1. A particle is moving on a circular track of radius $r$ with angular speed $\omega$. What is the linear speed of particle? [1]
   (1) $r\omega$  (2) $r^2\omega$  (3) $r\omega^2$  (4) $r/\omega$

2. Is alloy a pure substance or mixture? Explain. [1]

3. Where is the sclerenchyma tissue present? [1]

4. (i) What is the uniform circular motion? [1]
   (ii) A cyclist completes 2 revolutions of a circular path of diameter 20 m in half minute. Calculate the speed of cyclist? [2]

5. Write any three difference between metals and non-metals. [3]

6. Write any three differences between mixtures and compounds. [3]

7. (i) What are complex tissues? Name its types. [2]
   (ii) What are stomata? [1]

8. (i) A boy dropped a ball from the top of 20 m building and starts the stopwatch. What will be the reading of stopwatch when ball will reach at ground surface, if acceleration due to gravity is $10 \text{ m/s}^2$? [2]
   (ii) An object is thrown vertically upwards and rises to a height of 45 m. Calculate [Take, $g = 10 \text{ m/s}^2$] [3]
     (a) The velocity with which the object was thrown upward.
     (b) The time taken by object to reach highest point.
     (c) Total time for which object remains in air.

9. (i) Draw a section of phloem and label its following parts: [3]
   Sieve tube, Sieve plate, Phloem parenchyma, Companion cell.
   (ii) Give any two structural characteristics of sclerenchyma tissue. [2]
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