

# Zonal Informatics Olympiad, 2016

## *Solutions*

<i>Question 1</i>	Number of binary strings		
	(a) <b>75</b>	(b) <b>175</b>	(c) <b>399</b>

<i>Question 2</i>	Number of paths with even Reds		
	(a) <b>40</b>	(b) <b>52</b>	(c) <b>96</b>

<i>Question 3</i>	Number of valid permutations		
	(a) <b>71</b>	(b) <b>461</b>	(c) <b>3447</b>

<i>Question 4</i>	Number of subsets		
	(a) <b>13</b>	(b) <b>10</b>	(c) <b>12</b>

### Marking

The question paper carries 80 marks, broken up into four questions of 20 marks each. Each question has three parts. *If you solve all three parts correctly, you get 20 marks for that question.* Otherwise, you get 5 marks for each part that you solve correctly.

### Qualifying cutoff

- Std 12: 30
- Std 11: 30
- Std 10 or below: 25