Code No: 07A82307 **R07** **Set No. 2**

IV B.Tech II Semester Examinations,APRIL 2011
PHYTOCHEMICALS AND HERBAL MEDICINE
Bio-Technology

Time: 3 hours **Max Marks: 80**

Answer any FIVE Questions
All Questions carry equal marks

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1. Give the active constituents and industrial applications of neem. [16]
2. Describe the characteristics of Dicotyledonous plants in detail. [16]
3. Explain the chemical and biological methods for the assay of Diosgenin. [16]
4. Significance of TLC in separation of alkaloids. [16]
5. Explain the following:
   (a) Chemo microscopy in evaluation of a drug.
   (b) Palisade ratio. [8+8]
6. Write a brief account on morphological and chemical evaluaion of drugs. [16]
7. Give official source, chemical constituents and uses of Catharanthus roseus. [16]
8. Give the sources of natural drugs. [16]

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Code No: 07A82307 **R07** **Set No. 4**

IV B.Tech II Semester Examinations,APRIL 2011
PHYTOCHEMICALS AND HERBAL MEDICINE
Bio-Technology

Time: 3 hours **Max Marks: 80**

Answer any FIVE Questions
All Questions carry equal marks

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1. Clonal propagation is widely used in propagation of medicinal plants. Justify. [16]
2. Give the classification of resins with suitable examples and their industrial applications. [16]
3. Give the advantages and disadvantages of biofungicides. [16]
4. Explain the techniques involved in the detection of phytosterols and alkaloids .[16]
5. Describe the characteristics of Monocotyledonous plants in detail. [16]
6. What are the various methods of biological evaluation of drugs. [16]
7. What is the role of genetics in improving the properties of medicinal herbs? [16]
8. Give an account on active constituents of the following:
   (a) Sterol and cardiac glycosides.
   (b) Saponin glycosides. [8+8]

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Code No: 07A82307 R07 Set No. 1

IV B.Tech II Semester Examinations,APRIL 2011
PHYTOCHEMICALS AND HERBAL MEDICINE
Bio-Technology

Time: 3 hours Max Marks: 80

Answer any FIVE Questions
All Questions carry equal marks

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1. Explain briefly about Biotransformation. [16]
2. Write a brief account on drug evaluation using microscopic methods. [16]
3. Discuss on the factors that influence cultivation of medicianl plants. [16]
4. What are the different direct gene transfer methods are applied for introducing novel traits into plants. [16]
5. Explain the role of plants as medicines with suitable examples. [16]
6. Explain the protoalkaloids with suitable examples and their industrial applications. [16]
7. Explain the uses of following with suitable examples:
   (a) Tragacanth
   (b) Sodium alginate
   (c) Pectin
   (d) Gum karaya. [6+6+4]
8. Explain the laboratory methods used for the detection of adulterants in crude drugs. [16]

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Code No: 07A82307 **R07** **Set No. 3**

IV B.Tech II Semester Examinations,APRIL 2011
PHYTOCHEMICALS AND HERBAL MEDICINE
Bio-Technology

Time: 3 hours **Max Marks: 80**

Answer any FIVE Questions
All Questions carry equal marks

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1. Explain the following:
   (a) Fractional distillation
   (b) Steam distillation. [8+8]
2. Mention the methods of extraction of glycosides. [16]
3. What are the screening methods employed for estrogenic compounds. [16]
4. Write a brief account on pharmacological based classification of plants. [16]
5. Explain the qualitative tests used for the detection of alkaloids. [16]
6. Functional foods and Phytochemicals-discuss. [16]
7. Give official source, diagnostic characters, chemical constituents and uses of drugs obtained from the following four plants:
   (a) cinchona
   (b) Nuxvomica
   (c) Rauwolfia and
   (d) Withania. [16]
8. Explain briefly about the advantages of herbal drugs. [16]

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