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2015 Taiwan Selection Test for PMWC and EMIC
Preliminary Round Paper I (Time Allowed : 60 Minutes)

- Write down all answers on the answer sheet.
- Each problem is worth 5 points and the total is 100 points.

1. $97 \times 36 \div 25 + 97 \times 64 \div 25 = ?$

2. $901 + 802 + 703 + 604 + \cdots + 109 = ?$

3. $5 \times 27 + 15 \times 9 + 45 \times 3 + 135 = ?$

4. $9999 + 2015 + 2015 \times 9999 + 99 \div 99 = ?$

5. $\frac{125}{4} \div 14 \times 196 \times \frac{8}{25} = ?$

6. $100 + 99 + 98 - 97 - 96 - 95 + 94 + 93 + 92 - 91 - 90 - 89 + \cdots + 4 + 3 + 2 - 1 = ?$

7. $(\frac{11}{6} + \frac{77}{30} - \frac{33}{10}) \times 101010 =$

8. $\frac{11118888 + 33336666 + 55554444 + 77772222}{9999} = ?$

9. $2015 \times (20^2 \times 5 + 15) + 5 \times 45 - 4030 \times 15 = ?$

10. $0.8 + 9.8 + 99.8 + 999.8 + 9999.8 + \cdots + 999999999.8 = ?$

11. $785.123 + 758.132 + 875.213 + 857.231 + 578.312 + 587.321 = ?$

12. $123454321 \times (1 + 2 + 3 + 4 + 5 + 4 + 3 + 2 + 1) \div 55555 = ?$

13. $\frac{2015 + 2010 + 2005 + \dots + 15 + 10 + 5}{403^2 - 402^2 + 401^2 - 400^2 + \dots + 3^2 - 2^2 + 1} = ?$

14. $25 - \frac{9}{2} - \frac{17}{4} - \frac{33}{8} - \frac{65}{16} - \frac{129}{32} - \frac{257}{64} = ?$

15. $\frac{\frac{20152015}{1} - \frac{20152014}{1}}{20152014 - 20152015} = ?$

16. $\frac{1599}{2015} \times \left(\frac{734}{2015} - \frac{462}{2015} + 1 \right) - \frac{462}{2015} \times \left(\frac{734}{2015} - \frac{1599}{2015} + 1 \right) - \frac{734}{2015} \times \left(\frac{1599}{2015} - \frac{462}{2015} + 1 \right) = ?$

17. $5\frac{3}{15} + 2\frac{8}{35} + 1\frac{15}{63} + \frac{78}{99} + \frac{78}{143} = ?$

18. $999999999^2 + 1999999999 =$

19. $9999 \times \frac{\frac{1010}{11} \div \frac{20}{33}}{1.65 + 90\frac{9}{11} \times 1\frac{13}{20}} = ?$

20. $1 \times 2 + 2 \times 3 + 3 \times 4 + 4 \times 5 + 5 \times 6 + \dots + 99 \times 100 = ?$