Zonal Informatics Olympiad, 2015

Solutions

Question 1	Largest number that fits the budget				
	(a)	**7300000000**	(b)	**5322222**	(c)	**9666666666**

Question 2	Number of possible arrangements				
	(a)	**90**	(b)	**146**	(c)	**585**

Question 3	Maximum possible score				
	(a)	**123**	(b)	**72**	(c)	**107**

Question 4 (i)	Length of the longest possible route				
	(a)	**10**	(b)	**9**	(c)	**12**

Question 4 (ii)	Length of the longest possible route				
	(a)	**8**	(b)	**9**	(c)	**10**

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.

Some students found Question 4 ambiguous—whether or not it was possible to pass through the terminal city and return to it more than once. Option (ii) corresponds to the (mis)interpretation that this is not allowed. For question 4, compute the score independently according to 4(i) and 4(ii), and then take the maximum of the two.

Qualifying cutoff

- Std 12: 45
- Std 11: 40
- Std 10 or below: 35