

# DPP

DAILY PRACTICE PROBLEMS

CLASS : XI<sup>th</sup>  
DATE :

SUBJECT : BIOLOGY  
DPP No. : 2

## Topic :-MOLECULAR BASIS OF INHERITANCE

- DNA repairing is done by  
(A) Ligase (B) DNA polymerase III (C) DNA polymerase II (D) DNA polymerase I
- Transforming principle in Griffith's experiment was DNA. It was discovered by  
(A) Zinder and Lederberg (B) Avery, Mcleod and McCarthy  
(C) Lederberg and Tatum (D) Zinder and Tatum
- The enzyme required to catalyze the polymerization of deoxynucleotides is  
(A) DNA ligase (B) DNA polymerase (C)  $\beta$ -galactosidase (D) Transacetylase  
(E) RNases
- The bacterium used in Griffith's experiment was  
(A) Bacillus (B) Monococcus (C) Diplococcus (D) Spirillum
- Which RNA carries information from DNA in protein synthesis  
or  
In biotechnical processes cDNA is prepared from  
(A) s-RNA (B) t-RNA (C) r-RNA (D) m-RNA
- New strand on a DNA template is initiated by  
(A) RNA polymerase (B) DNA polymerase (C) DNA ligase (D) None of the above
- During DNA replication, the strands separate by  
(A) DNA polymerase (B) Unwindase (C) Gyrase (D) Topoisomerase
- Select the correct option  
Direction of                      Direction of reading of                      the template DNA strand                      RNA synthesis  
(A) 5' - 3'    5' - 3'  
(B) 3' - 5'    3' - 5'  
(C) 5' - 3'    3' - 5'  
(D) 3' - 5'    5' - 3'

9. There are special proteins that help to upon up DNA double helix in front of the replication fork. These protein are  
 (A) DNA ligase (B) DNA gyrase (C) DNA polymerase (D) None of these
10. In a hair pin model of RNA which nitrogen base is present at the short end  
 (A) Adenine (B) Guanine (C) Thymine (D) Cytosine
11. Transfer of DNA bands from an agrose gel to a nitrocellulos or nylon memebrane is referred to as  
 or  
 DNA Finger printing is done by a technique called  
 (A) Westen transfer (B) Northem transfer (C) Eastem transfer (D) Gene transfer  
 (E) Southem transfer
12. The main aim of the human genome project is .....  
 (A) To introduce new genes into humans  
 (B) To identify and sequence all the genes present in human DNA  
 (C) To develop better techniques for comparing two different human DNA samples  
 (D) To remove disease causing genes from human DNA
13. Human genome project was discovered by  
 (A) Francis Collins and Roderick  
 (B) Watson and Crick  
 (C) beadle and Tatum  
 (D) Paul Berg and Wollman
14. The human Genome project (HGP) was initiated in  
 (A) 1988 (B) 1990 (C) 1992 (D) 1994
15. Which of the following is used to select genes of interest from a genomic library  
 (A) Restriction enzymes (B) Cloning vectors (C) Gene targets (D) DNA probes
16. Biolistic (gene-gun) is suitable for  
 (A) Disarming pathogen vectors (B) Transformation of plant cells  
 (C) Constructing recombinant DNA by joining with vectors (D) DNA finger printing
17. What is that forms the basis of DNA Fingerprinting  
 (A) The relative proportions of purines and pyrimidines in DNA  
 (B) The relative difference in the DNA occurrence in blood, skin and saliva  
 (C) The relative amount of DNA in the ridges and grooves of the fingerprints  
 (D) Satellite DNA occurring as highly repeated short DNA segments
18. Which of the following is not required for any of the techniques of DNA fingerprinting available at present  
 (A) Polymerase chain reaction  
 (B) Zinc finger analysis  
 (C) Restriction enzymes  
 (D) DNA-DNA hybridizaton
19. The tranfer of protein from electrophoretic gel to nitrocellulos membrane is knnown as

(A) Transferase

(B) Northern blotting

(C) Western blotting

(D) Southern blotting

20. DNA fingerprinting method is very useful for

(A) DNA tests for identity and relationships

(B) Forensic studies

(C) Polymorphism

(D) All of the above

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