

BIRLA INSTITUTE OF TECHNOLOGY, MESRA, RANCHI
(END SEMESTER EXAMINATION)

CLASS: IMSC
BRANCH: FOOD TECHNOLOGY

SEMESTER : III
SESSION : MO/2022

SUBJECT: FT205 INTRODUCTION TO AGRICULTURAL PRACTICES

TIME: 3:00 Hours

FULL MARKS: 50

INSTRUCTIONS:

1. The question paper contains 5 questions each of 10 marks and total 50 marks.
 2. Attempt all questions.
 3. The missing data, if any, may be assumed suitably.
 4. Before attempting the question paper, be sure that you have got the correct question paper.
 5. Tables/Data hand book/Graph paper etc. to be supplied to the candidates in the examination hall.
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- Q.1(a) What is the concentration of ozone at 30km altitude? (Given, At 30km $[O_2] = 10^{17.00} \text{ cm}^{-3}$, [M]= $10^{17.68}$ molecules/cm³) (CO1, BT6) [5]
- Q.1(c) What would the pH of rain be if the atmosphere has 0.5 ppb of SO₂ in it? (Given $K_H = 10^{0.096} \text{ M/atm}$, $K_{a1} = 10^{-1.77}$, $K_{a2} = 10^{-7.21}$) (CO1, BT6) [5]
- Q.2(a) Explain universal soil loss equation. (CO2, BT2) [2]
- Q.2(b) Classify biofertilizers. (CO2, BT3) [3]
- Q.2(c) Explain different types of wind erosion and its effects. (CO2, BT2) [5]
- Q.3(a) Define cropping pattern. (CO3, BT1) [2]
- Q.3(b) Explain crop water requirement. (CO3, BT2) [3]
- Q.3(c) Enlist the characteristics of watershed. (CO3, BT3) [5]
- Q.4(a) Enlist the characteristics of organic farming. (CO4, BT1) [2]
- Q.4(b) Classify and elaborate crop rotation system. (CO4, BT3) [3]
- Q.4(c) Explain different types and harvesting of wheat. (CO4, BT2) [5]
- Q.5(a) Explain four recognized classes of seeds. (CO5, BT2) [2]
- Q.5(b) Describe the methods of dispersal of weeds. (CO5, BT2) [3]
- Q.5(c) Explain the principles of weed control. (CO5, BT2) [5]

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