

2016

**BOTANY**

PAPER : BOT 201

**RESOURCE MANAGEMENT & CONSERVATION,  
IPR AND TRADITIONAL KNOWLEDGE**

(Old Course)

Full Mark : 80

Time : 3 Hrs

*Figures in the right hand margin indicate full marks for the question*

Q1). Answer the following Multiple Choice Questions

1×9=9

- (i) The Earth Summit of 1992 at Rio de Janeiro resulted into a Convention on Biodiversity, which came into force on:
- (a) 5 June, 1992
  - (b) 5 July, 1992
  - (c) 19 December, 1993
  - (d) 29 December, 1993
- (ii) Wetland conservation programme generally based on
- (a) Checking waste disposal in wetlands
  - (b) Preparation of wetland inventories
  - (c) Reduction of excessive inflow of nutrients
  - (d) All of the above

(iii) The IUCN Red List system was initiated in the year of:

- (a) 1963                      (b) 1969  
(c) 1992                      (d) 2000

(iv) Match List-I with List-II and select the correct answer using the codes given below the list:

List-I (Microbs)	List-II (Characteristics)
A. <i>Pyrococcus furiosus</i>	1. Production of bacterial pesticides
B. <i>Rhodospirillum</i>	2. Production of thermostable enzymes
C. <i>Pseudomonas aeruginosa</i>	3. Free living nitrogen fixer
D. <i>Bacillus thuringiensis</i>	4. Biodegradation of oil spills
	5. Photosynthetic bacteria

Codes:

- |     | A | B | C | D |
|-----|---|---|---|---|
| (a) | 2 | 5 | 1 | 4 |
| (b) | 2 | 5 | 4 | 1 |
| (c) | 3 | 2 | 4 | 1 |
| (d) | 3 | 2 | 1 | 4 |

(v) Which of the following category is not considered as a RET criteria

- (a) Area of occurrence in term of geographical distribution  
(b) Extent of occurrence in term of geographical distribution  
(c) Area of occurrence in term of population numbers

(2)

P.T.O.

(d) Numbers of population

(vi) Opium is obtained from the Poppy in the form of:

- (a) Gum                              (b) Resin  
(c) Latex                              (d) Tannin

(vii) Which is not true about the genetically modified 'Bt crops'?

- (a) The technique has been applied to several species of crops  
(b) The source organism for the gene is a soil bacterium  
(c) The transferred gene exists in several allelic form  
(d) Bt brinjal has been commercially exploited

(viii) Which of the following cannot be protected by copyright?

- (a) Musical compositions  
(b) Computers hardware and software  
(c) Folklore  
(d) Graphic works

(ix) Botanical name of common millet is:

- (a) *Panicum miliaceum*              (b) *Setaria italica*  
(c) *Sorghum vulgare*              (d) *Triticum aestivum*

(3)

P.T.O.

Q2). Answer the following questions (any Six)  $2 \times 6 = 12$

- What is copyright? Give examples.
- Defined Traditional Knowledge. Differentiate between modern vs. traditional knowledge.
- Name any two economically important plants belongs to the family Acanthaceae.
- What is GMO? Write a note on advantages and risks of GMO crops.
- What do mean by white revolution? Who is the pioneer of white revolution in India?
- What are beverages? Mention botanical source and parts used of tea.
- Give botanical source, chemical content and uses of long pepper and turmeric.

Q3). Write an explanatory notes on any Four of the following  $5 \times 4 = 20$

- Centre of diversity
- INM and IPM
- Biotechnology related IPR's
- Biopiracy
- Importance of Pulses

Q4). Answer the following questions (any Three)  $3 \times 9 = 27$

- Defined Plant diversity? Describe the different

causes of loss of plant biodiversity. In what ways it can be checked?  $1+4+4=9$

- Write botanical name, family, cultivation practices and utilization of the following plants.

(i) Para rubber (ii) Rice  $4.5+4.5=9$

- What is NTFP's? Describe the role of NTFP's livelihood in rural people.  $2+7=9$

- What is IPR? Write a consensus note on different form of IPR's with suitable examples.

Q5). Answer the following questions (any One) 12

- Write an account on benefits and adverse consequences on Green Revolution. 12

- What is in situ conservation? Explain the different strategies of in situ conservation? Write a brief account on International efforts and National Initiatives of in situ conservation.  $2+5+5=12$

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