

Rajiv Gandhi University of Health Sciences, Karnataka IV Year B.Pharm Degree Examination - 14-Jan-2020

Time: Three Hours Max. Marks: 70 Marks

INDUSTRIAL PHARMACOGNOSY (RS - 3) Q.P. CODE: 2620

Your answers should be specific to the questions asked. Draw neat labeled diagrams wherever necessary.

LONG ESSAYS (Answer any Two)

 $2 \times 10 = 20 \text{ Marks}$

- 1. Discuss in detail WHO Guidelines for the assessment of crude drugs.
- 2. Describe the various techniques involved in the physically mediated DNA gene transfer in plants.
- 3. Describe in detail the various processes involved in the isolation of Enzymes.

SHORT ESSAYS (Answer any Six)

 $6 \times 5 = 30 \text{ Marks}$

- 4. Discuss the production of secondary metabolites in vitro.
- 5. Describe the production of Sterptokinase.
- 6. Explain the process of standardization of Vasaka.
- 7. Mention the various Ayurvedic formulations and discuss the preparation of Bhasma.
- 8. Explain the process of isolation of Digitoxin.
- 9. Discuss the source, chemical constituents and uses of Shatavari and Shankhpushpi.
- 10. Explain the various techniques involved in the immobilization of cells.
- 11. Give a detailed note on mutation.

SHORT ANSWERS $10 \times 2 = 20 \text{ Marks}$

- 12. What are Enzyme reactors? Name the different types of Enzyme reactors.
- 13. Name the Marker compounds of Glycyrrhiza and Vasaka.
- 14. What are Transgenic plants?
- 15. Define Arista and Asava. Give examples.
- 16. Write a note on Soaphut.
- 17. Define Tissue culture and Callus culture.
- 18. Write the chemical constituents and uses of Aleovera.
- 19. Mention the various Alternative systems of medicine.
- 20. Define Biotransformation.
- 21. Define Churna and write the method of preparation of Churna.
