

E 1760

(Pages : 3)

Reg. No.....

Name.....

B.Sc. DEGREE (C.B.C.S.S.) EXAMINATION, MARCH 2015

Sixth Semester

Choice Based Course—DISEASES AND DIAGNOSTIC BIOTECHNOLOGY

(For B.Sc. Biotechnology)

Time : Three Hours

Maximum Weight : 25

Part A

*Answer all questions.
Weight for each bunch of four 1.*

Choose the correct answer :

I. 1. Enzyme used in PCR :

(a) Lactase.

(b) Taq DNA polymerase.

(c) DNA isomerase.

(d) Dismutase.

2. Blotting of RNA :

(a) Southern blotting.

(b) Western blotting.

(c) Northern Blotting.

(d) None of these.

3. c DNA has :

(a) Introns.

(b) No introns.

(c) No extons.

(d) Junk DNA.

4. Mutation in different sites along APP genes leads to :

(a) Haemophilia.

(b) Cancer.

(c) Alzheimer's disease.

(d) Muscular dystrophy.

II. 5. BRCA 1 gene can be used for identification of :

(a) Cystic fibrosis.

(b) Thalassemia.

(c) Alzheimer's disease.

(d) Cancer.

6. PCR was invented by :

(a) James Watson.

(b) Watson and Crick.

(c) H.G.Khorana.

(d) Kary Mullis.

7. In electron microscope, electron gun consists of :

(a) Cathode.

(b) Anode.

(c) Cathode shield.

(d) All of these.

Turn over

8. Hepatitis virus can be detected by :

- (a) Chromatography. (b) Microscopy.
(c) Ligase chain reaction. (d) Electrophoresis.

Fill the blanks :

- III. 9. Expansion of ELISA is _____.
10. PCR technique can be used for diagnosis of genetic disorder like _____.
11. TEM means _____.
12. Single nucleotide polymorphism can be identified by _____ technique.
IV. 13. Array of nucleotides of known overlapping sequences, which differ at specific solitary nucleotide can be used for detection of _____.
14. _____ is an example of autosomal disorder.
15. _____ is a inherited blood disorder.
16. _____ is used to investigated composition of marker chromosome and chromosome rearrangements.

(4 × 1 = 4)

Part B

Answer any five out of eight.
Weight for each answer 1.

Write short notes on :

17. Positional cloning.
18. SNP testing.
19. Cystic fibrosis.
20. Immunoassay.
21. STR testing.
22. Southern blot diagnostics.
23. Beta thalassemia.
24. G Banding.

(5 × 1 = 5)

Part C

Answer any four out of six.
Weight for each answer 2.

25. Explain FISH and on FISH.
26. Give an account of Triplet disorder.

27. Give a note on viral disease diagnostics.
28. Explain how can we identify disease genes.
29. Write a note on chromosomal disorders.
30. Mention the significance of mitochondrial sequencing.

(4 × 2 = 8)

Part D

Answer any two out of three.
Weight for each answer 4.

31. Write a note on DNA diagnostics of genetic disorder.
32. Explain techniques for cancer diagnostics.
33. Explain DNA typing and its significance in Forensic science.

(2 × 4 = 8)