٢٥

١) $n! \rightarrow 6! = 720$ ✓ (١)

٢) $(n-1)! \rightarrow 5! = 120$ ✓ (١)

٣) $\frac{(n-1)!}{2} = \frac{5!}{2} = \frac{120}{2} = 60$ ✓ (١)

٤) $\binom{6}{4} = \frac{6 \times 5}{2} = 15$ ✓ (١)

$20 \times 3! = 120$ ✗ ٦٠

٥) $\binom{n}{4} = 210$ $(n-4)! \times 24 = 210$ ✓ (١)

٦) $\binom{n}{2} = 45$ $\frac{n!}{2!} \times 20 = 90$ ✓ (١)

٧) $\binom{6}{3} = 20$ ✓ (١)

٨) $\binom{4}{3} = 4$ $4 \times 4! = 96$ ✓ (١)

٩) $5! = 120$ ✓ (١)

١٠) $\frac{6!}{2!} = 360$ ✓ (١)

١١) $4! \times 4! = 24 \times 24 = 576$ ✓ (١)

١٢) $\frac{6!}{4!} = \frac{720}{24} = 30$ ✓ (١)

١٣) $\frac{6!}{4!} = 30$ ✓ (١)

١٤) $\frac{6!}{2! \times 4!} = \frac{720}{2 \times 24} = 15$ ✓ (١)

١٥) $\binom{6}{4} \times 4! \times 4! = 15 \times 24 \times 24 = 8640$ ✓ (١)

١٦) $\binom{6}{3} \times 3! \times 3! \times 2! = 20 \times 6 \times 6 \times 2 = 1440$ ✓ (١)

١٧) $\binom{6}{3} \times 2! \times 3! \times 3! = 20 \times 2 \times 6 \times 6 = 1440$ ✓ (١)

١٨) $10! - 4! \times 3! \times 5! \times 2!$ ✗ (١)

١٩) $5! \times 5! \times 2!$ ✓ (١)

٢٠) $4! \times 3!$ ✓ (١)