Previous M.Sc., Degree Examinations

September/October 2015

(Directorate of Distance Education)

BOTANY

DPA510 : Paper I : Biology and Diversity of Algae, Fungi, Bryophytes, Pteridophytes and Gymnosperms

Time: 3 hrs.] *[Max.Marks:75/85*

Instructions : 1. Answer all Questions.
2. Repeaters shall answer questions from Section A, B and C only (Marks 75)

SECTION -A

I. Write brief notes on any SEVEN of the following: **7X3 =21**

1. Brown algae

2. Cleistothecium

3. Gamma cup

4. Aeciospore

5. Plectostele

6. Sporophyte

7. Conidiophore

8. Resin canal

9. *Geledium fusilatum*

10. Globule

SECTION -B

II. Write brief notes on any THREE of the following: **3X8 =24**

11. Evolution of land plants

12. Anatomy of corolloid root

13. Life history of *Saccharomyces*

14. Economic importance of pteridophytes

15. General characters of Bryophytes

Contd…2

SECTION -C

III. Answer any TWO of the following: 2X15 =30

16. Write on the significance of heterospory and seed habit.

17. Give an account on the classification of algae.

18. Write an account on salient features of cycadales. Add a note on its economic importance.

19. Discuss sexual reproduction in Oromycetes and Basidiomycetes

SECTION –D

This Section shall be answered only by freshers having 85 marks as paper maximum in addition to section A, B and C

IV. Answer any ONE of the following: 1X10 =10

20. Write an account on the life cycle of *Funaria.*

21. Give an account of lichens.

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Previous M.Sc., Degree Examinations

September/October 2015

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BOTANY

DPA520 : Paper II : Diversity of Angiosperms and Plant Taxonomy

Time: 3 hrs.] *[Max.Marks:75/85*

Instructions : 1. Answer all Questions.
2. Repeaters shall answer questions from Section A, B and C only (Marks 75)

SECTION -A

I. Write brief notes on any SEVEN of the following: 7X3 =21

1. Species plantarum

2. Metachlamydae

3. Isotype

4. Vienna Code

5. Takhtajan

6. Panicle

7. CBD

8. Magnoliopsida

9. Hydrilla

10. Cypsella

SECTION -B

II. Write brief notes on any THREE of the following: 3X8 =24

11. Relevance of taxonomy to biodiversity conservation

12. Role of Palynology in taxonomic evidence

13. Hot spots of India

14. Salient features of Capparidaceae

15. Inflorescence in Poaceae

Contd…2

SECTION -C

III. Answer any TWO of the following: 2X15 =30

16. Write an account of Hutchinson's classification of flowering plants.

17. Explain the practices of sustainable utilization of bioresources.

18. Explain the principles of ICBN.

19. Write the diagnostic characteristic features of

a) Magnoliaceae

b) Verbenaceae

c) Asteraceae

SECTION –D

This Section shall be answered only by Freshers having 85 marks as paper maximum in addition to Section A, B and C

IV. Answer any ONE of the following: 1X10 =10

20. Write the characteristics of families Combretaceae and Meliaceae. Write their evolutionary significance.

21. Explain the importance of plant diversity in socio economic development.

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Previous M.Sc., Degree Examinations

September/October 2015

(Directorate of Distance Education)

BOTANY

DPA530 : Paper – III Plant Ecology and Plant Geography

Time: 3 hrs.] *[Max.Marks:75/85*

Instructions : 1. Answer all Questions.
2. Repeaters shall answer questions from Section A, B and C only (Marks 75)

SECTION -A

I. Write brief notes on any SEVEN of the following: 7X3 =21

1. Energy flow
2. Precipitation
3. Nutrient budget
4. Negative Interaction
5. Climax community
6. Green House Effect
7. Phytogeography
8. Secondary production
9. Smog
10. Minnemata

SECTION -B

II. Write brief notes on any THREE of the following: 3X8 =24

11. Continental drift
12. Electromagnetic spectrum
13. Nature and types of ecosystems
14. Ecosystem models
15. Macro and Micro - climate

Contd…2

SECTION -C

III. Answer any TWO of the following: 2X15 =30

16. Describe the origin and distribution of Coffee and Banana

17. Explain major types of biogeochemical cycles.

18. Explain genecological units and ecological amplitudes.

19. Discuss the concept of ecological succession.

SECTION –D

This Section shall be answered only by freshers having 85 marks as paper maximum in addition to Section A, B and C

IV. Answer any ONE of the following: 1X10 =10

20. Write an account of noise pollution and suggest its remedial measures.

21. Explain different dispersal mechanisms.

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Previous M.Sc., Degree Examinations

September/October 2015

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BOTANY

DPA540 : Paper IV : Microbiology

Time: 3 hrs.] *[Max.Marks:75/85*

Instructions : 1. Answer all Questions.
2. Repeaters shall answer questions from Section A, B and C only (Marks 75)

SECTION -A

I. Write brief notes on any SEVEN of the following: **7X3 =21**

1. Mycoplasma

2. Louis Pasteur

3. Spirulina

4. Vinegar

5. Soil preservation

6. Mordant

7. PGPR

8. Brewing industry

9. β Lactam ring

10. Cellulases

SECTION -B

II. Write brief notes on any THREE of the following: **3X8 =24**

11. Ultra structure of Bacteria

12. Sexual reproduction in Algae

13. Serial dilution technique

14. Five Kingdom classification

15. Pollution indicator microorganisms

16. Fermented dairy products

17. Types of vaccines

Contd…2

SECTION -C

III. Answer any TWO of the following: 2X15 =30

18. Give an account of rhizosphere microflora

19. Describe the ultra structure and reproduction in BGA

20. Write an account on water borne diseases

21. Write the principles and working of TEM

SECTION –D

This Section shall be answered only by freshers having 85 marks as paper maximum in addition to Section A, B and C

IV. Answer any ONE of the following: 1X10 =10

22. Briefly elucidate the recent advances in the field of aerobiology

23. Discuss the role of Biofertilizers in the field of agriculture.

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