

D 94941

(Pages : 2)

Name.....

Reg. No.....

**FIRST SEMESTER B.VOC. DEGREE EXAMINATION, NOVEMBER 2020**

Organic Farming

SDC 1A G03—FUNDAMENTALS OF AGRICULTURAL ENGINEERING

Time : Three Hours

Maximum : 80 Marks

(A) Very short 1 Objective answer questions (1 mark each) :

- 1 The equation used to determine Kinetic Energy is \_\_\_\_\_.
- 2 The length of the Gunter chain is \_\_\_\_\_.
- 3 What is offsetting ?
- 4 Name an instrument used for setting out right angles to a chain line.
- 5 Expand ICRISAT.
- 6 Broad Bed and Furrow (BBF) method was introduced by \_\_\_\_\_.
- 7 In \_\_\_\_\_ tillage, the seed bed is prepared by cultivating the soil in a narrow strip.
- 8 The stations located on the main survey lines are known as \_\_\_\_\_.
- 9 Primary stage of the soil erosion process is called \_\_\_\_\_.
- 10 Length of Engineers chain is : A) 50 ft B) 66 ft C) 100 ft D) 33 ft.

(10 × 1 = 10 marks)

(B) Short answer questions. Answer any *eight* questions. (2 marks each) :

- 11 Give an account on geologic erosion.
- 12 Compare between a contour bund and a graded bund.
- 13 What are the types of strip cropping ?
- 14 Describe the benefits of percolation ponds.
- 15 Comment on Bench terracing.
- 16 What do you mean by surface creep ?
- 17 Differentiate Gunter's chain and Engineer's chain.
- 18 What is accelerated Erosion ?
- 19 What is erodibility ?

Turn over

- 20 What is the difference between Stream Bank erosion and gully erosion ?
- 21 What are shelter beds ?
- 22 What is stone terracing ?

(8 × 2 = 16 marks)

(C) Short Essay. Answer any *six* questions. (4 marks each) :

- 23 Explain the different types of contour trenching.
- 24 What are the different types of irrigation ?
- 25 What are the main soil conservation measures for hill slopes ?
- 26 How do you classify survey methods ?
- 27 Explain the techniques to improve Water Use Efficiency (WUE).
- 28 Discuss on the biological measures of erosion control.
- 29 Comment on Drip Irrigation.
- 30 Write about measurement of distances.
- 31 Differentiate dry farming and dry-land farming.

(6 × 4 = 24 marks)

(D) Essay. Answer any *two* questions (15 marks each) :

- 32 Write an essay on soil conservation measures for agricultural lands.
- 33 How do you manage the watershed in your agriculture land ? Explain in the aspect of various watershed management practices.
- 34 Describe the gully control structures.
- 35 Briefly describe all the *four* given below :
  - A) Survey equipment.
  - B) Cross staff survey.
  - C) Plotting procedure.
  - D) Chain survey.

(2 × 15 = 30 marks)