

General Instructions:

- i) There are 33 questions in all.
- ii) All questions are compulsory.
- iii) There are 5 sections in the question paper namely A, B, C, D and E.
- iv) Section A : Q. Nos. 1 to 14 are MCQs and carry 1 mark each.
- v) Section B : Q. Nos. 15 to 20 are very short answer type questions and carry 1 mark each.
- vi) Section C : Q. Nos. 21 to 25 are short answer type questions and carry 2 marks each.
- vii) Section D : Q. Nos. 26 to 30 are short answer type questions and carry 3 marks each.
- viii) Section E : Q. Nos. 31 to 33 are long answer type questions and carry 5 marks each.

SECTION – A : MULTIPLE CHOICE QUESTIONS (14 x 1 = 14 marks)

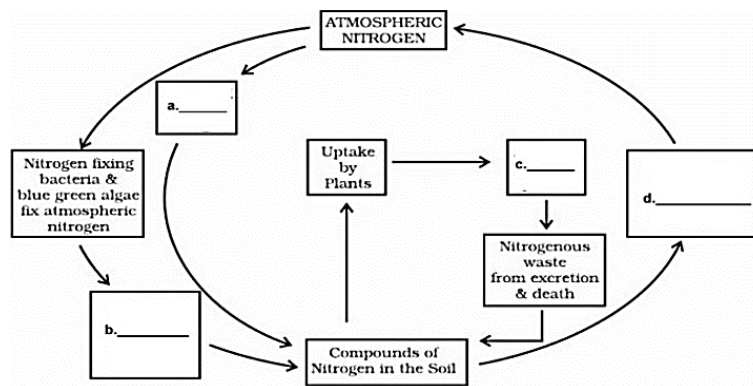
1. Yeast is used in the production of 1
 a) Alcohol b) Sugar c) Hydrochloric acid d) Oxygen
2. _____ is cutting of the mature crops manually or by machines. 1
 a) Manuring b) Sowing c) Harvesting d) Winnowing
3. Which of the following is used in the extraction of many metals? 1
 a) Coke b) Coal tar c) Charcoal d) Coal
4. Female Aedes mosquito acts as a carrier of _____. 1
 a) Malaria b) Cholera c) Tuberculosis d) Dengue
5. Which of the following are contact forces? 1
 i) Friction ii) gravitational force
 iii) Magnetic force iv) muscular force
 a) (i) and (ii) b) (i) and (iv)
 c) (ii) and (iii) d) (ii) and (iv)
6. Sound can travel through 1
 a) Gases only b) Solids only
 c) Liquids only d) Solids, liquids and gases
7. The device used for detecting charge on an object is called: 1
 a) Electroscope b) Telescope
 c) Stethoscope d) Kaleidoscope
8. Which of the following is not an advantage of friction? 1
 a) It enables drawing to be made on paper.
 b) It enables rubber pads to be rubbed off.
 c) It enables fallen things to be picked up.
 d) It enables vehicles to move on ground.
9. Voice of which of the following is likely to have minimum frequency? 1
 a) Baby girl b) Baby boy c) A man d) A woman
10. Which of the following is used to reduce friction on a carrom board? 1
 a) A lubricating oil b) A dry lubricant
 c) A layer of grease d) A ball bearing

Section – D (3 marks questions)

26. a) What do you mean by rolling friction? 3
 b) Mention any one factor on which friction depends.
 c) Explain why a pencil will write on paper but not on glass.
27. a) Define atmospheric pressure. 3
 b) Name the types of forces involved in the following:
 i) A coin falling to the ground on slipping from hands.
 ii) A plastic comb rubbed in dry hair picking up tiny pieces of paper.
 c) Draw a neat diagram **only** to show that liquids exert equal pressure at the same depth.
28. a) Explain why a charged body loses its charge if we touch it with our hands. 3
 b) Suppose you are at home and an earthquake strikes. What precautions would you take to protect yourself? (any two)
29. a) Write any two characteristics of petroleum. 3
 b) Describe how coal is formed from dead vegetation.
30. a) What kind of friction comes into play 3
 i) when a block of wood kept on table just tends to move?
 ii) when a block of wood kept on cylindrical iron rods moves?
 b) Write any two disadvantages of friction.

Section – E (5 marks questions)

31. a) What are antibiotics? State any two precautions which must be taken while taking antibiotics? 5
 b) Complete the following diagram of nitrogen cycle:



32. a) Define crop. 5
 b) Excessive use of fertilisers is not good. Justify.
 c) Why earthworms are known as farmers friends?
 d) Differentiate between kharif and rabi crops. (any two)
33. a) Write an activity to show that sound can travel through liquids. 5
 b) A pendulum oscillates 60 times in 3 seconds. Calculate its time period and frequency. Can we hear the sound produced by the oscillations of this pendulum? Give reasons for your answer.