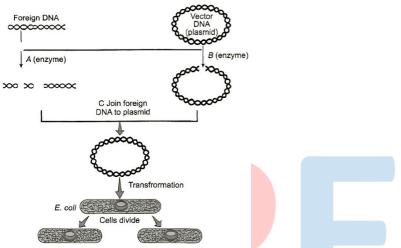
DPP						
-	Class : XIIth Date : Solutions	Subject : BIOLOGY DPP No. : 2				
Topic :- Biotechnology Principles & Processes						
1.		c) Rhizobium d) Spirillium				
2.	 Who discovered that restriction enzymes have the ca fashion, which left what has became known as 'sticky a) Ramdeo Mishra b) Stanley Cohen 					
3.	 A restriction fragment containing a specific gene of ir followed by transferring the DNA to a membrane as a a) An allozyme c) Identification of a gene 					
4.	I. This method is also known as biolistic technique II. In this method cells are bombarded with high velo DNA in plants III. Important crop plants like maize, rice and wheat I Which of the statements given above are correct?					
5.		ested set of DNA fragments				
	c) Microinjection – Technique of introducing foreign d) Gene cloning – Technique of obtaining identical co	genes into a host cell				

- a) VNTR is used as probes
- b) Specific metabolic genes are used as probes

c) House keeping or luxury genes are use as probesd) All of the above

- 7. The message from nuclear DNA for the synthesis of specific cytoplasmic protein is carried by:
a) mRNAb) t-RNAc) s-RNAd) r-RNA
- 8. The recent techniques used for separating fragments of DNA is:a) Northern blottingb) Southern blottingc) Eastern blottingd) Western blotting
- 9. The flowchart given below represent the process of recombinant technology. Identify *A* and *D*



- a) A-Restriction endonuclease, B-Restriction exonuclease, C-RNA ligase, D-Transformation
- b) A-Restriction endonuclease, B-Restriction endonuclease, C-DNA ligase, D-Transformation
- c) A-Restriction exonuclea<mark>se, B-</mark>Restriction endonuclease, C-DNA polymerase , D-Transduction
- d) A-Restriction endonuclease, B-Restriction endonuclease, C-DNA polymerase, D-Transformation

10.	RNA is removed by the treatment with				
	a) Ribonuclease	b) Protease	c) Chitinase	d) Cellulase	

- 11. Which one of the following scientists developed the process of DNA fingerprinting?a) Kary B. Mullisb) T.H. Morganc) H.O. Smithd) Alec Jeffreys
- 12. Which of the following statement is not correct regarding *Eco* RI restriction endonuclease enzyme?
 I. *Eco*. RI restriction endonuclease enzyme is isolated from *Escherichia coli* RY13
 II. Its recognition sequence is 5'–GAATTC 3'

$$3'-CTTAAG - 5' \downarrow$$

$$5' - G - A - A - T - T - C - 3'$$
 III. Its site of cleavage is
$$3' - C - T - T - A - A - G - 5' \uparrow$$

a) I and II

b) I and III c) I, II and III d) None of the above 13. Process of formation of RNA from DNA is called b) Transcription a) Transduction c) Transformation d) Translation 14. Which of the following would not be used in preparing recombinant DNA? a) Plasmids b) Phages d) DNA polymerase III c) Restriction enzymes 15. Which one of the following bacteria has found extensive use in genetic engineering work in plants? a) Agrobacterium tumefaciens b) *Clostridium septicum* c) Xanthomonas citri d) Bacillus coagulens 16. Which of the following components are used in gel electrophoresis? I. Ethidium bromide II. Restriction endonuclease III. Agarose IV. UV radiation Choose the correct option a) I and II b) I and III c) I, II and IV d) I, II, III and IV 17. What is the first step in Southern Blotting technique? a) Isolation of DNA from a nucleated cell such as the one from the scene of crime b) Denaturation of DNA on the gel for hybridization with specific probe c) Production of group of genetically identical cells d) Digestion of DNA by restriction enzyme 18. The most thoroughly studied of the known bacteria-plant interaction is the: a) Plant growth simulation by phosphate-solubilising bacteria b) Cyanobacterial symbiosis with some aquatic ferns c) Gall formation on certain angiosperms by Agrobacterium d) Nodulation of Sesbania stems by nitrogen fixing bacteria 19. Microorganisms can be grown in the bioreactor by a) Support growth system b) Agitated growth system c) Suspended growth system d) Both (a) and (b) 20. In Northern blotting RNAs are separated by gel electrophoresis and the RNA bands are transferred onto a membrane of: a) Diazobenzyl oxymethyl b) Diazobenzene d) None of the above c) Diazobromine

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