

P - II (1+1+1) H / 20 (N)

2020

BOTANY (Honours)

Paper Code : IV - A & B

[New Syllabus]

Important Instructions for Multiple Choice Question (MCQ)

- Write Subject Name and Code, Registration number, Session and Roll number in the space provided on the Answer Script.

Example : Such as for Paper III-A (MCQ) and III-B (Descriptive).

Subject Code :

III	A	&	B
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Subject Name :

- Candidates are required to attempt all questions (MCQ). Below each question, four alternatives are given [i.e. (A), (B), (C), (D)]. Only one of these alternatives is 'CORRECT' answer. The candidate has to write the Correct Alternative [i.e. (A)/(B)/(C)/(D)] against each Question No. in the Answer Script.

Example – If alternative A of 1 is correct, then write :

1. – A

- There is no negative marking for wrong answer.

মাল্টিপল চয়েস প্রশ্নের (MCQ) জন্য জরুরী নির্দেশাবলী

- উত্তরপত্রে নির্দেশিত স্থানে বিষয়ের (Subject) নাম এবং কোড, রেজিস্ট্রেশন নম্বর, সেশন এবং রোল নম্বর লিখতে হবে।

উদাহরণ — যেমন Paper III-A (MCQ) এবং III-B (Descriptive)।

Subject Code :

III	A	&	B
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Subject Name :

- পরীক্ষার্থীদের সবগুলি প্রশ্নের (MCQ) উত্তর দিতে হবে। প্রতিটি প্রশ্নে চারটি করে সম্ভাব্য উত্তর, যথাক্রমে (A), (B), (C) এবং (D) করে দেওয়া আছে। পরীক্ষার্থীকে তার উত্তরের স্বপক্ষে (A)/(B)/(C)/(D) সঠিক বিকল্পটিকে প্রশ্ন নম্বর উল্লেখসহ উত্তরপত্রে লিখতে হবে।

উদাহরণ — যদি 1 নম্বর প্রশ্নের সঠিক উত্তর A হয় তবে লিখতে হবে :

1. – A

- ভুল উত্তরের জন্য কোন নেগেটিভ মার্কিং নেই।

Paper Code : IV - A

Full Marks : 14

Time : Twenty Minutes

Choose the correct answer.

Each question carries 1 mark.

1. System of classification proposed by Linnaeus —
 - (A) Phylogenetic system
 - (B) Natural system
 - (C) Artificial system
 - (D) None of the above

2. Pick the right sequence of taxonomic categories —
 - (A) division-class-family-tribe-order-genus-species
 - (B) division-class-family-order-tribe-genus-species
 - (C) division-class-order-family-tribe-genus-species
 - (D) division-order-class-family-genus-tribe-species

3. Alternative family name for Guttiferae is —
 - (A) Umbelliferae
 - (B) Clusiaceae
 - (C) Asteraceae
 - (D) Malvaceae

4. The last botanical congress was held in —
 - (A.) Melbourne, Australia
 - (B) Shenzhen, China
 - (C) Rio de Janeiro, Brazil
 - (D) Amsterdam, Netherlands

5. Binomials with same genus name and species epithet are called —
- (A) Hommonym
 - (B) Tautonym
 - (C) Basionym
 - (D) Synonym
6. Principals of Numeric taxonomy were developed by —
- (A) Bentham and Hooker
 - (B) Engler and Prantl
 - (C) Sneath and Sokal
 - (D) None of the above
7. A fruit developed from condensed inflorescence is —
- (A) Composite fruit
 - (B) Simple fruit
 - (C) Aggregate fruit
 - (D) Etaerio
8. Vexillum is found in —
- (A) Cruciferae
 - (B) Rosaceae
 - (C) Solanaceae
 - (D) Papilionaceae
9. In racemose inflorescence, flowers are arranged in —
- (A) Acropetal order
 - (B) Centripetal order
 - (C) Basipetal order
 - (D) Centrifugal order

10. A typical flower with superior ovary is called —
- (A) Hypergynous
 - (B) Hypogynous
 - (C) Perigynous
 - (D) Epigynous
11. A coherent mass of pollen grains present in the anther lobes of some flowers is known as —
- (A) Pollen grains
 - (B) Pollinium
 - (C) Pollenidium
 - (D) Pollen cluster
12. Insect pollinated flowers usually contain —
- (A) Dry pollen with smooth surface
 - (B) Spiny and large pollen
 - (C) Brightly coloured pollen
 - (D) Sticky pollen with rough surface
13. Exine of pollen grains are composed of —
- (A) Sporopollenin
 - (B) Myopollenin
 - (C) Thydopollenin
 - (D) Saproollenin
14. The study of pollen contained in honey —
- (A) Forensic Palynology
 - (B) Palaeopalynology
 - (C) Melissopalynology
 - (D) Entomopalynology
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BOTANY (Honours)

Paper Code : IV - B

[New Syllabus]

Full Marks : 56

Time : Two Hours Forty Minutes

The figures in the margin indicate full marks.

Group - A

- 1 Write short answers of *any two* of the following : 4×2=8
- (a) Distinguish between the following with examples : 2×2
- (i) Verticillaster and Hypanthodium Inflorescence
- (ii) Anomocytic and Anisocytic types of stomata
- (b) Give a brief account of different types of ovules found in angiosperms with examples. 4
- (c) Write a brief note on the orientation and polarity in the pollen grains. 4
- (d) Write a brief note on the significance of palaeopalynology. 4
- 2 Answer *any two* of the following: 10×2=20
- (a) Give an outline of different types of corolla aestivations in angiosperms with examples. What is a floral diagram and floral formula? 8+2
- (b) Describe with suitable diagrams and examples the different types of placentation found in angiosperms. 10
- (c) Briefly discuss the NPC system of classification of pollen grains based on the apertures and their number as proposed by Erdtman (1969). 10
- (d) Write notes on the following : 5+5
- (i) Forensic palynology
- (ii) Application of Neopalynology

Group – B

3. Write short answers of *any two* of the following : 4×2=8
- (a) What is ICN? Write down the governing principles of ICN (ICBN) of nomenclature. 1+3
 - (b) What is a Herbarium? Mention the role of herbarium in the 21st century. 2+2
 - (c) Mention the diagnostic characters of the family Orchidaceae with scientific name of one economically important plant. 3+1
 - (d) What is the principle of priority? What are the limitations of principle of priority? 2+2
4. Answer *any two* of the following: 10×2=20
- (a) Give an outline of the classification of higher plants proposed by Bentham and Hooker up to order. What are the main demerits of this classification? 8+2
 - (b) How does IUCN categorize threatened plants? Describe the roles of National Parks and Sanctuaries in preserving and protecting plant species. 2+8
 - (c) Discuss the characteristic features and systematic positions of the families Magnoliaceae and Asteraceae. 5+5
 - (d) What is a type specimen? Describe in brief with examples the different kinds of nomenclatural types as recommended by ICN. 2+8
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