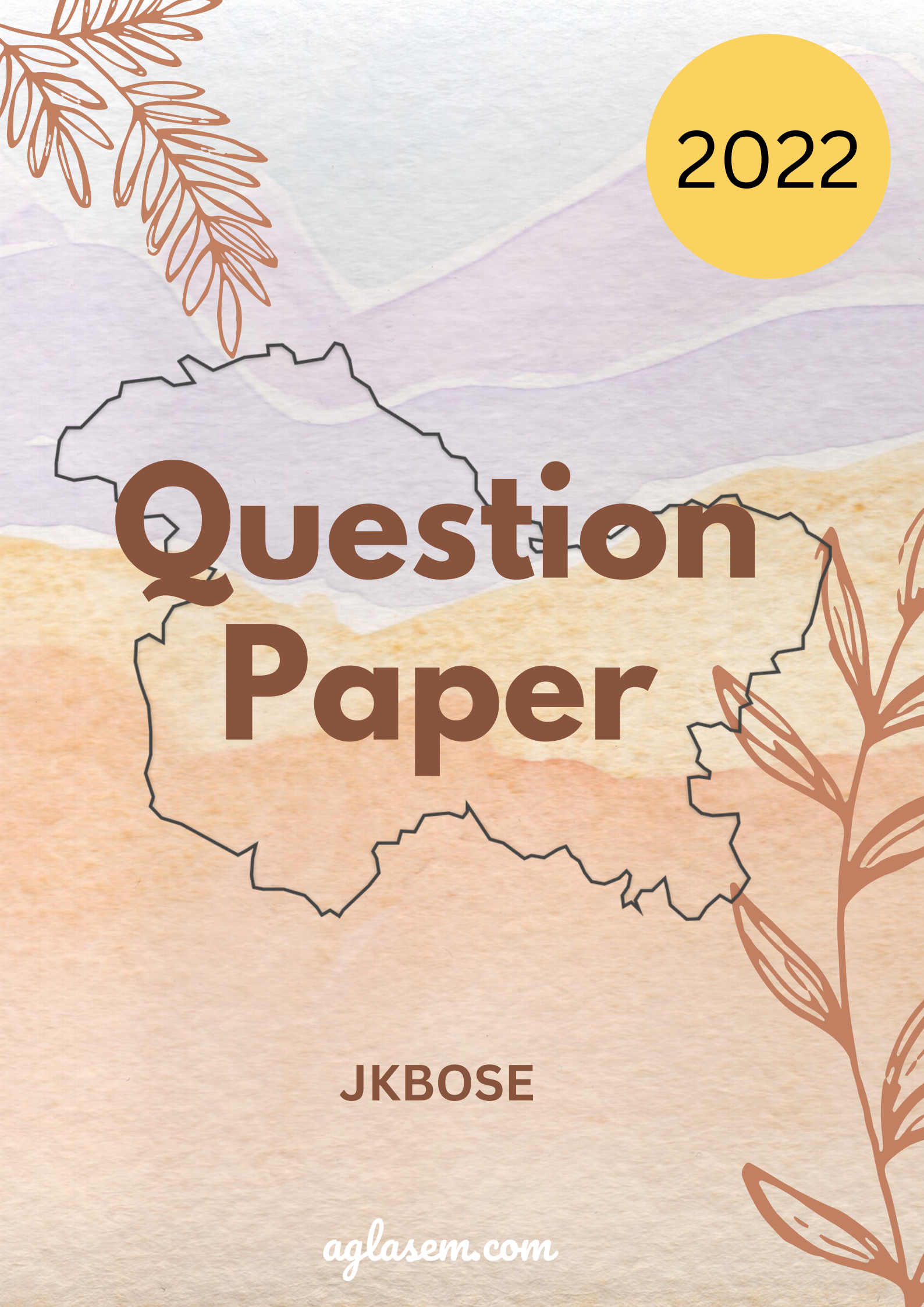




2022

Question Paper

JKBOSE

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A-3-A

Roll No. _____

Total No. of Questions : 14]

[Total No. of Printed Pages : 3

12thSZARJD22

6003-A

BOTANY

(Biology)

Time : 1.15 Hours]

[Maximum Marks : 35

Section-A

1 each

1. _____ is called Anthesis. (Fill in the blank)
2. In angiosperms, functional megaspore develops into :
 - (A) Endosperm
 - (B) Pollen sac
 - (C) Embryo sac
 - (D) Ovule
3. The genotype of a plant showing a dominant phenotype can be determined by :
 - (A) Back cross
 - (B) Test cross
 - (C) Dihybrid cross
 - (D) Pedigree analysis
4. Name the chemical used for doubling the chromosome number.

12thSZARJD22-6003-A

Turn Over

A-3-A

(2)

Section-B

2 each

5. Differentiate between Autogamy and Xenogamy.
6. What is Cryopreservation ?
7. Differentiate between primary productivity and secondary productivity.

Or

Maximum number of trophic levels is hardly 3-5 in terrestrial ecosystems. Explain, why ?

Section-C

3 each

8. Describe the process of decomposition.
9. What are GM organisms ? What is their importance ?
10. Describe the importance of mycorrhiza, cyanobacteria and bacteria as biofertilizers. <https://www.jkboseonline.com>
11. With the help of well labelled diagrams explain the structure of an unfertilized and a fertilized embryo sac.
12. Define 'Genetic Code.' What are its characteristics ?

Or

Write explanatory note on the central dogma and central dogma reverse of molecular biology.

Section-D

5 each

13. What do you understand by Gene Expression ? Explain Lac Operon.

Or

Give an experimental verification of DNA as genetic material.

12th SZARJD22-6003-A

A-3-A

14. Discuss the various types of interactions between the members of different species.

Or

Define Xerosere. Describe the process of ecological succession on a bare rock.

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