



SYBSc Botany Paper III

Answer Key Code 65228

	Marks
Q.1. A MCQ:	
i. a – olericulture	1
ii. a- garden	1
iii. a- Sanjay Gandhi National Park	1
iv. b- Laminar air flow	1
v. c- pollen	1
vi. b—ligase	1
vii. a- linear	1
viii. a- -1 to +1	1
ix. a- DDBJ	1
x. b- National Centre for Biotechnology Information	1
Q.1.B One or two sentences:	
i. Horticulture- Definition.	2
ii. Totipotency- Definition	2
iii. Organogenesis- Definition.	2
iv. Perfectly -ve correlation- Definition	2
v. Bioinformatics- Definition.	2
Q.2. Answer any two:	
i) Definition of botanical garden	2
Importance—	8
• Conserving Biodiversity	
• Research purpose	
• Tourist site	
• Maintaining of native and exotic species	
ii) Definition of water garden-	1
Construction, site and maintenance	4
2 examples of plants	2
Definition of focal point	1
Significance	2
iii) Importance of horticulture	5
Flower bed-	5
• Definition,	
• types,	
• maintenance,	
• examples of plants	
iv) Avenue (Description, significance and 2 examples)	3.5

2

Lawn (Description, significance and 2 examples)	03
Edges (Description, significance and 2 examples)	3.5
Q.3. Answer any two :	
i) Applications of PTC- Micropropagation, Disease free plants, Virus free plants, Haploid culture, Somatic embryogenesis, Embryo Culture.	10
ii) Root culture- Definition and Description of process Importance	7 3
iii) Definition of gene cloning Technique- Description a) cutting of plasmid and insertion of DNA b) bacterial transformation and selection c) production of protein	1 9
iv) Cloning vectors- Definition Various types- pBR322, pUC18, Ti plasmid	2 8
Q. 4. Answer any two:	
i) Calculation of X^2 <ul style="list-style-type: none">• Setting of Null and Alternate hypothesis• Data table• Formula and Calculation• Result• Conclusion	2 2 4 1 1
ii) Coefficient of correlation <ul style="list-style-type: none">• Data table• Formula and calculation• Result• Conclusion	4 4 1 1
iii) BLAST- Full form Significance as a retrieval tool	1 9
iv) Bioinformatics programmes <ul style="list-style-type: none">• Under graduation Programs• Post graduation Programs• Diploma programs• Ph.D research program	10
Q.5. Short notes- (Any four)	
i) Informal Garden- Description and example.	5
ii) Hedges- Definition, Significance, 2 examples .	5
iii) Wet sterilisation – Definition and its role.	5
iv) Embryo culture- Definition and its importance.	5
v) Steps involved in the working procedure of coefficient of correlation.	5
vi) WWW- its full form, different components.	5
