (-5)^{-3}$

SECTION – C(3 marks each)

9. Simplify: $(1.5x - 4y)(1.5x + 4y + 3) - 4.5x + 12y$
10. Show that: $(9p - 5q)^2 + 180pq = (9p + 5q)^2$
11. A suitcase with measures $80 \text{ cm} \times 48 \text{ cm} \times 24 \text{ cm}$ is to be covered with a tarpaulin cloth. How many metres of tarpaulin of width 96 cm is required to cover 100 such suitcases?
12. Simplify: $\frac{3^{-5} \times 10^{-5} \times 125}{5^{-7} \times 6^{-5}}$

SECTION – D(4 marks each)

- 13.** Using $(x + a)(x + b) = x^2 + (a + b)x + ab$, find (i) 103×104 (ii) 5.1×5.2
- 14.** A milk tank is in the form of cylinder whose radius is 1.5 m and length is 7 m. Find the quantity of milk in litres that can be stored in the tank? What are advantages of drinking milk?
- 15.** Express the number appearing in the following statements in standard form.
(i) Thickness of a thick paper is 0.07 mm
(ii) Mass of Uranus = 86,800,000,000,000,000,000,000 kg
(iii) Mass of the Earth = 5,976,000,000,000,000,000,000,000 kg
(iv) Distance of Sun from the centre of our Galaxy = 300,000,000,000,000,000,000 m
- 16.** A company packages its milk powder in cylindrical container whose base has a diameter of 14 cm and height 20 cm. Company places a label around the surface of the container (as shown in the figure). If the label is placed 2 cm from top and bottom, what is the area of the label.

