A.MULTIPLE CHOICE QUESTIONS   [1X10]

CHOOSE THE CORRECT ANSWER

1. Plant variety means
   (a) Lowest rank in taxon
   (b) Highest rank in taxon
   (c) Intermediate rank
   (d) Not related to taxon

2. Plant variety protection is required
   (a) To get higher yield
   (b) To get more paste resistant plant
   (c) To promote research and development
   (d) All the above

3. The plant variety protected in India include
   (a) Extant variety
   (b) Essentially derived variety
   (c) Farmer’s variety
   (d) All the above

4. Farmer can be considered as breeder
   (a) Yes
   (b) No
   (c) Yes in some cases

5. To register a plant variety, the criteria require include
   (a) New
   (b) Distinct
   (c) Uniform
   (d) All the above

6. UPOV is
   (a) Convention for plant variety
   (b) United states patent
   (c) Convention for patent
   (d) None of the above

7. Biodiversity means
   (a) Variety of life
   (b) Variety and variability of life
   (c) Variability within species
   (d) Both (b) and (c)

8. The objective of CBD is/are
   (a) To conserve biological diversity
To promote sustainable use of component
(c) Fair and equitable sharing of benefit
(d) All the above
9. Patenting genetic resources may leads to
(a) Conservation of bio-diversity
(b) Protection of bio-diversity
(c) Destruction of bio-diversity
(d) All the above
10. IP commercialization can be done by
(a) Licensing
(b) Assignment
(c) Entrepreneurship
(d) All the above

B. SHORT ANSWER TYPE QUESTIONS [2X10=20]

1. Why plant variety protection is required?
Ans: Plant variety protection is required to produce high yielding and pest resistant variety of plant. It is estimated that improved varieties have accounted for more than 50 percent of overall yield increases for important crops in Europe.

2. What do you mean by extant variety?
Ans: "Variety" means a plant grouping except micro organism within a single botanical taxon of the lowest known rank. "Extant variety" means a variety available in India which is-
- notified under section 5 of the Seeds Act, 1966 (54 of 1966); or
- farmers' variety; or
- a variety about which there is common knowledge; or
- any other variety which is in public domain

3. What is farmer’s right?
Ans: Farmer’s right includes
- a farmer who has bred or developed a new variety shall be entitled for registration and other protection in like manner as a breeder of a variety,
- a farmer who is engaged in the conservation of genetic resources of land races and wild relatives of economic plants and their improvement through selection and preservation shall be
a farmer shall be deemed to be entitled to save, use, sow resow, exchange, share or sell his farm produce including seed of a variety protected under this Act in the same manner as he was entitled before the coming into force of this Act.

4. What is researcher’s right?

Ans: Researcher’s right includes:

(a) the use of any variety registered under this Act by any person using such variety for conducting experiment or research; or

(b) the use of a variety by any person as an initial source of variety for the purpose of creating other varieties:

5. Discuss the criteria’s to register breeder variety in India.

Ans: A new variety shall be registered under this Act if it conforms to the criteria of novelty, distinctiveness, uniformity and stability

6. What do you mean by hot spot in bio-diversity?

Ans: A biodiversity hotspot is a biogeographic region with significant levels of biodiversity that is under threat from humans. Example Mountains of Central Asia

7. How plant variety is protected in USA?

Ans: The Plant Variety Protection Act of 1970 (PVPA), 7 U.S.C. §§ 2321-2582, is an intellectual property statute in the United States. The PVPA gives breeders up to 25 years of exclusive control over new, distinct, uniform, and stable sexually reproduced or tuber propagated plant varieties.

8. How IP can be commercialized?

Ans: IP can be commercialized by IP transaction such as licensing, assignment, sale and or creating entrepreneurship.

9. What is difference between license and assignment?

Ans: Licensing is considered as mere permission whereas assignment leads to transfer of ownership.

10. What is the importance of IP audit?
Ans: IP audit helps to identify the potential IP and its ownership.

C. ANALYTICAL QUESTIONS [5X3=15]

1. Discuss the inter-relationship and conflicts between farmer’s right and breeder right.

Ans: The objectives of the Protection of Plant Varieties and Farmers’ Rights Act, 2000 are: (i) to stimulate investments for research and development both in the public and the private sectors for the developments of new plant varieties by ensuring appropriate returns on such investments; (ii) to facilitate the growth of the seed industry in the country through domestic and foreign investment which will ensure the availability of high quality seeds and planting material to Indian farmers; and (iii) to recognize the role of farmers as cultivators and conservers and the contribution of traditional, rural and tribal communities to the country’s agro biodiversity by rewarding them for their contribution through benefit sharing and protecting the traditional right of the farmers. More importantly this act provides safeguards to farmers by giving farmers’ rights while providing for an effective system of protection of plant breeders’ rights. The Act seeks to safeguard researchers’ rights as well. It also contains provisions for safeguarding the larger public interest. The farmer’s rights include his traditional rights to save, use, share or sell his farm produce of a variety protected under this Act provided the sale is not for the purpose of reproduction under a commercial marketing arrangement. Hence, the act has sufficient provision to balance between farmer’s right vs breeder’s right.

2. How can you identify a registrable plant variety?

Ans: A new variety shall be registered under this Act if it conforms to the following criteria:

- Novelty: A new variety is deemed to be novel if, at the date of filing of the application for registration for protection, the propagating and harvested material of such variety has not been sold or otherwise disposed of by or with the consent of its breeder or his successor for the purposes of exploitation of such variety for a certain period of time before the date of filing of the application. For sale or disposal of a new variety in India, this time period is earlier than one year. Outside of India, in the case of trees and vines, the time period is earlier than six years. In any other case in India, it is earlier than four years.

- Distinctiveness: A new variety is deemed distinct if it is clearly distinguishable by at least one essential characteristic from any other variety whose existence is a matter of common knowledge in any country at the time of filing of the application.

- Uniformity: A new variety is deemed uniform if subject to the variation that may be expected from the particular features of its propagation it is sufficiently uniform in its essential characteristics.

- Stability: A new variety is deemed stable if its essential characteristics remain unchanged after repeated propagation or, in case of a particular cycle of propagation, at the end of each such cycle.
Unacceptable Denominations
A new variety cannot be registered under a given name if the denomination given to such variety:

- Is not capable of identifying such variety;
- Consists solely of figures;
- Is liable to mislead or cause confusion concerning the characteristics, value identity of such variety or the identity of breeder of such variety;
- Is not different from every denomination which designates a variety of the same botanical species or of a closely related species registered under the Act;
- Is likely to deceive the public or cause confusion in the public regarding the identity of such variety;
- Is likely to hurt the religious sentiments respectively of any class or section of the citizens of India;
- Is prohibited for use as a name or emblem for any purposes mentioned in section 3 of the Emblems and Names (Protection of Improper Use) Act, 1950; or
- Is comprised of solely or partly of geographical name.

3. How the bio-diversity can be used suitably?

Ans: Bio-diversity can be used suitably if conserve and preserve bio-diversity along with its use for benefit of people. It has significant value to human health and livelihood. Hence, it is required adequate balance of all those.

4. How can you identify hot spot bio-diversity?

Ans: It can be identified by proper screening. To qualify as a biodiversity hotspot on Myers 2000 edition of the hotspot-map, a region must meet two strict criteria: it must contain at least 0.5% or 1,500 species of vascular plants as endemics, and it has to have lost at least 70% of its primary vegetation. Around the world, 34 areas qualify under this definition, with nine other possible candidates. These sites support nearly 60% of the world's plant, bird, mammal, reptile, and amphibian species, with a very high share of those species as endemics.[source:https://en.wikipedia.org/wiki/Biodiversity_hotspot]

5. How can you perform IP audit of academic institute?