- 1. 4
- $2. \qquad A = \sqrt{s(s-a)(s-b)(s-c)}$
- 3. AB + BC = AC
- 4. 6 sq.units
- 5. 1
- 6. trisectional points

7.
$$\left(\frac{a+1}{3}, \frac{b+1}{3}\right)$$

8. $\frac{1}{x} + \frac{1}{y} = 1 (or) x + y = xy$
9. (2, 2)
10. $\left(\frac{40}{a}, 0\right)$
11. 7 : 4
12. $2\sqrt{2}units$
13. $2 + \sqrt{2}units$
14. 0
15. Q_1 and Q_4
16. (4, -3)
17. $\frac{-3}{2}$
18. 16 sq units
19. (-16, 4)
20. (x, y)
21. 10
22. 0
23. Right angle triangle
24. $x - y = 2$
25. (7, 3)
26. 7
27. (3, -10)
28. 24 sq.units
29. 3:2
30. (2, -1)
31. 1
32. $4\sqrt{5}units$
33. (-7, 0)
34. (7, 0)
35. $\Delta = \sqrt{s(s-a)(s-b)(s-c)}$

where, a, b, c are lengths of the sides and s is semi perimeter $s = \frac{a+b+c}{2}$

GENERAL SCIENCE - 2 KEY

- 1. Von Helmont
- 2. cytostome
- 3. Haustoria, parasitic
- 4. Palate
- 5. Amino Acids
- 6. RUBP or ribulose bis phosphate
- 7. Trypsin is found in pancreatic juice and it acts on proteins.
- 8. 1(tocoferol---eye and skin diseases)
- 9. Priestly
- 10. to create awareness about Global warming.
- 11. Broad bed furrow
- 12. Contour strip farming
- 13. Jatropa curcas
- 14. Petroleum
- 15. Mining
- 16. Drip irrigation, sprinkler system
- 17. Ground water can be recharged by percolation pits.
- 18. Vitamin C
- 19. Reverse peristalsis
- 20. 1(Gliricidia --- dry land plantation)
- 21. Magnessium
- 22. Enzymes
- 23. Rabbit, mushroom (animals)
- 24. if the rate of respiration becomes more than the rate of photosynthesis, all the synthesised carbohydrates are completely utilised during respiration and there will be no food for storage and as a result plant becomes weak and soon may die.
- 25. Biodiversity is the variety of living things that populate the earth.
- 26. Kwashiorkor
- 27. Beaker, test tube, methylated spirit,tripod stand, Bunsen burner, Petri dish, water, iodine solution, leaf from a plant exposed to sunlight.
- 28. I would suggest him to maintain regular food habits. To solve problem temporarily I would prescribe some antacids which contain a base so that It can neutralise hydrochloric acid

- 29. Blue and red rays of visible spectrum
- 30. The practice of removing individual plants or small groups of plants leaves other plants standing anchor the soil, is called selective harvesting
- 31. 1. destroys wildlife habitats and increases soil pollution
 - 2. It increases greenhouse gases in atmosphere contributing to global warming
- 32. Bishnoi people are nature lovers. They have a set of 29 rules to conserve nature."Khejri tree is the plant saved by them.
- 33. 1. How much water is required for drinking?
 - 2. Do you observe any wastage of water? (Any two relevant questions)
- 34. Using a magnifying glass, so that all the light rays converge at a point.
- 35. Chlorophyll and other pigment molecules trap solar energy and convert it into chemical energy in the thylakoid membrane in chloroplast.

But animals having green colour on their body cannot trap solar energy and cannot perform photosynthesis as they do not have chlorophyll pigment.