

I. Answer the following: 4x1=4

1. Area under velocity - time graph shows _____.
2. Calcium and Argon are examples of a pair of _____.
3. _____ tissues provide mechanical support to organs.
4. Choose the correct answer:
Companion cells are closely associated with _____.
a) Sieve elements b) Vessel elements
c) Trichomes d) Guard cells

II. Answer in short: 3x2=6

Part - A (any one)

6. What is meant by uniform circular motion? Give two examples of uniform circular motion.
7. A racing car has a uniform acceleration of $4ms^{-2}$. What distance it covers in 10S after the start?

Part - B (any one)

8. Name an element which has the same number of electrons in its first and second shell.

9. Match the following:

- | | | |
|---------------|---|-----------------------|
| a) Dalton | - | Hydrogen atom model |
| b) Chadwick | - | Discovery of nucleus |
| c) Rutherford | - | First atomic theory |
| d) Neils Bohr | - | Discovery of neutrons |

Part - C (any one)

10. What is complex tissue? Name the various kinds of complex tissue.

11. In which stage of mitosis the chromosomes align in an equatorial plate? How?

III. Answer in detail: 3x5=15

Part - A (any one)

1. a) Derive first and second equations of motion by graphical method.

(or)

- b) A 900 kg car moving at $10ms^{-1}$ takes a turn around a circle with a radius of 25m. Determine the acceleration and the net force acting upon the car.

Part - B (any one)

2. a) What conclusions were made from the observations of Gold foil experiment?

(or)

- b) Explain the postulates of Bohr's atomic model

Part - C (any one)

3. a) What are permanent tissues? Describe the different types of simple permanent tissues.

(or)

- b) List out the differences between mitosis and meiosis.

I. Choose the correct answer: 3x1=3

- The Harappans did not have the knowledge of _____.
 - Gold and Elephant
 - Horse and Iron
 - Sheep and Silver
 - Ox and Platinum
- The Election commission of India is a/an
 - Statutory body
 - Private body
 - Independent body
 - Public Corporation
- India has adapted the electoral system followed in the _____.
 - USA
 - United Kingdom
 - Canada
 - Russia

II. Fill in the blanks: 4x1=4

- _____ was the master archive keeper of Chou state, according to traditions.
- _____ is a massive lime stone image of a lion with a human head.
- Narmada Bachao Andolan is a _____.
- In 2017, there were _____ recognized national parties.

III. Match the following: 5x1=5

- Pressure Groups - Mohenjo - Daro
- Great law makes - Seven
- The Great Bath - Hammurabi
- National Party - A kind of grass
- Papyrus - Trade Unions

IV. Answer the question given under each caption: 4x½=2

1. Early Civilisations:
- What is meant by civilization?
 - Name the important early civilization.
 - What did South India witness during the time of early civilization?
 - What happened when civilization began to take shape.

V. Answer any three in Brief: 3x2=6

- Hammurabi code is an important legal document. Explain.
- What is a pressure group?
- State the salient features of the ziggurats.
- Give the meaning of a political party.

VI. Answer any one in detail: 1x5=5

- Define Hieroglyphics & Cuneiform writing system.
- Discuss merits and demerits of direct election.