

PHYSICS (M. Marks : 07; Time : 20 mts.)

1. Give one use of electrostatic force. (½)
2. Why magnetic force is a non-contact force? (½)
3. Define atmospheric pressure. Why our body does not get crushed due to atmospheric pressure? (1)
4. Why heavy tanks are provided with caterpillar tracks? (1)
5. Differentiate balanced & unbalanced forces. What is the direction of motion of a body if it is under the action of several forces? (2)
6. Define Pascal. Calculate pressure exerted by a brick of dimension 25 x 10 x 5cm when placed upright on soil if weight of the brick is 20N. (2)

CHEMISTRY (M. Marks : 07; Time : 20 mts.)

1. How is rayon fibre made, why is it called a regenerated fibre? (1)
2. Write one property and one use of each of the following :- (1)
 - a) Teflon
 - b) Bakelite
3. Differentiate between thermoplastic and thermosetting plastic. (1)
4. Give reason for the following :-
 - a) Synthetic fibres are not very comfortable to wear in hot and humid season.
 - b) Plastic containers are not used to store chemicals . (2)
5. Name the following:-
 - a) The plastic used to insulate the hollow walls of refrigerator.
 - b) Synthetic fibre used to make strong ropes.
 - c) Plastic which is transparent like glass.
 - d) Fibre which resembles wool in its properties . (2)

BIOLOGY (M. Marks : 06; Time : 20 mts.)

1. Fill in the blanks with suitable words :- (1)
 - a) _____ organelles are responsible for energy production in a cell.
 - b) Jelly like substance present in the cell is _____.
 - c) The largest known single cell is _____.
 - d) _____ cells can change shape and squeeze through the walls of blood vessels.
2. What is cell division? Draw a labelled diagram of a cell showing cell division. (1)
3. Write any two differences between unicellular and multicellular organisms. (2)
4. Write the functions of the following in a cell (any one function). (2)
 - a) Cell Membrane
 - b) Mitochondria
 - c) Nucleus
 - d) Vacuoles.