(15)

| Roll No. of Pages Total No. of Questions: 06 | : 01 |
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| M.Pharmacy (Pharmacogonosy) (2017 & Onwards) (Sem2) MEDICINAL PLANT BIOTECHNOLOGY Subject Code: MPG-201 M.Code: 74949 | |
| Time: 3 Hrs. Max. Marks | : 75 |
| INSTRUCTIONS TO CANDIDATES: 1. Attempt any FIVE questions out of SIX questions. 2. Each question carries FIFTEEN marks. | |
| Q.l. (a) Discuss various sterilization methods involved in tissue culture and gene transfiplants. | fer in (8) |
| (b) Plant biotechnology plays an imperative role in pharmaceutical sciences. Justify statement and elaborate. | the (7) |
| Q.2. Write a note on the following (Any Three): | |
| (a) DNA replication | (5) |
| (b) Synthetic seeds | (5) |
| (c) Elicitors in production of secondary metabolites | (5) |
| (d) Biotransformations | (5) |
| Q.3. (a) Elaborate on the production of ergot alkaloids through fermentation technology. | (7) |
| (b) What are bioreactors? Explain types of bioreactors used in plant tissue culturing. | (8) |
| Q.4. What do you understand by plant cell cloning? What are various methods used for | plant |

Q.5. Write a note on following:(a) Micropropagation of medicinal plants(6)

cell cloning? Also elaborate on applications, advantages and disadvantages.

(b) DNA recombinant technology (5)

(c) Monoclonal variations. (4)

Q.6. Discuss in detail the commercial role of plant tissue culture techniques in the production of plant secondary metabolites. (15)

NOTE: Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.

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