



# Entry Test

Academic Session 2019-20

**MATHEMATICS**

Total  
Marks **25**

45 min

Class: IG-II(IX)

**Write in block letters:**

Candidate Name

Date

**Kindly read the instructions carefully;**

- 1 Answers must be written in ink.**
- 2 Write the number of question distinctly before each answer.**
- 3 CALCULATORS ARE ALLOWED.**

**FOR OFFICIAL USE ONLY**

<b>Total Marks</b>		<b>Marks Obtained</b>		<b>Percentage</b>	
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**Q.1 Solve the following equation. [2]**

a.  $x^2 + 12x + 36 = 0$

**Q.2 Simplify**

a.  $\frac{3}{2b-4c} + \frac{2}{3b-6c}$  [2+2]

b.  $\frac{3d-6}{d^2+d-6}$

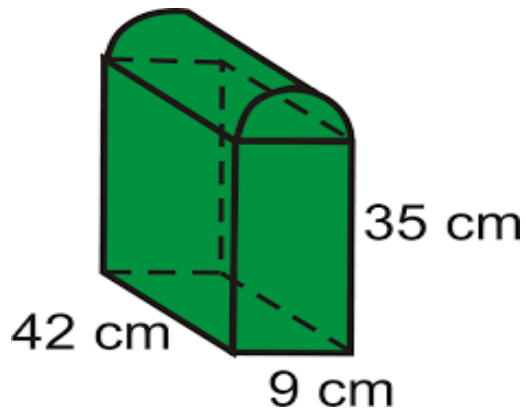
**Q.2 The difference between two numbers is 9 and the product of the numbers is 162. Find the two numbers. [3]**

**Q.4 A solid consists of a cuboid and half cylinder.**

**Find**

**[3+3=6]**

- a) the volume
- b) the total surface area



**Q.5 The sum of the ages of Ahmed and his mother is 60. Two years ago, Ahmed' mother was three times as old as Ahmed. Calculate**

- a. Ahmeds present age.
- b. the age of Ahmed's when he was born.

**[3]**

Q.6 A car took 2 hours and 15 minutes to travel 198km. If it arrived at its destination at 1206, find

- the time it started its journey;
- the average speed of the car, giving your answer in kilometers per hour.

[3]

Q.7 The length of two diagonals of a rhombus are 16cm and 12cm respectively. Find the length of one side of the rhombus. [3]

