

Sc

C106]

No. of printed pages: 2

SARDAR PATEL UNIVERSITY  
M. Sc. (IV Semester) Examination-2016  
Subject: Biotechnology

PS04EBIT01-Phytoresource Utilization & Conservation

Date: 11/04/2016

Time: 02:30pm to 05:30pm

Marks: 70

Note: figures on the right in bracket indicate maximum marks.

Q.1 Choose the correct options to the followings: [08]

1. Which of the following is a not good source of botanical dye?
 

a. <i>Indigofera tinctoria</i>	c. <i>Azadirachta indica</i>
b. <i>Curcuma longa</i>	d. <i>Butea monosperma</i>
2. Our concern about biodiversity is due to:
 

i) Pharmaceutical value	ii) Ecosystem value	iii) Ethical value	iv) Tourism value
a. i, ii & iii	c. ii & iii		
b. i & ii	d. i, ii, iii & iv		
3. Wood is composed of :
 

a. Axial elements	c. Both a and b
b. Radial elements	d. None of the above
4. Which of the following statements is/are true?
 

i) John Harshberger coined the word 'Ethnobotany'	
ii) S.K.Jain coined the word 'Ethnobotany'	
iii) S.K.Jain regarded 'Father of Indian Ethnobotany'	
iv) Janki Ammal coined the word 'Ethnobotany'	
a. i & ii	c. ii & iii
b. i & iii	d. None of the above
5. Edible fatty oil obtained from which plant known as "bran oil"?
 

a. <i>Oryza sativa</i> (Rice)	c. <i>Zea mays</i> (Maize)
b. <i>Triticum spp.</i> (wheat)	d. None of the above
6. IUCN (The International Union for Conservation of Nature and Natural resources) headquarters is at:
 

a. Paris, France	c. Vienna, Austria
b. Gland, Switzerland	d. New York, USA
7. All are the in-situ conservation efforts except:
 

a. National Parks	c. Zoo
b. Sanctuaries	d. Biosphere reserve
8. *Rattan* comes from a .....
 

a. Royal Palm	c. Fishtail Palm
b. Coconut Palm	d. Climbing Palm

- Q.2** Write short answers for **ANY SEVEN** of the following: [14]
- 1 Write various characteristics for avenue tree selection.
  - 2 Describe the wet cultivation of rice.
  - 3 Write a note on scope of ethno medico botany.
  - 4 Define Biodiversity. What are different levels of biodiversity?
  - 5 What are the uses of Bamboo?
  - 6 In what way the sapwood is superior or inferior to heartwood?
  - 7 Give an outline the general classification of textile natural fibers.
  - 8 Mention any two important sources of bio-fuels.
  - 9 Write a short note on Red Data Book.
- Q.3**
- A Explain in detail the general characteristics, types and cultivation of wheat. [06]  
 B What is growth-ring? Explain the factors responsible for growth-ring formation in soft woods. [06]
- OR
- B "What do you understand by 'NTPF'? Enlisting various NTPFs studied by you, give the botanical source and uses of any four of them. [06]
- Q.4**
- A Listing any six name of medicinal and aromatic plants of your choice, give a brief note on each of their uses. [06]  
 B Write a note on status of plant biodiversity of India. [06]
- OR
- B What are the causes for the extinction or biodiversity degradation? [06]
- Q.5**
- A Discuss different criteria to select avenue trees along the road side of Anand Vidyannagar region. [06]  
 B Describe the role of traditional knowledge in exploring the new uses of phytoresources. [06]
- OR
- B What is voucher specimen? What is its role in ethnobotanical studies? Explain how voucher specimens are prepared and preserved? [06]
- Q.6**
- A Describe in details the herbarium and its making. [06]  
 B Explain in detail *In-situ* and *ex-situ* plant conservation strategies. [06]
- OR
- B Explain in detail Role of BSI in Plant Taxonomic Research. [06]

**ALL THE BEST**