

"Education for Knowledge , Science and Culture.  
Shikshanmaharshi Dr. Bapuji Salunkhe  
Shri Swami Vivekanand Shikshan Sanstha's

**Vivekanand College Kolhapur.( Autonomous)**  
**Department of Biotechnology ( Optional)**

Date: 20/02/2020

**Notice**

All students from B.Sc I Biotechnology (Optional ) there will be a Internal Exam On 28/02/2020 and on at Room no. 42 ~~tab~~ at 11:30a m. An attendance is compulsory for all as it is a part of Academics. So kindly be present on time.



A handwritten signature in blue ink, appearing to read "P. Suleb", written over the printed name of the Head of Department.

**Head of Department**

**Head**

Department of Biotechnology (Optional)  
Vivekanand College, Kolhapur (Autonomous)



Shri Swami Vivekanand Shikshan Sanstha's  
Vivekanand College (Autonomous), Kolhapur

**THIRD YEAR BIOTECHNOLOGY {OPTIONAL}**

**Internal test**

Roll no	Name of student	sign
8337	Akshay. Bansode	Bansode.A-J
8338	Janhavi. Varute	<u>Janhavi</u>
8339	Mayuri. Parit	—
8340	Ajit. Khandekar	<u>Ajit</u>
8341	Sanket. Madhale	<u>Sanket</u>
8342	Shrutkirti. Shinde	<u>Shrutkirti</u>
8343	Rutwik. Sonawane	<u>Rutwik</u>
8344	Rutuja. Londhe	<u>Rutuja</u>
8345	Saloni. Lambu	<u>Saloni</u>
8346	Rahim. Shaikh	<u>Rahim</u>
8347	Sudarshan. Redekar	<u>Sudarshan</u>
8348	Gourav. Magdum	<u>Gourav</u>
8349	Amruta. Bhalekar	<u>A.s. Bhalekar.</u>
8350	Megha. Barge	<u>M Barge.</u>
8351	Kajal. Gaikwad	—
8352	Rashi. Gaikwad	<u>Rashi</u>
8353	Devyani. Ravan	<u>Devyani</u>
8354	Mrinal. Kirolkar	Present
8355	Ankita. Sanmukh	<u>Ankita</u>
8356	Varsharani. Chougale	<u>Varsharani</u>
8357	Ashutosh. Bhat	<u>Ashutosh</u>



Vivekananda College, Kolhapur (Autonomous)

Department of Biotechnology (Opt)

Paper title- Gene technology and Bioinformatics

Marks -20

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1. In DNA finger printing, Federal Bureau of Investigation uses set of ----- standard specific STR regions for CODIS.  
a. 12                      b. 13                      c. 15                      d. 16
2. ----- are VNTR loci developed by primer for flanking regions.  
a. Microsatellite      b. Microsatellite      c. Multilocus                      d. Single locus
3. ----- developed the original probes to identify minisatellite .  
a. Alec Jaffrey                      b. Gasket                      c. Watson                      d. Marks
4. DNA is extracted from sample by using ----- and dithiothritol.  
a. DNase                      b. RNase                      c. Proteinase K                      d. Aldolase
5. Kinship analysis is an application of ----- .  
a. DNA fingerprinting                      b. Cromosal walking      c. Antisense therapy      d. all
6. ----- is used in chromosomal jumping technique.  
a. Rnase      b. Restriction endonuclease      c.  $\lambda$  DNA                      d. Dnase
7. In ----- technique stem cells are used.  
a. Antisense therapy                      b. chromosomal walking  
b. c. Chromosomal jumping                      d. gene targeting
8. In ----- technique of gene transfer technique 10-30 ng of DNA canbe transferred into nucleus of target cell.  
a. Microinjection      b. electroporation      c. lliposome mediated
9. ----- is totipotent stem cell used in gene therapy.  
a. Liver      b. Bone marrow                      c. kidney      d. Heart
10. In ----- lagging strand of DNA is used for gene therapy.  
a. Antisense therapy                      b. chromosomal walking  
c. Chromosomal jumping                      d. gene targeting
11. ----- is the data retrieval system of NCBI.  
a) Entrenz                      b) Google      c) DBGet                      d) Search engine
- 12) Each record in a database is called an -----.  
a) File                      b) Record                      c) Entry                      d) Accession number



14) ----- is the comprehensive database for the study of human genetics & molecular biology.

- a) PDB      b) STAG      c) OMIM      d) PSD

15) Proteomics is the study of -----

- a) Set of proteins      c) entire set of expressed protein in a cell  
b) Set of proteins in specific region of cell      d) proteins associated with Lysosome

16) ----- is the member of International Nucleotide sequence database.

- a) DDBJ      b) PDB      c) SWISS PROT      d) PIR

17) ----- is an example of homology and similarity tool.

- a) PROSPECT      b) EMBOSS      c) Rasmol      d) BLAST

18) Human genome contain about -----.

- a) 2 billion base pair      b) 3 billion base pair      c) 4 billion base pair      d) 5 billion base pair

19) ----- is used as computer annotated supplement to SWISS PROT.

- a) EMBL      b) Tr- EMBL      c) PDB      d) CATH

20) Genbank is maintained by -----

- a) NCBI      b) DDBJ      c) EMBL      d) EBI



# B.Sc. III Biotechnology (Optional)

## Internal Examination

Presenty 2019-20

Date-25/02/2020

Sr.No.	Name of Students	Sign
1	Bansode Akshay	Bansode A.T
2	Barge Megha	M Barge
3	Bhalekar Amruta	A.S. Bhalekar
4	Bhat Ashutosh	Ashutosh
5	Chougale Varsharani	Chougale
6	Gaikwad Rashi	Rashi
7	Gaikwad Kajal	
8	Khandekar Ajit	Ajit
9	Kirolkar Mrinal	Mrinal
10	Lambu Saloni	Saloni
11	Londhe Rutuja	Rutuja
12	Madhale Sanket	Sanket
13	Magdum Gourav	Gourav
14	Parit Mayuri	
15	Ravan Devyani	Devyani
16	Redekar Sudarshan	Sudarshan
17	Sanmukh Ankita	Ankita
18	Shaikh Rahim	Rahim
19	Shinde Shrutkirti	Shrutkirti
20	Sonawane Rutwik	Rutwik
21	Varute Janavi	Janavi



# Practice Test

PAGE NO: \_\_\_\_\_

DATE: \_\_\_\_\_

- (1) sodium alginate - 4 %  
(2) Calcium chloride - 2 %

- 1) Suchita Dattatray Patil Patil
- 2) Bhagyashri Balasheb Patil B.B. Patil
- 3) Bhagyashri Bhimrao Patil Patil
- 4) Aniket Ashok Katkar Katkar
- 5) Sakshi Santosh Power Power
- 6) Samrudhi Vijaykumar Gaikwad Gaikwad
- 7) Snehal Ramchandra Redekar Redekar
- 8) Suraj Balwant Ramane Ramane
- 9) Tejas Bajirao Ombase Ombase
- 10) Prathmesh Krushnat Madake Madake
- 11) Vivek & Dilip Koli Koli
- 12) Dipak Pandurang Tate Tate
- 13) Saniya Abdulgani Mujawar Mujawar
- 14) Snehal Satapa Hajare Hajare
- 15) Sandhyarani Namdev Patil Patil
- 16) Shradha Vikas Kshirsagar Kshirsagar
- 17] veushali Paudyalang Nangare Nangare
- 18] pradnya Ramesh Desai Desai
- 19] shriya Santosh Arulekar Arulekar
- 20] veushali Khumbhar Khumbhar
- 21] Tejaswini Chougale Chougale



Vivekanand College, Kolhapur

SY Biotechnology (Optional)

Subject- Molecular Biology

Weekly Test - 2

Date: 08/07/2019

Time: 2.45-3.30pm

Marks: 10

**Q.1) Multiple Choice Questions**

1) \_\_\_\_\_ is used to synthesize primer.

- a) DNA pol I                      b) DNA pol II  
c) DNA pol III                    d) Primase

2) Exonucleases acts on

- a) Phospho-diester Bond                      b) Hydrogen Bond  
c) Van der Waals forces                      d) Ionic Interaction

3) DNA Polymerase III has \_\_\_\_\_ activities.

- a) 3' to 5' pol & 3' to 5' Exo                      b) 3' to 5' pol & 5' to 3' Exo  
c) 5' to 3' pol & 5' to 3' Exo                      d) 5' to 3' pol & 3' to 5' Exo

4) E.coli ori C is \_\_\_\_\_ bp sequence.

- a) 240                      b) 245  
c) 250                      d) 260

5) The synthesis of DNA fragment after removal of primer is work of \_\_\_\_\_.

- a) DNA Ligase                      b) DNA pol II  
c) DNA pol I                      d) DNA pol III

6) Following strands represents Leading & Lagging strand respectively ;

- a) 5' to 3' & 3' to 5'                      b) 5' to 3' & 5' to 3'  
c) 3' to 5' & 3' to 5'                      d) 3' to 5' & 5' to 3'



7) DNA pol can add nucleotides at

a) 3' Phosphate

b) 3' OH

c) 5' Phosphate

d) 5' OH

8) activity of DNA pol III helps in Proof Reading.

a) 3' to 5' polymerase

b) 3' to 5' Exonuclease

c) 5' to 3' polymerase

d) 5' to 3' Exonuclease

9) Rolling circle mode of replication is

a) Conservative

b) Non Conservative

c) Semi conservative

d) Dispersed

10) Ori C consist of cluster of

a) 3 copies of 9 mer X 4copies of 13 mer

b) 3 copies of 13 mer X 4 copies of 9 mer

c) 9 copies of 3 mer X 13copies of 4 mer

d) 9 copies of 13 mer X 4copies of 13 mer

## OMR

1.	A	B	C	D
2.	A	B	C	D
3.	A	B	C	D
4.	A	B	C	D
5.	A	B	C	D
6.	A	B	C	D
7.	A	B	C	D
8.	A	B	C	D
9.	A	B	C	D
10.	A	B	C	D