WORK SHEET ON FACTORIAL

Q.1 The highest power of 3 in 80!
(a) 36   (b) 34   (c) 23   (d) 24

Q.2 The highest power of 5 in 100!
(a) 4   (b) 3   (c) 5   (d) 7

Q.3 $40!^{40!}$ end with how many zeros?
(a) 40!   (b) 8 x 40!   (c) 9 X 40!   (d) $8^{40!}$

Q.4 How many zeroes will be there at end of product of $2!^{3!} \times 4!^{5!} \times 6!^{7!} \times 8!^{11!} \times 10!^{13!}$?
(a) 10! +8! +6!   (b) 2 x 10!   (c) 10! + 8!   (d) 7! + 11! +2(13!)

Q.5 How many numbers between 300 and 700 are divisible by all of 2, 3 and 7 together?
(a) 8   (b) 9   (c) 10   (d) 7

Q.6 The highest power of 16 in 125! ?
(a) 59   (b) 32   (c) 23   (d) 29

Q.7 50! end with how many zeros?
(a) 34   (b) 12   (c) 23   (d) 43

Q.8 $100!^{100!}$ end with how many zeros?
(a) 100!   (b) 24 x 100!   (c) 10 X 100!   (d) 24 X 50!