UNIVERSITY OF EDUCATION
"UExam" Semester-II, 2019
BS   Chemistry/BS Botany/BS Zoology, Session:2018-2022

No. _____421_____

Course Code: BOTN1112
Subject: Plant Systematics, Anatomy and Development

Roll No. (in fig.)_____

Roll No. (in words)_____
_____

SECTION: 1 (MCQ's)

Candidate's Signature.
_____

Time Allowed: 15 Minutes   Max. Marks: 12

Signature of Addl. Supdt.
_____

NOTE: Encircle the correct/ best answer in each of the followings. Each Question carries 1 mark. Use of remover carries zero mark. Cutting and Overwriting is not allowed.

Q1.

- Cruciform corolla is the distinguishing character of family?

  a)   Brassicaceae   b) Rosaceae   c) Liliaceae   d) Solanaceae

- Ring form vascular bundles are present in:

  a) *Zea mays*   b) *Triticum aestivum* c) *Solanum tuberosum* d) Both a and b

- Hard wood is present in:

  a) Sheesham b) Mango   c) Gymnosperm   d) both a and b

- Fruit of mustard is:

  a) Legume   b) Siliqua c) Follicle d) Silicule

- Scientific name of tomato is:

  a) *Solanum tuberosum* b) *Solanum melongena* c) *Lycopersicum esculantum* d) *Solanum esculantum*

- Which is correct for monocot characters?

  a) Ring shaped vascular bundle b) Reticulate venation

  c) Scattered vascular bundle d) Tap roots

- Marginal placentation is found in:

  a) Orange b) Tomato c) Pea d) Cucumber

- Cambium is usually absent in

  a) None b) monocot c) dicot d) gymnosperm

- ---------- is an example of nut.

  a) Peanut b) coconut   c) water chestnut   d) all

- Linnaeus is credit with introducing:

  a) The concept of inheritance b) law of limiting factor c) theory of heredity d) binomial nomenclature

- Which of the following structure is not associated with epidermis

  a) Root hairs   b) Pith cells c) trichome d) Guard cells

- Margins of the sunflower leaves are:

  a) Entire   b) serrate c) dentate d) Palmate
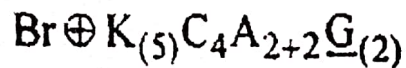
Max. Marks: 33

Section II (Short Answer)

Q.2- Write short answers of the following.   3x5 = 15

(i) What do you know about sclerenchyma and aerenchyma cells?

(ii) What are stomata? Describe the function and type of stomata.

(iii) Define influences and describe catkin, spike and umbel influences with exmaples.

(iv) Draw a floral diagram based on following formula.

$$Br \oplus K_{(5)} C_4 A_{2+2} \underline{G}_{(2)}$$

(v) Differentiate between tap roots and adventitious roots. Give example of each.

Section III (Essay Type)

Answer the following Questions   6x3 = 18

Q.3:- Define tissues. Differentiate between simple and complex tissues. Write different type of simple tissues

Q.4:- Explain some theories about development of shoot apical meristem.

Q.5:- Write down the characters of family solanaceae. Also give the floral formula and diagram and economic importance of this family