

## 13<sup>th</sup> PMO 2010-2011 Qualifying Stage

### Answer Key

I. (Two points each)

1. b
2. c
3. a
4. b
5. d
6. d
7. a
8. c
9. d
10. d
11. c
12. c
13. a
14. c
15. a

II. (Three points each)

1. b
2. d
3. c
4. This question was discarded since the given continued fraction is divergent. If the question of convergence is not taken into account, the answer should be -1.
5. d
6. a
7. This question was discarded because the correct answer was not among the choices. The slope is  $\frac{4}{3}$ .
8. c
9. a
10. This question was discarded because the correct answer was not among the choices. There are 30 such arrangements possible.

III. (Six points each)

1. c
2. b
3. d
4. b
5. d