1. Why is the colour of blood red?
2. What is blood? What are its functions?
3. Name the components of blood. Write the functions of each one.
4. Blood has two parts, the fluid part is called _____ and the three type of cells are _____, _____ and _____.
5. What is Haemoglobin? What are its functions.
6. What are WBC? Write their other name.
7. WBC can change their shape. How is this an advantage to us?
8. What is the function of platelets?
9. Why is the falling level of platelets a matter of concern in Dengue?
10. Name the two types of blood vessels. Differentiate between them.
11. Why is our blood red and the blood of insects not red in colour?
12. Why do arteries have thick walls?
13. Why do veins have valves?
14. What is pulse? What does it measure?
15. What is pulse rate? What is the normal pulse rate for human beings?
16. Draw a pulse rate? What is the normal pulse rate for human beings?
17. Explain these times regarding circulatory system. Open & closed.
18. How many chambers are there in the heart of: fish, frog, crocodile, lizard, monkey, man.
19. How to pulmonary artery different from other arteries?
20. How is pulmonary vein difference from other veins?
21. What are portal veins?
22. What are capillaries? What is then function?
23. Draw a labelled diagram for human heart.
24. Write a short note on heart.
25. Describe the location of heart.
26. How is heart able to work non-stop through out our life?
27. Why is heart generally felt towards the left side of the chest?
28. Which side (right or left) of heart has

    (a) oxygen rich blood (b) CO_2 rich blood.
29. What are atria? Write their other name. What is their function.
30. What are ventricles? What is their functions.

31. Distinguish between atria & ventricles.
32. What separates the right and left halves of the heart?
33. What is the role of the partition in the heart?
34. Why does heart have valves?
35. What is the function of valves in veins?
36. Why are valves present at the base of arteries leaving the heart?
37. Write the sequence of flow of blood the circulatory system.
38. What is a heart beat? (Define)
39. Name the instrument that doctors use to feel the heartbeats.
40. Why does a doctor use a stethoscope to listen to heart beats? What is he looking for?
41. Draw a diagram for stethoscope and explain its working.
42. What is the relationship between a heartbeat and a pulse.
43. Why is the heartbeat rate equal to pulse rate?
44. Why does our heart beat?
45. What is advantage of rhythmic beating of heart?
46. Do lower animals like Hydra & sponges have blood?
47. Describe the circulatory system of hydra & sponges.
48. Who discovered this circulatory system?
49. What is the contribution of William Harvey in the study of human biology?
50. Why do large multicellular animals need a circulatory system?
51. Name all the excretory organs in human beings (lungs, skin, egestion, liver, kidney)
52. How do the following act as excretory organs

    (a) lungs (b) skin (c) liver (d) kidney
53. Why do we need an excretory system?
54. Define excretion & excretory system.
55. What is the role of kidneys in purifying or cleansing blood?
56. How is urine formed? Write in steps (filtration, reassumption & secretion)
57. Draw a labelled diagram for excretory system.
58. Write the correct sequence of organs then. Which blood flows for excretion.
59. Differentiate between ureter & urethra.
60. Name the organs that form the:

(a) Excretory system (b) Circulatory system

61. What is the composition of (a) urine? (b) blood?
62. How much urine do we excrete in one day?
63. Why do we sweat?
64. Why does sweat leave marks on our clothes?
65. What do the following excrete?

    (a) fish (b) man/cat/dog (c) birds
66. How does sweating bring about excretion?
67. Why do

    (a) fish excrete ammonia (b) birds excrete uric acid

    (c) mammals excrete urea (man)
68. On what factor does the way in which chemicals are removed from the body depend?
69. Why do some people need dialysis?
70. What is kidney failure? What happens in this?
71. What is cardiac failure?
72. Why does sweating cool our body?
73. Why do plants need a conducting system?
74. How is food transported to all plants parts from the leaves?
75. How does a plant absorb H_2O?
76. Draw a labelled diagram for a section of root showing absorption and conduction of H_2O.
77. What is the function of root hair? Where does it get water from?
78. What is vascular tissue? What is it made of?
79. Define tissue.
80. Explain: (a) Xylem (b) Phloem.
81. Differentiate between xylem and phloem.
82. How does water enter vegetables when we soak them in water?
83. Study activity 11.3 NCERT? Why does level of water rise inside the potato?
84. What is transpiration? Why is it necessary?
85. Transpiration is a necessary evil. Why?
86. How does water rise up in tall trees?
87. What are the functions of transportation?