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BOT-503

Gymnosperms, Taxonomy of Angiosperms and Anatomy

M.sc. BOTANY (MSCBOT - 12/13/16/17)

First Year, Examination-2019

Time: 3 Hours **Max. Marks: 80**

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Note:- This paper is of Eighty (80) marks divided into two (02) Section A and B. Attempt the question contained in these sections according to the detailed instructions given therein.

नोटः– यह प्रश्न–पत्र अस्सी (80) अकों का है जो दो (02) खण्डों 'क' तथा 'ख' में विभाजित है। प्रत्येक खण्ड में दिए गए विस्तृत निर्देशों के अनुसार इन प्रश्नों को हल करना है।

Section-A (खण्ड–क)

(Long Answer Type Question) (दीर्घ उत्तरीय प्रश्न)

Note:- Section - A contains five (05) long answer-type questions of fifteen (15) marks each. Learners are required to answer any three (03) questions only. (3×15=45)

नोटः— खण्ड 'क' में पाँच (05) दीर्घ उत्तरीय प्रश्न दिये गये हैं। प्रत्येक प्रश्न के लिए पन्द्रह (15) अंक निर्धारित हैं। शिक्षार्थियों को इनमें से केवल तीन (03) प्रश्नों के उत्तर देने हैं।

1. Give Comparative account of the female reproductive organs in cycas and Pinus with the help of suitable diagrams.

2. Describe the morphology and reproduction in Ginkgoales. Justify that Ginkgo biloba is a living fossil.

3. Give an illustrated account of the internal structure of dorsiventral leaf you have studied. Compare it with that of isobilateral leaf.

4. Give an antline of classification of Bentham-Hooker system. What is the basis of this classification? Write the merits and demerits of this system.

5. Define herbarium. Describe the techniques used to prepare herbarium. Write the significance of herbaria.

Section-B (खण्ड–ख)

(Short Answer Type Question) / (लघु उत्तरीय प्रश्न)

Note:- Section-B contains eight (08) short answer type questions of seven (07) marks each. Learners are required to answer any five (05) questions only. (5×7=35)

नोटः– खण्ड 'ख' में आठ (08) लघु उत्तरीय प्रश्न दिये गये हैं। प्रत्येक प्रश्न के लिए सात (07) अंक निर्धारित हैं। शिक्षार्थियों को इनमें से केवल पाँच (05) प्रश्नों के उत्तर देने हैं।

1. Structure of male strobilus of Gnetum.

2. Development of male gametophyte in gymnosperms.

3. Modern trends in plant taxonamy.

4. International code of Batanical nomenclature (ICBN).

5. Ex-site conservation techniques for plants.

6. Give general characters of Poales.

7. Complex tissues in plants.

8. Theories relating to the organization of shoot apex.

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