## Venn Diagram, Comparison, Symbol and Notation

1. In an examination $70 \%$ candidates passed in English and $65 \%$ in Mathematics. If $27 \%$ candidate fail in both the subject and 248 passed the examination. The total number of candidates was :
A. 400
B. 348
C. 420
D. 484
2. In a class consisting of 100 students, 20 know English and 20 do not know Hindi and 10 know neither English nor Hindi. The number of students knowing both Hindi and English is :
A. 10
B. 9
C. 12
D. 8

Directions for questions 3 to 5 : These questions are based on the following information given below.
Six boys - Vicky, Nicky, Chicky, Ricky, Dicky and Micky are comparing their heights. We have the following information about their heights.
(i) Only one boy is taller than Vicky.
(ii) Nicky is taller than only one boy.
(iii) The number of boys shorter than Chicky is the same as the number of boys taller than Ricky.
(iv) No two boys are of the same height.
(v) Dicky is shorter than Micky, who in turn is shorter than Ricky.
3. How many boys are taller than Chicky?
(1) 5
(2) 4
(3) 3
(4) 2
(5) None of these
4. Who is the fourth shortest boy?
(1) Micky
(2) Dicky
(3) Chicky
Ricky
(5) Vicky
(4)
5. The boy, who is taller than Nicky but shorter than Micky, is $\qquad$
(1) Chicky
(2) Dicky
(3) Ricky
(4) Vicky
(5) Cannot be determined

Directions for questions 6 and 7 : These questions are based on the following information.
J,K,L,M,N and P scored different marks in an exam. L scored more than only two other persons. K scored less than L but is not the least scorer. J scored less than only one other person. P scored neither the highest nor the least marks. $K$ and $M$ scored 35 and 60 marks, respectively.
6. If P scored 45 marks, then the marks scored by J can be $\qquad$ .
(1) 40
(2) 25
(3) 65
(4) 50
7. If L scored 40 marks, then marks scored by the person who scored the highest and L together are $\qquad$ .
(1) 90
(2) 110
(3) 120
(4) 100
8. Which of the following symbols should replace the question mark in the given expression in order to make the expressions ' $B \leq C$ ' and ' $D \geq E^{\prime}$ definitely true?
$\mathrm{F} \geq \mathrm{B} \leq \mathrm{E} ? \mathrm{~A} \leq \mathrm{C}=\mathrm{D}$
(1) <
(2) $\leq$
(3) >
(4) $\geq$
9. In Which of the following expressions the expressions ' $\mathrm{S} \geq \mathrm{U}$ ' and ' $R \leq Q$ ' are definitely false?
(1) $\mathrm{P}<Q \geq R \leq S=T \geq U$
(2) $\mathrm{Q} \geq \mathrm{P} \geq \mathrm{S}=\mathrm{T} \geq \mathrm{U}=\mathrm{R}$
(3) $\mathrm{S} \geq \mathrm{P}-\mathrm{Q} \geq \mathrm{T} \geq \mathrm{R}=\mathrm{U}$
(4) $\mathrm{R} \geq \mathrm{T}<S \geq Q>P \geq U$
10. If ' + ' means ' - ', ' - ' means ' $x$ ', ' $x$ ' means ' $\div$ ' and ' $\div$ ' means ' + ', then find the value of the expression
$25+32 \times 2 \div 3-8$.
(A) 64
(B) 96
(C) 33
(D) 22
11. $3 \times 5 \times 4=47 \times 6 \times 8=5$ $8 \times 2 \times 5=58 \times 7 \times 1=$ ?
(A) 14
(B) 12
(C) 13
(D) 16
12. If $\mathrm{A} \forall \mathrm{B}=\mathrm{A}^{2}+\mathrm{AB}-\mathrm{B}^{2}+1$, then $9 \forall 11=$ ?
(A) 80
(B) 60
(C) 70
(D) 90
13. If $x @ y=x^{2}+y^{2}+x y+y$, then $8 @ 6=$ ?
(A) 148
(B) 158
(C) 154
(D) 250

