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[A-99]

SARDAR PATEL UNIVERSITY

APRIL-2016

BIOTECHNOLOGY

US 06 CZOO 05

TIME: 2.30PM-5.30PM DATE: 06/04/2016 WEDNESDAY MARKS: 70

Q-1 multiple choice quastions **[10]**

1. A T G C are
   a. nitrogrn bases b. component of dna c. purines and pyrimidines d. all
2. The enzyme which use to break nucleotides.
   a. helicase b. ligase c. polymerase d. nuclease
3. Replication of DNA is .....model
   a. conservative b. typical c. semiconservative d. disputative
4. The two sub units of prokaryotic RNA are
   a. 40,30 b. 50,30 c. 60,40 d. 40,50
5. The kind of probs
   a. c dna b. synthetic c. rna d. all
6. Which is non-genetic rna?
   a. r rna b. mrna c. trna d.all
7. Tissue culture laboratory requires
   a. sterile area b. media c. incubator d. all
8. The meaning of vitro in ivf is
   a. laboratory b. microscope c. glass d. all
9. Animals with improved genome are called
   a. polygenic b. transgenic c. monogenic d. trigenic
10. Neoplasia is also called

a. tumour b. cancer c. benign d. none

Q-2 short question [any TEN] **[20]**

1. **write about types DNA**
2. **draw a structure of DNA**
3. **structure of 80 s RNA**
4. **what is c dna as vector?**
5. **write production of probe**
6. **give names of ligases enzymes**
7. **write isolation by enzyme**
8. **define superovulation**
9. **write about embryo transfer**
10. **what is transfection ?**
11. **patient therapy**
12. **characters of carcinogenesis**

Q-3	[a]explain indirect evidence of DNA	[05]
	[b]describe replication of DNA in eukaryotes	[05]
	OR	
Q-3	explain protein synthesis and gene regulation in prokaryotes in detail	[10]
Q-4	[a] write about restriction enzymes	[05]
	[b] define probes and its labeling	[05]
	OR	
Q-4	what is basic PCR? describe applications in detail	[10]
Q-5	[a] explain whole embryo culture	[05]
	[b] explain organ culture	[05]
	OR	
Q-5	describe IVF, its causes of infertility and assessment of patient	[10]
Q-6	explain transgenic animals	[10]
	OR	
Q-6	compare benign and malignant tumors in human	[10]

X=X=X