C 62078   (Pages 2)   Name.....................................

                                           Reg. No.............................

FOURTH SEMESTER B.Sc. DEGREE EXAMINATION, MAY 2014

(UG–CCSS)

Complementary Course

Botany

B0 4C 04—MORPHOLOGY, SYSTEMATIC BOTANY, ECONOMIC BOTANY PLANT BREEDING AND HORTICULTURE

(2009-2011 Admissions)

Time : Three Hours   **Maximum : 30 Weightage**

I. Objective type questions (include multiple choice, fill in the blanks and answer in a single word):

Answer all *twelve* questions :

Choose the correct answer :

1   Which is the useful part in green gram ?

     (a)   Endosperm.   (b)   Embryo.

     (c)   Cotyledons.   (d)   seed coat.

2   Double follicle is seen in :

     (a)   Ixora.   (b)   Alstonia.

     (c)   Hibiscus.   (d)   Phaseolus.

3   Ovary is inferior in :

     (a)   Pisum sativum.   (b)   Vinca rosea.

     (c)   Ixora.   (d)   Allamanda.

4   Family in which the flowers are unisexual :

     (a)   Malvaceae.   (b)   Fabaceae.

     (c)   Rubiaceae.   (d)   Euphorbiaceae.

Fill in the blanks :

5   Mutation breeding in wheat was initiated in India by ——————.

6   Artificial system of classification was introduced by ——————.

7   Morphology of cloves is ——————.

8   Descendants of a single homozygous self fertilized individual are called ——————.

                                                             Turn over

Answer in a single word :

9   The binomial of gingelly.

10 The arrangement of sepals and petals in bud condition.

11 Name the fruit in Poaceae.

12 Family in which presence of stipule is characteristic.

(12 × ¼ = 3 weightage)

II. Short Answer Questions. Answer all *nine* questions :

13 Give an account of layering.

14 Describe rule of priority.

15 What is a herbarium ? Mention its significance.

16 Chemotaxonomy and its significance.

17 Describe intergeneric hybridization with an example.

18 Mention the binomial and morphology of useful part of turmeric and pepper.

19 What do you mean by ICBN ?

20 Explain hypanthodium with an example.

21 Give an account of breeding for disease resistance.

(9 × 1 = 9 weightage)

III. Short essay *or* paragraph questions. Answer any *five* questions from seven :

22 Conditions for valid publication.

23 Mention the binomial, family, morphology of useful parts and uses of wheat and cotton.

24 What are the important floral characters of Apocynaceae ?

25 Explain the different types of aestivations.

26 Compare the flowers of the subfamilies of Fabaceae

27 Explain grafting and its advantages.

28 Explain the spikelet of Poaceae.

(5 × 2 = 10 weightage)

IV. Essay questions. Answer any *two* questions from three :

29 Define herbarium. Describe the preparation. Add a note on the important herbaria.

30 What is an inflorescence ? Describe the various types of racemose inflorescences.

31 Describe the importance of mutation breeding as a method of crop improvement.

(2 × 4 = 8 weightage)