

36. **Read the following text carefully and answer the questions that follow:**

[4]

Ajay is writing a test which consists of 'True' or 'False' questions. One mark is awarded for every correct answer while $\frac{1}{4}$ mark is deducted for every wrong answer. Ajay knew answers to some of the questions. Rest of the questions he attempted by guessing.



- i. If he answered 110 questions and got 80 marks and answer to all questions, he attempted by guessing were wrong, then how many questions did he answer correctly? (1)
- ii. If he answered 110 questions and got 80 marks and answer to all questions, he attempted by guessing were wrong, then how many questions did he guess? (1)
- iii. If answer to all questions he attempted by guessing were wrong and answered 80 correctly, then how many marks he got? (2)

OR

If answer to all questions he attempted by guessing were wrong, then how many questions answered correctly to score 95 marks? (2)

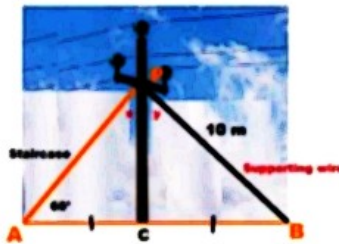
37. **Read the following text carefully and answer the questions that follow:**

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As shown In the village of Surya there was a big pole PC. This pole was tied with a strong wire of 10 m length. Once there was a big spark on this pole, thus wires got damaged very badly. Any small fault was usually

repaired with the help of a rope which normal board electricians were carrying on bicycles.

This time electricians need a staircase of 10 m so that it can reach at point P on the pole and this should make 60° with line AC.



- i. Show that $\triangle APC$ and $\triangle BPC$ are congruent. (1)
- ii. Find the value of $\angle x$. (1)
- iii. Find the value of $\angle y$. (2)

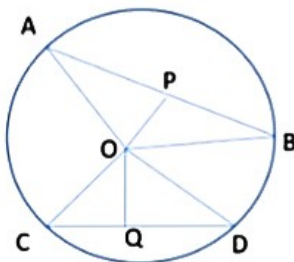
OR

What is the value of $\angle PBC$? (2)

38. **Read the following text carefully and answer the questions that follow:**

[4]

Rohan draws a circle of radius 10 cm with the help of a compass and scale. He also draws two chords, AB and CD in such a way that the perpendicular distance from the center to AB and CD are 6 cm and 8 cm respectively. Now, he has some doubts that are given below.



- i. Show that the perpendicular drawn from the Centre of a circle to a chord bisects the chord. (1)
- ii. What is the length of CD? (1)
- iii. What is the length of AB? (2)

OR

How many circles can be drawn from given three noncollinear points? (2)