

B-10-Z

Roll No.....

Total No. of Questions : 16]

[Total No. of Printed Pages : 4

12thARM(SZ)JKUT2024

1110-Z

BOTANY

(Biology)

Time : 1½ Hours]

[Maximum Marks : 35

SECTION-A

1 each

1. Which triplet codon does not code for any amino acid ?

(A) UUU

(B) UUA

(C) UAG

~~(D) UUG~~

Turn Over

12thARM(SZ)JKUT2024-1110-Z

3-10-Z

<https://www.jkbosenline.com>

2. Supply of oxygen to the biogas plant will have :

(A) Positive effect

(B) Negative effect

(C) No effect

(D) None of these

3. Baker's yeast is :

(A) *S. ludwingii*

(B) *S. cerevisiae*

(C) *S. octosporus*

(D) *Schizosaccharomyces*

4. Which group has more species than all the vertebrate species combined ?

(A) Fungi

(B) Insects

(C) Algae

(D) Bryophytes

12thARM(SZ)JKUT2024-1110-Z

B-10-Z

5. Population density is equal to :

- (A) [Natality + Immigration] + [Mortality + Emigration]
- (B) [Natality - Immigration] + [Mortality - Emigration]
- ~~(C)~~ [Natality + Immigration] - [Mortality + Emigration]
- (D) [Natality + Mortality] - [Immigration + Emigration]

SECTION-B

2 each

~~6~~ Describe the development of male gametophyte.

~~7~~ What is Double fertilization ?

8. Write a note on various types of processes that occur simultaneously during decomposition of detritus. <https://www.jkboseonline.com>

9. What is the key difference between Primary and Secondary sewage treatment ?

10. Draw schematic structure of a Transcription unit.

Turn Over

SECTION-C

3 each

11. Translation involves steps like activation of amino acids, charging, initiation, elongation, termination and modification. Throw light on first two steps.

12. ✓ What is Tissue Culture ? Give its applications.

13. ✓ Flowers have evolved various strategies to prevent self pollination.

Write a note on those strategies.

14. ✓ What are Hotspots ? Give an example and also write criteria for hotspots.

15. ✓ What are properties of genetic material ?

SECTION-D

5

16. Describe the attributes that populations possess but not individuals.

Or

✓ Define Ecological Pyramid. Name the three types of ecological pyramids. What information is conveyed by each pyramid regarding structure, functions and energy in the ecosystem ?

2thARM(SZ)JKUT2024-1110-Z

3-10-Z