Exercise-1

✍ **Marked Questions are for Revision Questions.**

ONLY ONE OPTION CORRECT TYPE

SECTION - A # Main Steps in Plant breeding, Wheat and Rice, Methods of breeding for disease resistance, Mutation Breeding, Plant Breeding for Developing Resistance to Insect Pests, Plant Breeding for Improved Food Quality

1. The entire collection (of plants/seeds) having all the diverse alleles for all genes in a given crop is called
(1) Germplasm collection (2) In-situ conservation
(3) Mass collection (4) None

2. Importing better varieties of plants from outside and acclimitising them to local environment is
(1) Selection (2) Cloning (3) Introduction (4) Heterosis

3. Mexican dwarf wheat variety was developed by
(1) M S Swaminathan (2) Watson and Crick (3) Norman borlaug (4) Kush

4. Green revolution started in
(1) 1970 (2) 1960 (3) 1950 (4) 1975

5. Picking up only homozygous plants for further cultivation is known as
(1) Mass selection (2) Pure line selection (3) Clone (4) Acclimitization

6. Progeny is heterozgous in case of
(1) Mutation (2) Autopolyploidy (3) Hybridisation (4) Selective breeding

7. Dee-geo-woo-gen is dwarfing gene of
(1) Rice (2) Barley (3) Oat (4) Maize

8. Pusa Gaurav is a variety of -
(1) Rice (2) Maize (3) Wheat (4) Rapeseed

9. Which of the following varieties of wheat developed in India during green revolution.
(1) Sonalika & Kalyansona (2) Atlas-66
(3) Jaya & Ratna (4) Pusa Komal

10. Select the wrong pair
(1) Pusa swarnim – Brassica
(2) Pusa A-4 – Cauliflower
(3) Pusa Komal – Cow pea
(4) Pusa sem 2 – Flat bean

11. Which of the following is variety of chillie that shows resistance against chillie mosaic virus
(1) Pusa komal (2) Pusa sadabahar
(3) Pusa shubhra (4) Pusa swarnim

12. Breeding of crops that are rich in minerals, vitamins, good proteins and healthier fats for human is called
(1) Biomagnification (2) Bioremediation (3) Bioprospecting (4) Biofortification

SECTION - B # Single Cell Protein (SCP), Tissue culture

1. Microbial biomass that is used as a food suppliment of human and animals is called-
(1) Detritus (2) Duff (3) SCP (4) Humus

2. Single cell protein is obtained from
(1) Spirulina (2) Chlorella (3) Yeast (4) All of the above

3. Callus formation is promoted by
(1) Proper light and subculturing (2) Darkness and subculturing
(3) Excess of NAA (4) Absence of salts

4. Explant is required to be disinfected before placing in culture. This is done by
(1) Autoclaving (2) Ultra-violet rays
(3) Clorax or hypochlorite (4) X-rays

5. Correct chronological order during callus formation is
(1) Explant → Cell division → Callus → Addition of Cytokinin → Cells acquire meristematic property
(2) Callus → Explant → Cell division → Addition of Cytokinin → Cells acquire meristematic property
(3) Callus → Cell division → Explant → Addition of Cytokinin → Cells acquire meristematic property
(4) Explant → Callus → Cell division → Addition of Cytokinin → Cells acquire meristematic property

6. Virus free plants can be obtained through
(1) Shoot tip culture (2) Haploid culture (3) Protoplast fusion (4) Embryo culture

7. Haploid plants are obtained by culturing
(1) Root tip (2) Endosperm (3) Young leaves (4) Pollen grain / Anther

8. An androgenic plant can be converted into homozygous diploid plant through the application of
(1) Nitrogen mustard (2) Nitrous acid (3) Colchicine (4) Acridine orange

9. Cutting of anthers from the intersexual flowers called
(1) Emasculation (2) Male sterile line
(3) Artificial pollination (4) Selective or differential reproduction

10. Polyploidy is induced through
(1) Colchicine (2) Irradiation
(3) Mutagenic chemicals (4) Ethylene

11. Somatic hybridisation is achieved through
(1) Grafting (2) Protoplast fusion
(3) Conjugation (4) Recombinant DNA technology

12. Which one is required for protoplast fusion?
(1) Treatment with cellulase and pectinase (2) Electrofusion of PEG treatment
(3) Both 1 and 2 (4) Recombinant DNA technology

13. Somaclonal variations are the ones
(1) Caused by mutagens (2) Produced during tissue culture
(3) Induced during sexual embryogeny (4) Caused by gamma rays

14. Pomato is
(1) Somatic hybrid (2) Natural mutant (3) Androgenic haploid (4) Somatic embryoid

15. Name the tissue culture technique used to grow nonviable inter-specific hybrids
(1) Androgenic haploids (2) Shoot tip culture
(3) Somatic embryogenesis (4) Embryo rescue

16. A technique of micropropagation is
(1) Multiples shoot production
(2) Multiple shoot production and somatic embryogenesis
(3) Growth of micro-organisms on culture medium
(4) Somatic embryogenesis

17. Embryoid is
(1) Nonzygotic embryo (2) Nonfunctional embryo
(3) Parthenogenetic embryo (4) An early stage in callus differentiation

18. Haploids from anther were first obtained from
(1) *Brassica* (2) *Datura* (3) *Nicotiana* (4) *Gossypium*

MISCELLANEOUS QUESTIONS

1. Quarantine regulation is meant for
(1) Preventing entry of diseased plants/pathogen/wild plants of the country
(2) Spraying diseased plants with insecticides
(3) Promoting dry farming
(4) Growing fruit trees in all the states

2. Which will vanish in the absence of human help?
(1) Rice (2) Wheat (3) Maize (4) Potato

3. Thurioside is proteinaceous toxin obtained from
(1) Biofertiliser (2) Green manure (3) Bacterial origin (4) Farmyard manure

4. Farmers cannot use seeds of plants showing hybrid vigour in successive years because
(1) Hybrid vigour is lost on inbreeding (2) Dunkel's proposals
(3) They are not allowed to sow their own seeds (4) It is cheaper to purchase fresh seeds.

5. Which one is green manure biofertilizer?
(1) Sesbania (2) Maize (3) Rice (4) Oat

6. Mycorrhiza acts as
(1) Mechanical tissue (2) Root hair
(3) Modified root (4) Organ for vegetative propagation

7. Alongwith auxin, another hormone is used in culture technique. It is
(1) Gibberellin (2) Cytokinin (3) Ethylene (4) Coumarin

8. Organic forming is the technique of raising crops through use of
(1) Manures (2) Resistant varieties (3) Biofertilisers (4) All of these

9. From which one of the following plants, the insecticide pyrethrum is prepared?
(1) Cymbopogon (2) Tephrosia (3) Chrysanthemum (4) Vetivera

10. Somatic hybridisation is carried out by
(1) Pollen culture (2) Cell culture (3) Protoplast fusion (4) Halploid culture

11. Callus is
(1) Plant hormone (2) Root formation in culture media
(3) Plant byproduct (4) Undifferentiated mass of tissues

12. Agitation of liquid tissue culture serves the purpose of
(1) Aeration (2) Constant mixing
(3) Breaking cell aggregates (4) All the above

13. Auxenic culture is
(1) Pure culture without any contamination (2) Pure culture without any nutrient
(3) Culture of a tissue (4) Culture of gene

14. Root knot disease of Brinjal is due to
(1) *Phytophthora infestans* (2) *Meloidogyne incognita*
(3) *Fusarium udum* (4) *Xanthomonas citri*

15. An organic fertilizer which improves phosphorus uptake is
(1) Actenomycete fungi (2) *Rhizobium* (3) *Azospirillum* (4) *Azotobacter*

16. Late blight of potato is caused by
(1) *Ustilago* (2) *Pseudomonas*
(3) *Phytophthora infestans* (4) *Colletotricum falcatum*

17. What type of plant is formed when colchicine is used in the process of development of *Raphano Brassica*
(1) Triploid (2) Haploid
(3) Autotetraploid (4) Allotetraploid

18. Which crop utilises solar enegy most efficiently?
(1) Potato (2) Sugarcane
(3) Wheat (4) Rice

19. The following process is used to get desired breed of plants
(1) Tissue culture (2) Genetic engineering
(3) Inbreeding (4) None of these

20. Powdery mildew of wheat is caused by a species of
(1) *Puccinia* (2) *Erysiphe*
(3) *Ustilago* (4) *Albugo*

Exercise-2

1. Farmers need to apply less nitrogenous fertilizers to fields if one of these plants are present **(FINBO)**
(1) Rhodophyceae (2) *Spirogyra* (3) *Azolla* species (4) Weeds

Exercise-3

PART - I : NEET/AIPMT QUESTION (PREVIOUS YEARS)

1. Wild varieties of plants must be conserved to **(AIPMT-2000)**
(1) Maintain ecosystem (2) Feeding wild animals
(3) Future evolution (4) Incorporate useful traits in future crop varieties

2. Enzyme required for nitrogen fixation is **(AIPMT-2001)**
(1) Nitrogenase (2) Nitroreductase (3) Transaminase (4) Transferase

3. Differentiation of shoot in tissue culture is controlled by **(AIPMT-2003)**
(1) High auxin : cytokinin ratio (2) High cytokinin : auxin ratio
(3) High gibberellin : auxin ratio (4) High gibberellin : cytokinin ratio

4. The technique of obtaining large number of plantlets through tissue culture is **(AIPMT-2004)**
(1) Micropropagation (2) Macropropagation (3) Organ culture (4) Plantlet culture

5. Which one is a neem product used as insect repellent? **(AIPMT-2004)**
(1) Rotenone (2) Azadirachtin (3) Parathion (4) Endrin

6. India's Wheat yield revolution of 1960s was possible primarily due to **(AIPMT-2004)**
(1) Hybrid seeds (2) Mutations resulting in plant height reduction
(3) Increased chlorophyll content (4) Quantitative trait mutation

7. In Maize, hybrid vigour is produced by **(AIPMT-2006)**
(1) Crossing two inbreed lines (2) Inducing mutations
(3) Bombarding the protoplast with DNA (4) Harvesting seeds from most productive plants

8. Breeding of crops with high level of minerals, vitamins and proteins is called **(AIPMT-2010)**
(1) Biofortification (2) Biomagnification (3) Micropropagation (4) Somatic hybridisation

9. "Jaya" and "Ratna" dveloped for green revolution in India are the varieties of **(AIPMT Pre.-2011)**
(1) Maize (2) Rice (3) Wheat (4) Bajra

10. When two unrelated individuals or lines are crossed, the performance of F_1 hybrid is often superior to both is parents. This phenomenon is called: **(AIPMT Pre.-2011)**
(1) Heterosis (2) Transfortmation (3) Splicing (4) Metamorphosis

11. Which one of the following is a case of wrong matching **(AIPMT Pre.-2012)**
(1) Somatic hybridization - Fusion of two diverse cells
(2) Vector DNA -Site for t-RNA synthesis.
(3) Micropropagation - In vitro production of plants in large numbers.
(4) Callus - Unorganised mass of cell produced in tissue culture

12. *Monascus purpureus* is a *Yeast* used commercially in the production of: **(AIPMT Pre.-2012)**

(1) ethanol

(2) streptokinase for removing clots from the blood vessels.

(3)Citric acid

(4) blood cholesterol lowering statins

13. Green revolution in India occurred during: **(AIPMT Mains-2012)**

(1) 1960's (2) 1970's (3) 1980's (4) 1950's

14. Consider the following four statements (a-d) and select the option which includes all the correct ones only.

(a) Single cell Spirulina can produce large quantities of food rich in protein, minerals, vitamins etc.

(b) Body weight-wise the microorganism *Methylophilus methylotrophus* may be able to produce several times more proteins than the cows per day

(c) Common button mushrooms are a very rich source of vitamin C

(d) A rice variety has been developed which is *very* rich in calcium. **(AIPMT Mains-2012)**

Options:

(1) Statements (c), (d) (2) Statements (a), (c) and (d)

(3) Statements (b), (c) and (d) (4) Statements (a), (b)

15. In plant breeding programmes, the entire collection (of plants/seeds) having all the diverse alleles for all genes in a given crop is called: **(NEET-2013)**

(1) cross-hybridisation among the selected parents.

(2) evaluation and selection of parents.

(3) germplasm collection

(4) selection of superior recombinants.

16. To obtain virus - free healthy plants from a diseased one by tissue culture technique, which part/parts of the diseased plant will be taken? **(AIPMT-2014)**

(1) Apical meristem only (2) Palisade parenchyma

(3) Both apical and axillary meristems (4) Epidermis only

17. Which of the following enhances or induces fusion of protoplasts? **(AIPMT-2015)**

(1) Polyethylene glycol and sodium nitrate

(2) IAA and kinetin

(3) IAA and gibberellins

(4) Sodium chloride and potassium chloride

18. Which part of the tobacco plant is infected by Meloidogyne incognita? **(NEET-I-2016)**

(1) Root (2) Flower (3) Leaf (4) Stem

19. A true breeding plant is **(NEET-II-2016)**

(1) Always homozygous recessive in its genetic constitution

(2) One that is able to bred on its own

(3) Produced due to cross pollination among unrelated plants

(4) Near homozygous and produces offspiring of its kind

20. Interespecific hybridization in the mating of **(NEET-II-2016)**

(1) more closely related individuals within same breed for 4-6 generations

(2) animals within same breed without having common ancestors

(3) two different related species

(4) superior males and females of different breeds

21._ Homozygous purelines in cattle can be obtained by: **(NEET-2017)**

(1) mating of related individuals of same breed.

(2) mating of unrelated individuals of same breed.

(3) mating of individuals of different breed.

(4) mating of individuals of different species.

PART - II : AIIMS QUESTION (PREVIOUS YEARS)

1. Virus free plants can be obtained by **(AIIMS-1996)**

(1) Antibiotic treatment (2) Bordeaux mixture

(3) Root tip culture (4) Shoot tip culture

2. Plant medium used widely in preparation of culture medium is got from **(AIIMS-1998)**

(1) *Cycas revoluta* (2) *Cocos nucifera*

(3) *Pinus roxburghii* (4) *Borassus flabellifera*

3. *Azolla* is used as a biofertiliser because it **(AIIMS-2003)**

(1) Multiplies very fast to produce massive biomass

(2) Has association of nitrogen fixing *Rhizobium*

(3) Has association of nitrogen flxing cyanobacteria

(4) Has association of mycorrhiza

4. Somaclones are prepared by **(AIIMS-2014)**

(1) callus culture (2) sexual reproduction

(3) micropropagation (4) somatic hybridisation

5. Select the correct statement(s)- **(AIIMS-2015)**

(a) IARI has released a mustard variety rich in vitamin C.

(b) Pusa Sawani variety of Okra is resistant to aphids

(c) Hairiness of leaves provides resistance to insect pests.

(d) Agriculture accounts for approximately 33% of India's GDP and employs nearly 62% of the population.

(1) (a) and (b) (2) (b) and (c) (3) (a), (c) and (d) (4) None of these

6. Match **Column-I** with **Column-II** and select the correct option from codes given below **(AIIMS-2016)**

Column-I	**Column-II**
A. *Brassica*	(i) Himgiri
B. Okra	(ii) Pusa Komal
C. Wheat	(iii) Pusa Gaurav
D. Cow pea	(iv) Pusa Sawani

(1) A-(iii), B-(iv), C-(i), D-(ii)

(2) A-(i), B-(iii), C-(ii), D-(iv)

(3) A-(iv), B-(iii), C-(i), D-(ii)

(4) A-(ii), B-(iv), C-(i), D-(iii)

7. Identify the correct matches for crops and their improved varities

	Crops	**Varities**	**Disease**
(1)	Wheat	Karan rai	White rust
(2)	Cauliflower	Pusa Shubhra	Leaf and stipe rust
(3)	Cowpea	Pusa Komal	Hill bunt
(4)	Chilli	Pusa Sadabahar	Tobacco mosaic virus and leaf curl

8 To obtain seedless watermelon, which among the following method is followed: **(AIIMS-2018-II)**

(1) Apomixis (2) Somatic hybridization

(3) Organogenesis (4) Micropropagation

9. Which enzymes will be required to obtain protoplast from plant cell? **(AIIMS-2018-III)**

(1) Cellulase, Pectinase (2) Cellulase, Protease

(3) Chitinase, Pectinase (4) Cellulase, Lipase

10. Which of the following is correct about somaclone plants **(AIIMS-2018-III)**

(1) Somatic hybrid (2) Same genetic constitution

(3) Different genetic constitution (4) None

Answers

EXERCISE - 1

SECTION - A

1.	(1)	**2.**	(3)	**3.**	(3)	**4.**	(2)	**5.**	(2)	**6.**	(3)	**7.**	(1)
8.	(4)	**9.**	(1)	**10.**	(2)	**11.**	(2)	**12.**	(4)				

SECTION - B

1.	(3)	**2.**	(4)	**3.**	(2)	**4.**	(3)	**5.**	(1)	**6.**	(1)	**7.**	(4)
8.	(3)	**9.**	(1)	**10.**	(1)	**11.**	(2)	**12.**	(3)	**13.**	(2)	**14.**	(1)
15.	(4)	**16.**	(2)	**17.**	(1)	**18.**	(2)						

MISCELLANEOUS QUESTIONS

1.	(1)	**2.**	(3)	**3.**	(3)	**4.**	(1)	**5.**	(1)	**6.**	(2)	**7.**	(2)
8.	(4)	**9.**	(3)	**10.**	(3)	**11.**	(4)	**12.**	(4)	**13.**	(1)	**14.**	(2)
15.	(3)	**16.**	(3)	**17.**	(4)	**18.**	(2)	**19.**	(2)	**20.**	(2)		

EXERCISE - 2

1.	(3)

EXERCISE - 3

PART- I

1.	(4)	**2.**	(1)	**3.**	(2)	**4.**	(1)	**5.**	(2)	**6.**	(2)	**7.**	(1)
8.	(1)	**9.**	(2)	**10.**	(1)	**11.**	(2)	**12.**	(4)	**13.**	(1)	**14.**	(4)
15.	(3)	**16.**	(3)	**17.**	(1)	**18.**	(1)	**19.**	(4)	**20.**	(3)	**21.**	(1)

PART- II

1.	(4)	**2.**	(2)	**3.**	(3)	**4.**	(3)	**5.**	(3)	**6.**	(1)	**7.**	(4)
8	(2)	**9.**	(1)	**10.**	(2)								

Self Practice Paper (SPP)

1. Atlas-66 is a protein rich variety of -
(1) Rice (2) Maize (3) Wheat (4) Mustard

2. In mung bean, resistance has been developed by mutation against
(1) Downy mildew (2) Powdery mildew
(3) Yellow mosaic virus, powdery mildew (4) Bactereal blight

3. In flavr savr variety of tomato. Gene for which enzyme has been inactivated.
(1) Protease (2) Polyamylase (3) Polygalactouronase (4) B- glucanase

4. (A) In gel electrophoresis, separated DNA fragments can be visualized only by x-rays.
(B) Pusa comal is a variety of cowpea
(C) SCP is rich in carbohydrates, fats but poor in minerals & vitamins
(D) Himigiri is a disease resistant variety of wheat
Which of the two statement have mistake
(1) A & D (2) A & C (3) B & D (4) A & B

5. Organic forming is the technique of raising crops through use of
(1) Manures (2) Resistant varieties (3) Biofertilisers (4) All of these

6. Name the tissue culture technique used to grow nonviable inter-specific hybrids
(1) Androgenic haploids (2) Shoot tip culture
(3) Somatic embryogenesis (4) Embryo rescue

7. High yielding drought resistance hybrid varieties of maize, Jowar & Pearlmillet has developed in India by
(1) Tissue culture (2) Mass selection (3) Pure line selection (4) Hybridization

8. In maize, high aspartic acid small contents of nitrogen and sugar provides resistance against
(1) Stem borer (2) Bollworm (3) Aphids (4) Gall wasp

9. Semi dwarf varieties of rice developed by IRRI was
(1) Jaya (2) Parmal (3) IR-8 (4) Ratna

10. Late blight of potato is caused by
(1) Alternaria solani (2) Phytophthora infestans
(3) Colletotrichum falactum (4) Cercospora arachidicola

11. Pusa Sawani is a variety of
(1) Wheat (2) Okra (3) Cauliflower (4) Rapeseed Mustard

12. The superiority of hybrid from its parents is called
(1) Hybridization (2) Hybrid vigour or heterosis
(3) Overdominance (4) All of above

13. Father of green revolution is
(1) Norman Borlaug (2) M.S. swaminathan
(3) Ramdev mishra (4) S.R. Kayshap

14. Root nodules for nitrogen fixation of a nonleguminous tree possess
(1) *Frankia* (2) *Rhizobium* (3) *Azotobacter* (4) *ThioBacillus*

15. In tissue culture glass ware and nutrients are sterilised through
(1) Water bath at 200°C (2) Dry air oven at 200°C
(3) Dehumidifier (4) Autoclave

16. The enzymes required to obtain wall-free / naked protoplasts are
(1) Cellulase and proteinase (2) Cellulase and pectinase
(3) Cellulase and amylase (4) Amylase and pectinase

17. First bioinsecticide developed on commmercial scale was
(1) Quinine (2) DDT (3) Organophosphates (4) Sporeine

18. Silencing of mRNA has been used in producing transgenic plants resistant to:
(1) Bollworms (2) Nematodes (3) White rusts (4) Bacterial blights

19. The plant material which is widely used in the preparation of culture medium is
(1) *Cycas revoluta* (2) *Cocos nucifera* (3) *Pinus longifolia* (4) *Borassus flabellifer*

20. The genetically-modified (GM) brinjal in India has been developed for
(1) Enhancing shelf life (2) Enhancing mineral content
(3) Drought-resistance (4) Insect-resistance

21. Cybrids carry
(1) two similar genomes (2) only one genome
(3) several genomes (4) one genome and two plasmones

22. Vitamin A rich transgenic plant is
(1) Flavr Savr Tomato (2) Golden Rice (3) Bt Cotton (4) Vaccinated Potato

23. Modification and adjustment of an organism to local environment is called
(1) Introduction (2) Selection (3) Acclimitization (4) Quarantine

24. Potato famine of Ireland was caused by attack of fungus
(1) *Phytophthora palmivora* (2) *Plasmopara viticola*
(3) *Puccinia graminis* (4) *Phytophthora infestans*

25. Lysine rich Maize variety is
(1) Protina (2) Rattan (3) Shakti (4) All the above

26. Antinutritional factor present in Rapeseed and Mustard oil cakes is
(1) Glucosinolates (2) Cyanogenic glycolipids
(3) Isoflavonoids (4) Cyanoalanine

27. Evaluation of newly evolved varieties is carried out by
(1) All agricultural universities (2) ICAR
(3) IARI (4) National Bureau of Plant Genetic Resources

28. Dwarf Wheat developed by
(1) Swaminathan (2) Borlaug (3) Vavilov (4) B.D. Singh

29. Processing of single cell protein generally involves removal of
(1) Nucleic acids (2) Fats (3) Carbohydrates (4) oils

30. Triticale is produced by the crossing of
(1) Wheat and rye (2) wheat and maize (3) wheat and barley (4) rye and maize

31. Tissue culture is recommended for
(1) multiplication of elite genotypes of useful trees
(2) developing virus free plants
(3) production of secodary metabolites
(4) induction of polyploidy

32. "Jaya" and "Ratna" dveloped for green revolution in India are the varieties of
(1) Maize (2) Rice (3) Wheat (4) Bajra

33. Breeding of crops with high level of minerals, vitamins and proteins is called
(1) Biofortication (2) Biomagnification (3) Micropropagation (4) Somatic hybridisation

34. Root knot disease of Brinjal is due to
(1) Phytophthora infestans (2) Meloidogyne incognita
(3) Fusarium udum (4) Xanthomonas citri

35. Which of the following crops occupies the highest area in India?
(1) rice (2) wheat (3) gram (4) sugarcane

36. Quarantine regulation is meant for
(1) Preventing entry of diseased plants / pathogen / wild plants of the country
(2) Spraying diseased plants with insecticides
(3) Promoting dry farming
(4) Growing fruit trees in all the states.

37. Hybrid vigour is best maintained in vegetatively reproducing plants because they are
(1) Resistant to diseases
(2) Easily propagated
(3) With long life span
(4) Little liable to lose vigour due to absence of sexual reproduction.

38. Which one is required for protoplast fusion?
(1) Treatment with cellulase and pectinase (2) Electrofusion or PEG treatment
(3) Both 1 and 2 (4) Recombinant DNA technology

39. Virus free plants can be obtained through
(1) Shoot tip culture (2) Haploid culture
(3) Protoplast fusion (4) Embryo culture

40. Dee-geo-woo-gen is dwarfing gene of
(1) Rice (2) Barley (3) Oat (4) Maize

41. Single cell protein (SCP) is commercially produced by
(1) Spirulina & chlorella (2) Yeast and Fusarium graminearum
(3) Saw dust & chlorella (4) Yeast & spirulina

42. IR -20 is a high yielding variety of
(1) Rice (2) wheat (3) gram (4) sugarcane

43. RNA interferance (RNAi) technique has been used to control the nematode disease in
(1) Brinjal (2) Pea (3) Soyabeen (4) Ground nut

44. Which technique can be helpful in over-coming hybridisation barrier?
(1) Shoot tip culture (2) Embryo rescue (3) Protoplst fusion (4) both 2 and 3

45. Hybrid vigour is best maintained in vegetatively reproducing plants because they are
(1) Resistant to diseases
(2) Easily propagated
(3) With long life span
(4) Little liable to lose vigour due to absence of sexual reproduction

SPP Answers

1.	(3)	**2.**	(3)	**3.**	(3)	**4.**	(2)	**5.**	(4)	**6.**	(4)	**7.**	(4)
8.	(1)	**9.**	(3)	**10.**	(2)	**11.**	(2)	**12.**	(2)	**13.**	(1)	**14.**	(1)
15.	(4)	**16.**	(2)	**17.**	(4)	**18.**	(2)	**19.**	(2)	**20.**	(4)	**21.**	(4)
22.	(2)	**23.**	(3)	**24.**	(4)	**25.**	(4)	**26.**	(1)	**27.**	(2)	**28.**	(2)
29.	(1)	**30.**	(1)	**31.**	(1)	**32.**	(2)	**33.**	(1)	**34.**	(2)	**35.**	(1)
36.	(1)	**37.**	(4)	**38.**	(3)	**39.**	(1)	**40.**	(1)	**41.**	(2)	**42.**	(1)
43.	(1)	**44.**	(4)	**45.**	(4)								