

ٹیسٹ سے پہلے کم از کم تین بار درود شریف پڑھ لیں

Student Name		Roll No:	Date: / /
سوچ بدلیں، معاشرہ بدلیں		Class 2nd Year	Ch#23
T- Marks - 40		Subject: Biology	Time: 35 - M
		Obtained Marks:	
ٹیسٹ سے پہلے کم از کم تین بار درود شریف پڑھ لیں			
Q#1	Encircle the Correct Option		10X1=10

1. The use of polymers chain reaction creates how many copies in a laboratory test tube?

- a** Billions **b** Millions **c** Hundred **d** Thousand

2. Gene of interest is joined to the opens end of plasmid by?

- a** DNA ligase **b** DNA polymerase **c** RNA polymerase **d** Itelicase

3. Adults transgenic Tobacco plants glowed when sryed with the substrate?

- a** Luciferon **b** Luciferin **c** Luciferol **d** Luciferase

4. Self- duplicating ring of accessory DNA in the cytoplasm of bacteria is?

- a** Plastid **b** Plasma **c** plasmid **d** None

5. Insertion of genetics material into humane cell for the treatment of a disorder called?

- a** Gene treatment **b** Gene therapy **c** Gene pool **d** Gene sequeneing

6. DNA polymers enzyme was isolated form?

- a** Bacteria **b** Viruses **c** Plants **d** Fungi

7. For generation of different sized DNA fragments method are used?

- a** 5 **b** 4 **c** 3 **d** 2

8. To get a gene how many methods are possible?

- a** 5 **b** 4 **c** 3 **d** 2

9. Choose correct statement .

- a** Both virus and plasmid can serve as vectors **b** Only gene therapy uses vectors **c** Both A and B **d** None of these

10. Which correct way to get a gene?

- a** To make it from RNA **b** To make it from DNA **c** To make it from mRNA **d** To make it from tRNA

Q # 2

Short Questions

2x10 = 20

- Name the required material to produced a recombinant DNA?
- How can we get a gene?
- What meant by cloning of gene?
- What is PCR?
- Differentiate between molecular victor and molecule scissor?
- Differentiate between in-vivo and Ex-vivo gene therapy?
- How gene therapy helpful for cancerous patients?
- How and why transgenic animals that secrete a products often cloned?
- Define transgenic organisms and bioreactors?
- What is Sanger's methodology of gene sequencing ?

Q # 3

Long Questions

2 X 5 = 10

- What is methodology for producing recombinant DNA to be used in gene cloning?
- Describe PCR in details ?