

Vivekanand College Kolhapur (Autonomous)

Dept. of Biotechnology (Entire)

Academic Year 2021-22

Notice

Date 26.11.2021

Hereby informed to all students of B. Sc.I, II,III Biotechnology (Entire) that there is arrangement of Internal Exam Term work for Sem. I, III, V for following subjects as follows.

| Sr. No. | Name of Subject/Paper | Date |
|---------|-----------------------------------|------------|
| 1 | DSC-A-Chemistry | 01.12.2021 |
| 2 | DSC-A-Biochemistry | 02.12.2021 |
| 3 | DSC-A-Plant Science | 03.12.2021 |
| 4 | DSC-A-Biotech fr Human Welf -I | 04.12.2021 |
| 5 | DSC-A-Computer& Bioinfo | 06.12.2021 |
| 6 | DSC-A-Instrumentation | 07.12.2021 |
| 7 | DSC-A-Microbiology | 08.12.2021 |
| 8 | DSC-A- Biotech for Human Welf -II | 09.12.2021 |



| Sr. No. | Name of Subject/Paper | Date |
|---------|--------------------------------------|------------|
| 1 | DSC-1345 C Genetics | 06.12.2021 |
| 2 | DSC-1346 C Biophysics and Enzymology | 07.12.2021 |
| 3 | DSC-1347 C Metabolic Pathways | 08.12.2021 |
| 4 | DSC-1348 C Ecology | 09.12.2021 |
| 5 | DSC-1349 C Molecular Biology - I | 10.12.2021 |
| 6 | DSC-1350 C Plant Tissue Culture | 11.12.2021 |

HEAD

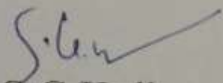
DEPARTMENT OF BIOTECHNOLOGY (ENTIRE)
VIVEKANAND COLLEGE, KOLHAPUR
(EMPOWERED AUTONOMOUS)

| Sr. No. | Name of Subject/Paper | Date |
|---------|--|------------|
| 1 | DSE-1355-E Basics in Genetic Engineering | 03.12.2021 |
| 2 | DSE-1356-E Industrial Biotechnology | 04.12.2021 |
| 3 | DSE-1357-E Application of Biotechnology in Agriculture | 06.12.2021 |
| 4 | DSE-1358-E Developmental Biology (Plant and Animal) | 07.12.2021 |

The nature of Internal may be multiple-choice / Fill in the blank / one word sentence / one sentence /one word.

Time: 11:30 to 12:30

12:30 onwards Routine


(Mr.S.G.Kulkarni)

HEAD
DEPARTMENT OF BIOTECHNOLOGY (ENTIRE)
VIVEKANAND COLLEGE, KOLHAPUR
(EMPOWERED AUTONOMOUS)

Vivekanand College Kolhapur (Autonomous)

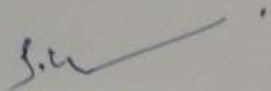
Dept. of Biotechnology (Entire)

Academic Year 2021-22

Continuous Internal Evaluation 2021-22

| Sr. No. | Evaluation Activity |
|---------|---------------------|
| 1 | One word answer |
| 2 | Fill in the blanks |
| 3 | One sentence answer |




HEAD
DEPARTMENT OF BIOTECHNOLOGY (ENTIRE)
VIVEKANAND COLLEGE, KOLHAPUR
(EMPOWERED AUTONOMOUS)

Roll No:- 9142

Name: Uma Sanjay Ghuk.



PAGE: / /
DATE: / /

a] Short Answer Questions.

1] Contribution of Louis Pasteur.

17/20

2] Write a Note on Flagella.

a] Long Answer -type Question.

1] Write a note on morphology, arrangement & size of bacteria.

Ans:-

a] contribution of Louis Pasteur.

- 1] He solved the problem of sour wine & beer in 1856-1857.
- 2] While studying Butyric Acid Fermentation, he found the existence of anaerobic microorganisms which can grow in absence of oxygen.
- 3] He discovered the process of pasteurization.
- 4] He showed the role of protozoa in Pebrine disease that occurs in silk worm, and proved Germ Theory of Disease, in 1865.
- 5] In 1864 Pasteur disproved the Spontaneous Generation Theory by a famous Schwann's Naked Experiment.
- 6] Each and every fermentation requires a specific environmental condition to support fermentation & growth.
- 7] He discovered principle of Active Immunization.
- 8] A specific type of microorganism requires for particulate requirement.
- 9] Substrate such as Sugar is fermented to form its specific product.
- 10] In 1880 he prepared vaccine to prevent Anthrax disease in sheep.
- 11] He isolated the causative agent of chicken cholera.
- 12] He developed the vaccine against Rabies, by attenuating virus in a rabbit host.
- 13] Discovered the process of Pasteurization.

5

Q1] Short Note

- 1] Sonification.
- 2] Salting out
- 3] Principle of centrifugation
- 4] Types of centrifuge any two

Q2] One sentence answer

What is ^{advantage} of Ultracentrifuge.

What is the main principle of Blender?

What is salting in

Define Dialysis.

Q1]

1] Sonification :-

- i] The distrib. cell disruption is caused by pro ultrasonic vibrators that produces high frequency sound waves with wave density of 20 kHz/s
- ii] This method is suitable for suspend cultured cell & microbial cells.
- iii] When sonicator probe is introduced or lower into suspension of cells, at that time, it generated high frequency sound wave for about 30-50 sec.
- iv] because of high frequency sound waves production is causes disruption of cells by shear force and cavitation.
- v] The cavitation refers to area where alternate compression & rarefaction are rapidly interchanges.
- vi] The gas bubbles present in the buffer at starting or initially they are under high pressure, but as they decompress & some shock waves are reduced or relaxed, cell disruption carried.
- vii] When we carried out or perform this method during process considerable amount of heat is generated, so the same must be kept on ice.
- viii] This method is ideal for handling relatively small volume 50-100ml.
- ix] Bacterial & fungal cell disruption is carried out by

Name - Tankaj Sunil Zingane
Roll no. - 9157
subject - Cell Biology

15/15

1. Passive Transport involves in down hill movement of molecules.
2. Unit membrane model of plasma membrane was proposed by Robertson
3. Pinocytosis is a cell drinking process
4. Isotonic solution contains right amount of solute & water for the cell
5. cell is a structural & functional unit of life
6. when two molecules moves in opposite direction through transmembrane protein is known as Antiport
7. Na⁺ Glucose transporter example of secondary active transport
8. Spectrin & Ankyrin are the best studied peripheral proteins
9. Lipids of plasmamembrane are amphipathic in nature where hydrophilic head & hydrophobic tail is present
10. Hypertonic solution causes plasmolysis of cell
11. prokaryotic cell contains 70s type of ribosomes
12. Quantasomes are real photosynthetic units
13. Lysosome is known as suicidal bags

| Sr.No | Roll | | Name of Students | |
|-------|------|---|-----------------------------------|------------------|
| 1 | 9101 | * | Adav Prachi Jotiba | 12 |
| 2 | 9102 | * | Bhosale Nisha Subhash | 13 |
| 3 | 9103 | * | Bugate Sejal Sharad | 13 |
| 4 | 9104 | | Chougule Ajay Malagonda | 13 |
| 5 | 9105 | * | Davkare Pooja Tatyaso | 12 |
| 6 | 9106 | * | | Canceled |
| 7 | 9107 | * | Desai Vaishnavi Sanjay | 10 |
| 8 | 9108 | * | Dharmadhikari Niyati Narayan | Ab. |
| 9 | 9109 | * | Dhenge Tanvi Shirish | 15 |
| 10 | 9110 | * | Dixit Radhaika Milind | 15 |
| 11 | 9111 | * | Dixit Sakshi Pradip | 12 |
| 12 | 9112 | * | Ghule Uma Sanjay | 14 |
| 13 | 9113 | * | Hadgal Rutuja Tanaji | 12 |
| 14 | 9114 | * | Hajgude Sakshi Mukesh | 15 |
| 15 | 9115 | * | Hikadi Arati Ravindra | 13 13 |
| 16 | 9116 | * | Jagatap Pratiksha Baban | 13 |
| 17 | 9117 | * | Kadam Neha Krushnat | 10 |
| 18 | 9118 | | Kadam Suraj Santosh | 13 |
| 19 | 9119 | * | Kalmakar Padmshri Prakash | 12 |
| 20 | 9120 | * | Kamble Anushka Sandip | 13 |
| 21 | 9121 | * | Kamble Seema Shivaji | 11 |
| 22 | 9122 | * | Kathare Sakshi Anil ALIAS ATMARAM | 14 |
| 23 | 9123 | | Kesarkar Omkar Balaso | 15 |
| 24 | 9124 | | Khanapure Ammar Abdulgafar | 13 |
| 25 | 9125 | * | Kole Sanika Uttam | 12 |
| 26 | 9126 | * | Kolekar Arya Ramchandra | 10 |
| 27 | 9127 | * | Kulkarni Aarya Dhananjay | 13 |
| 28 | 9128 | | Kulkarni Pranav Sanjeev | Ab |
| 29 | 9129 | * | Kurade Tanaya Prafulla | 13 |
| 30 | 9130 | * | Lavhate Prachi Suresh | 11 |
| 31 | 9131 | * | Lohar Pranjal Parashuram | 11 |
| 32 | 9132 | | Makandar Fardin Mahamadhanif | 12 |
| 33 | 9133 | | Mane Mohit Sunil | 13 |
| 34 | 9134 | * | More Ankita Shrikant | 12 |
| 35 | 9135 | * | Notani Disha Santosh | 15 |

| | | | | |
|----|------|---|---------------------------|----------|
| 36 | 9136 | * | Patil Gayatri Bhaurao | 13 |
| 37 | 9137 | * | Patil Mrunal Babaso | 13 |
| 38 | 9138 | | Patil Pruthviraj Amar | 15 |
| 39 | 9139 | * | Patil Saloni Suhas | 12 |
| 40 | 9140 | * | Patil Vaishnavi Vilas | 15 |
| 41 | 9141 | * | Patil Vaishnvi Manohar | 12 |
| 42 | 9142 | * | Patil Yuvradnyi Prakash | 12 |
| 43 | 9143 | * | | Canceled |
| 44 | 9144 | * | | Canceled |
| 45 | 9145 | * | Rane Simran Vinod | 13 |
| 46 | 9146 | * | Sawant Bramhali Vakil | 12 |
| 47 | 9147 | * | Shinde Sayali Yashwant | 15 |
| 48 | 9148 | * | Sutar Snehal Tukaram | 12 |
| 49 | 9149 | * | Teware Pranoti Sadashiv | 10 |
| 50 | 9150 | * | Tibile Siddhi Sunil | 15 |
| 51 | 9151 | * | Vedpathak Aditi Atul | 15 |
| 52 | 9152 | * | Veer Samruti Santosh | 15 |
| 53 | 9153 | * | Vichare Ashwini Raghunath | 11 |
| 54 | 9154 | | Yadav Om Mohan | 10 |
| 55 | 9155 | * | Yadav Shruti Subhash | 09 |
| 56 | 9156 | * | | Canceled |
| 57 | 9157 | | Zirange Pankaj Sunil | 13 |
| 58 | 9158 | | Bhatmare Sourabh sambhaji | 66. |

Prof S.G. Kulkarni

Dr.R.R.Kumbhar

DEPARTMENT OF BIOTECHNOLOGY (ENTIRE)
VIVEKANAND COLLEGE, KOLHAPUR
(AUTONOMOUS)

Name: Medinee P. Shdh
Roll no: 9238
BSC-Biotech (Entire)
SY.

Internal examination in immunology
B.Sc II biotechnology Entire

08
10

Q 1. Fill in the blanks.

1. Species immunity is a total or relative resistance shown by all members of species to a pathogen. (innate)
2. Immunity acquired by an individual by receiving sensitized white blood cells from donor called as Active NA immunity
Natural passive (Acquired)
3. Inflammation is an important non-specific defense reaction to the tissue injury caused by pathogen.
4. The bacterial flora of the host body produces various antimicrobial substances such as Collicine.
5. The cells formed from fusion of many no. of macrophages are called as Giant cell / Epitheloid cell.
6. T cytotoxic cell carry CD⁸ cell surface marker.
7. Myeloid lineage produces phagocytes and other cells.
8. Outer area of lymph node i.e. cortex contains B cells.
9. Red pulp of spleen corresponds to medulla of lymph node.
10. On contact with an appropriate antigen the mature B cell undergoes
(Giant cell) / Epitheloid cell Antibody production

OX

Name :- Aaditya Navakishor Sharma
Roll No. :- 9240

Internal examination in immunology

B.Sc II Immunology Part A

08
10

Q.1. Fill in the blanks.

1. Species immunity is a total or relative resistance shown by all members of species to a pathogen.

2. Immunity acquired by an individual by receiving sensitized white blood cells from donor called as Natural passive immunity.

3. Inflammation is an important non-specific defense reaction to the tissue injury caused by pathogen.

4. The bacterial flora of the host body produces various antimicrobial substances such as lysozyme, colicine.

5. The cells formed from fusion of many no. of macrophages are called as Giant cells.

6. T cytotoxic cell carry CD8 cell surface marker.

7. Myeloid lineage produces phagocytes and other cells.

8. Outer area of lymph node i.e. cortex contains B cells.

9. Red pulp of spleen corresponds to medulla of lymph node.

10. On contact with an appropriate antigen the mature B cell undergoes

Phagocytosis

Name:- Ekata Hemant Komble.

Roll No:- 9216.

Internal examination in immunology
B.Sc II biotechnology Entire

28
10

Q.1. Fill in the blanks.

1. Species immunity is a total or relative resistance shown by all members of species to a pathogen.

2. Immunity acquired by an individual by receiving sensitized white blood cells from donor called as passive immunity.

3. Inflammation is an important non-specific defense reaction to the tissue injury caused by pathogen.

4. The bacterial flora of the host body produces various antimicrobial substances such as collice.

5. The cells formed from fusion of many no. of macrophages are called as giant cells.

6. T cytotoxic cell carry CD8 cell surface marker.

7. Myeloid lineage produces phagocytes and other cells.

8. Outer area of lymph node i.e. cortex contains B cells.

9. Red pulp of spleen corresponds to medulla of lymph node.

10. On contact with an appropriate antigen the mature B cell undergoes

of phagocytosis.



Shri Swami Vivekanand Shikshan Sanstha's
VIVEKANAND COLLEGE (Autonomous), KOLHAPUR

Class 2nd Year B.Sc (Biotech Entire) Div _____

Roll No. 9245

Supplement No. _____

Subject Molecular Biology II

Test / Tutorial No. _____

Name :- Maithili Vikrant Surve

Q.1. _____ base plays an important role as a
Substituent between A and G in a
wobble.

→

Q.2. Genetic code is non-ambiguous means _____
→ ~~It can code for 2 or more amino acids.~~
→ ~~one triplet elongation codon codes only for 1 amino acid.~~

Q.3. _____ factor is necessary to regenerate
GTP in protein translation.

→

~~EF-Tu~~

Q.4. The half feedback regulation of Tryptophan
operon is called as _____

→

~~Attenuation control~~

Q.5. Give one example of genetic code
variation.

→

~~UAA (Tryptophan), AUG - N-formyl methionine~~

Q.6. In its housekeeping form _____ is
required to induce lactose operon.

→

~~cAMP - CAP (Catabolite Activator Promoter)~~



Shri Swami Vivekanand Shikshan Sanstha's
VIVEKANAND COLLEGE (Autonomous), KOLHAPUR

Class 2nd Year B.Sc (Biotech Entire) Div _____

Roll No. 9245

Suppliment No. _____

Subject molecular Biology II

Test / Tutorial No. _____

Name :- Maithili Vikrant Surve

Q.1. _____ base plays an important role as a
Substituent between A and G in a
wobble.

→

Q.2. Genetic code is non-ambiguous means _____
→ ~~It can code for 2 or more amino acids.~~
→ one triplet elongation codon codes only for 1 amino acid.

Q.3. _____ factor is necessary to regenerate
GTP in protein translation.

→ ~~EF-Tu~~

Q.4. The half feedback regulation of Tryptophan
operon is called as _____
→ ~~Attenuation. control~~

Q.5. Give one example of genetic code
variation.

→ ~~UAA (Tryptophan), AUG - N-formyl methionine~~

Q.6. In its housekeeping form _____ is
required to induce lactose Operon.

→ ~~cAMP - CAP (Catabolite Activator Promoter)~~



Shri Swami Vivekanand Shikshan Sanstha's
VIVEKANAND COLLEGE (Autonomous), KOLHAPUR

Class BSC Blotech (Eni) Div. Second year

Roll No. 9238

Suppliment No. _____

Subject Molecular Biology

Test / Tutorial No. _____

Name : Mednee Prasanna Shah

08
10

Q1) Uridine base plays an important role as a substuent between A & G in a wobble.

Q2) Genetic Code is ^{non-}ambiguous means ~~one amino acid can be coded by more than one~~ A codon codes for only one amino acid ~~codon~~.

Q3) ~~EFG~~ EFG elongation factor is ~~not~~ necessary ^{regeneration} GTP in protein translation.

Q4) The half feedback regulation of tryptophan operon is called as Attenuation.

Q5) Give one example of Genetic code variation: AUG is generally ^{and codes for methionine} used as start codon, but in mitochondria GUG is used.

Q6) In its ~~ham~~ housekeeping form Allolactose ^{lactose} is required to induce lactose operon.

Q7) The ~~to~~ ^{minus} 10 element in Eukaryote is called Hogness box (ie TATA box)

Q8) Phenylalanine (UUU) amino acid codon was first to be deciphered.



" ज्ञान, विज्ञान आणि सुसंस्कार यांचाही शिखर प्रसार " - शिक्षणपद्धती डॉ. बापूजी साबुळे

Signature of Supervisor

Shri Swami Vivekanand Shikshan Sanstha's VIVEKANAND COLLEGE (Autonomous), KOLHAPUR

Class Bsc II Biotechnology (ent Pre) Div _____ Roll No. 9249
Suppliment No. _____ Date: 8/6/22 Subject edu. in Molecular biology
Test / Tutorial No. _____ Name: Shreya Smrit Wadkar

06
10

Q.1 U base plays an important role as a substituent between A and G in a wobble.

Q.2 Genetic code is ^{non} ambiguous means that ^{one} ~~many~~ codons ^{not} code for a more than single amino acids.

Q.3 EFTS el elongation factor is necessary to regenerate GTP in protein translation.

Q.4 The half feedback regulation of tryptophan operon is called as attenuation control.

Q.5 Give one example of genetic code variation.

7 1/2
15

Q1] Short Note on Conservation of Biodiversity, Nitrogen cycle.

* Conservation of Biodiversity

1] Biodiversity is the variety and variations of organisms plants among or within the species.

2] Now a day's the loss of biodiversity is the main issue.

3] The loss of biodiversity cause the distinction of particular species and its affect on food chan.

4] The main causes are behind the loss of biodiversity are pollution, global warming, population

5] Pollution's like water pollution cause the disturbance in water ecosystem this affect on many living or non living matter in water ecosystem and affect cause loss of biodiversity.

6] Human population, and uncontrolled ~~number~~ growth in number of particular organism cause the decrease in number of their food material. This way the food material species or organism cause distinction.

7] We can conserve the biodiversity by decreasing the pollution, like water, air, soil. If we prevent pollution then corresponding ecosystem will not get disturbed. This way we can conserve the Biodiversity.

8] Preservation of species which are in the way of distinction.

9] Now a day deforestation becoming a big issue because of this we loss the diversity in plant due to this the forest ecosystem get disturbed and this cause affect on the animals birds living in that habitat.

10] Humans are gradually interfering in the different type of ecosystem take their resources. It cause the depletion in this cause loss of diversity this can cause.

Roll no:- 9295
Name:- Maithili Surve Ecology

9
15

Questions :-

- Q.1 Short note on Nitrogen Cycle.
- Q.2 Conservation of Biodiversity

Answers :-

Ans: 2) There are various ways for Conservation of Biodiversity :-

- In-situ Conservation :- It is a type of Conservation where animals are conserved in their respective Habitats, in their environment with taking certain precautions and like :-

4

- 1) No trespassing
- 2) No hunting allowed in
respective area.

This Conservation consists of Sanctuary's and National parks.

where ~~we~~ animals are free to roam in surroundings.

For example :- Kaziranga National park.

- In case of plants there are Botanical gardens for them. where they are in the living form.

Swami Vivekanand Shiksha Sanstha's
VIVEKANAND COLLEGE KOLHAPUR (AUTONOMOUS)
 B.Sc. Part III Biotechnology (Entire)
 E 2021-22 SEM - III

| Sr No | Roll No. | Student Name | Genetics | | Biology | | Maths | | Chemistry | | Physics | | P.T.C. | |
|-------|----------|------------------------------|----------|----|---------|----|-------|----|-----------|----|---------|----|--------|----|
| | | | CIE | CA | CIE | CA | CIE | CA | CIE | CA | CIE | CA | CIE | CA |
| 1 | 9301 | * ALAVE AARYA RAJENDRA | | | | | | | | | | | | |
| 2 | 9302 | * ARAB JAKIYA ABDULMAJID | 8 | 26 | 9 | 22 | 4 | 34 | 6 | 28 | 7 | 22 | 3 | 24 |
| 3 | 9303 | * ATHANIKAR SABIRA NIJAM | | | | | | | | | | | | |
| 4 | 9304 | * AWALKAR ANCHAL NANDKUMAR | 9 | 34 | 9 | 34 | 9 | 32 | 8 | 36 | 10 | 24 | 8 | 26 |
| 5 | 9305 | * BEDEKAR PRANAV ANIL | 5 | 32 | 6 | 32 | 5 | 32 | 5 | 32 | 8 | 32 | 7 | 30 |
| 6 | 9306 | * CHAVAN PRATIKAH ANANDA | | | | | | | | | | | | |
| 7 | 9307 | * CHAVAN RUTUJA RAJESH | | | | | | | | | | | | |
| 8 | 9308 | * CHIKHALE ROSHAN PRAKASH | 6 | 28 | 6 | 32 | 6 | 26 | 4 | 38 | 7 | 32 | 5 | 26 |
| 9 | 9309 | * CHOUGALE NIKITA BHARAT | 6 | 24 | 7 | 36 | 4 | 22 | 6 | 34 | 5 | 24 | 8 | 24 |
| 10 | 9310 | * CHOUGULE KSHITIJ JAGANNATH | 4 | 30 | 6 | 36 | 4 | 20 | 4 | 28 | 8 | 26 | 5 | 28 |
| 11 | 9311 | * DESHPANDE VAIBHAVI HARISH | 5 | 28 | 6 | 34 | 6 | 32 | 5 | 36 | 8 | 26 | 5 | 32 |
| 12 | 9312 | * GHORPADE PRITAM RAMESH | 5 | 24 | 6 | 30 | 6 | 22 | 5 | 30 | 6 | 28 | 5 | 26 |
| 13 | 9313 | * HAWAL ANUSHKA ANIL | 5 | 20 | 5 | 28 | 5 | 28 | 5 | 26 | 8 | 30 | 5 | 20 |
| 14 | 9314 | * INAMDAR VARDA RAHUL | 5 | 28 | 7 | 28 | 6 | 30 | 5 | 32 | 8 | 20 | 9 | 28 |
| 15 | 9315 | * KADAM ANIKET BALASAHEB | 08 | 28 | 09 | 32 | 05 | 34 | 08 | 34 | 06 | 34 | 08 | 24 |
| 16 | 9316 | * KAMBLE EKATA HEMANT | 6 | 38 | 9 | 32 | 9 | 36 | 6 | 32 | 6 | 36 | 7 | 26 |
| 17 | 9317 | * KAMBLE MRUNALI SHAHAJI | 5 | 26 | 6 | 20 | 5 | 22 | 5 | 20 | 9 | 24 | 8 | 26 |
| 18 | 9318 | * KHONDAL JAYRAM DNYANDEV | | | | | | | | | | | | |
| 19 | 9319 | * KORANE PRATIKSHA TANAJI | 5 | 26 | 7 | 30 | 6 | 34 | 8 | 30 | 6 | 26 | 7 | 26 |
| 20 | 9320 | * KOSHTI SHRIDHAR SHRIKANT | 5 | 28 | 6 | 36 | 5 | 28 | 4 | 32 | 4 | 34 | 4 | 30 |
| 21 | 9321 | * KULKARNI GAYATRI RAGHUNATH | 8 | 36 | 9 | 32 | 9 | 32 | 7 | 26 | 7 | 28 | 8 | 28 |
| 22 | 9322 | * MADHALE SHUBHAM RAVINDRA | | | | | | | | | | | | |
| 23 | 9323 | * MANE UTKARSHA GAJENDRA | 5 | 20 | 5 | 29 | 5 | 33 | 4 | 28 | 9 | 34 | 5 | 33 |
| 24 | 9324 | * NALAWADE SOURABH DATTATRAY | 6 | 20 | 5 | 32 | 6 | 22 | 6 | 28 | 5 | 20 | 5 | 24 |
| 25 | 9325 | * PALKAR SHARVARI MANIKSEN | 09 | 30 | 05 | 36 | 09 | 38 | 09 | 40 | 08 | 38 | 08 | 26 |
| 26 | 9326 | * PARKAR SIDDHI SUNIL | 05 | 38 | 09 | 26 | 05 | 34 | 04 | 28 | 08 | 38 | 05 | 26 |
| 27 | 9327 | * PATIL AARYA VIJAY | 6 | 30 | 5 | 30 | 4 | 22 | 4 | 36 | 7 | 32 | 6 | 30 |
| 28 | 9328 | * PATIL ANJALI RAJENDRA | 8 | 32 | 9 | 38 | 6 | 36 | 7 | 38 | 4 | 24 | 7 | 32 |
| 29 | 9329 | * PATIL AVADHOOT MOHAN | 7 | 32 | 6 | 32 | 6 | 20 | 6 | 36 | 8 | 28 | 7 | 32 |
| 30 | 9330 | * PATIL DIVYA SURESH | 6 | 32 | 7 | 28 | 6 | 36 | 5 | 30 | 8 | 24 | 7 | 24 |
| 31 | 9331 | * PATIL NAMRATA DHARMGONDA | 8 | 34 | 9 | 36 | 7 | 32 | 8 | 34 | 7 | 34 | 6 | 26 |
| 32 | 9332 | * PATIL PORNIMA YUVRAJ | 6 | 24 | 7 | 26 | 4 | 24 | 5 | 30 | 6 | 32 | 7 | 28 |
| 33 | 9333 | * PATIL RUTUJA ANANDRAO | 7 | 16 | 7 | 22 | 4 | 16 | 6 | 20 | 7 | 22 | 6 | 22 |
| 34 | 9334 | * PATIL SHWETA TANAJI | 6 | 32 | 7 | 32 | 6 | 26 | 4 | 34 | 7 | 26 | 6 | 28 |
| 35 | 9335 | * PATIL VAISHNAVI RAJENDRA | 7 | 30 | 7 | 32 | 8 | 28 | 4 | 36 | 6 | 28 | 6 | 30 |

| | | | | | | | | | | | | | | |
|----|------|--------------------------------|---|----|---|----|---|----|---|----|---|----|---|----|
| 36 | 9336 | SARNAIK PRATHAMESH K. N | 7 | 30 | 7 | 28 | 6 | 24 | 5 | 36 | 6 | 26 | 7 | 28 |
| 37 | 9337 | * SAVARDEKAR VAISHNAVI UMESH | 7 | 30 | 7 | 26 | 7 | 26 | 5 | 26 | 8 | 30 | 8 | 30 |
| 38 | 9338 | * SHAH MEDINEE PRASANNA | 9 | 34 | 9 | 38 | 9 | 26 | 8 | 32 | 7 | 30 | 9 | 30 |
| 39 | 9339 | SHAIKH FIRAS DILAWAR | 6 | 28 | 4 | 28 | 5 | 24 | 4 | 26 | 8 | 32 | 7 | 24 |
| 40 | 9340 | SHARMA ADITYA NAVALKISHOR | 7 | 26 | 8 | 36 | 7 | 34 | 5 | 26 | 8 | 32 | 7 | 32 |
| 41 | 9341 | SHINDE SHUBHAM SUBHASH | 8 | 32 | 9 | 30 | 9 | 38 | 6 | 34 | 7 | 38 | 7 | 32 |
| 42 | 9342 | SHINDE SWANAND ARUN | | | | | | | | | | | | |
| 43 | 9343 | SHIRKE HARSHWARDHAN DATTATRAYA | 9 | 28 | 7 | 38 | 5 | 26 | 5 | 26 | 9 | 28 | 9 | 26 |
| 44 | 9344 | * SIDDHANAİK RADHIKA BAPU | 7 | 32 | 7 | 24 | 5 | 32 | 4 | 32 | 9 | 28 | 5 | 38 |
| 45 | 9345 | * SURVE MAITHILI VIKRANT | 9 | 24 | 9 | 32 | 8 | 38 | 6 | 36 | 9 | 36 | 8 | 32 |
| 46 | 9346 | * SUTAR SNEHA VIKAS | 8 | 32 | 8 | 36 | 6 | 24 | 5 | 40 | 7 | 30 | 7 | 24 |
| 47 | 9347 | * TAHASILDAR SANIKA SAMRAT | 4 | 30 | 5 | 28 | 4 | 32 | 4 | 26 | 7 | 22 | 5 | 28 |
| 48 | 9348 | * VARUTE ANKITA ASHWINKUMAR | 9 | 30 | 9 | 30 | 9 | 38 | 7 | 38 | 9 | 32 | 8 | 34 |
| 49 | 9349 | * WADAKAR SHREYA SUNIL | 9 | 26 | 8 | 30 | 7 | 26 | 5 | 24 | 5 | 30 | 7 | 20 |
| 50 | 9350 | * WADEYAR MADHUMITA MALHARI | 6 | 26 | 5 | 32 | 5 | 20 | 4 | 32 | 7 | 32 | 6 | 34 |
| 51 | 9351 | * ZAPATE SHWETA SHEKHAR | | | | | | | | | | | | |
| 52 | 9352 | * KHAMKAR SKASHTA | | | | | | | | | | | | |




 HEAD
 DEPARTMENT OF BIOTECHNOLOGY (ENTIRE)
 VIVEKANAND COLLEGE, KOLHAPUR
 (EMPOWERED AUTONOMOUS)

05
10

1355-P - Advance in Genetic Engineering.

Q.1. Fill the blanks.

1) RFLP. co dominant molecular markers

2) Restrictid-f

3) Restriction fragment length polymorphism is co-dominant molecular marker.

4) why the somatostatin produce as fusion protein.

→ It produce β galactosidase.

5) why non-transform cells gives blue colour in blue white screening

→ Non-transform cells give blue colour in blue-white screening because xgal and β -galactosidase present

6) what are the roles of virulence D2 protein in agrobacterium mediated gene transfer.

→ virulence D2 protein in agrobacterium It form single stranded T-DNA. This protein attach to 3' end

7) Taq man probe has have fluorescent reporter at 5' end & a quencher at 3' end



“ ज्ञान, विज्ञान आणि सुसंस्कार यांसाठी शिक्षण प्रसार ”

- शिक्षणमहर्षी प. यू. डॉ. बापूजी साबुळे

Shri Swami Vivekanand Shikshan Sanstha's
VIVEKANAND COLLEGE, KOLHAPUR

Class Bsc III Div biotech entire Roll No. 9301

Suppliment No. _____ Subject Developmental biology

Test / Tutorial No. Internal exam - 1

5/10

Q.1

Vaccine, is the which is contains antigens or antibodies or which give immunity to an organism. it has subunit, attenuated or vector ve type of Recombinant vaccine. of fight against any infections.

Q.2 Recombinant, because it has less disadvantages as compared to the DNA. e.g. Hepatitus B vaccine is used for by humans.

Q.3 - 42 nm

- Done partical have 23 nm.

Q.4 Not expensive, not complicated to use. &

Q.5 Vp1 of C terminal & N terminal

Q.6 Agrobacterium tumefecious

Q.7 totipotent cell specific for specific organ cell gives all types cell including extraembryonic cells.

Q.8 Q.1 antitrypsin

**Shri Swami Vivekanand Shikshan Sanstha's
Vivekanand College, Kolhapur
Department of Biotechnology
B.Sc. III (Entire) Biotechnology Sem- V**

| Sr. No. | Roll No. | Name of Students | Genetic Engineering | App of Biotech Agriculture/1 | Industrial Biotechnology/1 | Development Biology/10 | English |
|---------|----------|---------------------------|---------------------|------------------------------|----------------------------|------------------------|---------|
| 1 | 9301 | ARAGU RASHIKA REMESH | 4 | 7 | 4 | 5 | 8 |
| 2 | 9302 | BALEKHAN SWALIHA A. | 6 | 8 | 5 | 6 | 9 |
| 3 | 9303 | BATE SWARUP SUNIL | Ab | Ab | Ab | Ab | Ab |
| 4 | 9304 | BHAT POURANIMA SUHAS | 4 | 7 | 4 | 5 | 7 |
| 5 | 9305 | BHOITE PRANALI PRATAPSIKH | 4 | 8 | 4 | 6 | 9 |
| 6 | 9306 | BIJAPUKAR SHIRIN AJAY | 4 | 9 | 6 | 7 | 9 |
| 7 | 9307 | BUDAKE SHAILESH APPA | 4 | 7 | 4 | 5 | 8 |
| 8 | 9308 | BUGADE PAYAL DAYANAND | 4 | 7 | 4 | 5 | 9 |
| 9 | 9309 | CHAVAN MRUNMAYI ANIL | 5 | 8 | 6 | 8 | 7 |
| 10 | 9310 | CHOUGULE VRUSHABH SURESH | 4 | 8 | 4 | 6 | 8 |
| 11 | 9311 | DESA FLAVIAN AVELINE | 4 | 9 | 8 | 7 | 9 |
| 12 | 9312 | DHEKALE SOURABH VINOD | 4 | 7 | 4 | 6 | 9 |
| 13 | 9313 | GAWADE CHINMAY VIJAY | 4 | 7 | 4 | 6 | 8 |
| 14 | 9314 | JADHAV SALONI BAJIRAO | 4 | 7 | 4 | 6 | 8 |
| 15 | 9315 | JADHAV SHWETA VISHWASH | 4 | 7 | 4 | 6 | 7 |
| 16 | 9316 | JITKAR SHRUTI SHASIKANT | 6 | 7 | 5 | 6 | 8 |
| 17 | 9317 | KAMBLE PRANAY PUNDLIK | 4 | 7 | 4 | 6 | 6 |
| 18 | 9318 | KAMBLE VAISHNAVI ASHOK | 4 | 8 | 7 | 8 | 9 |
| 19 | 9319 | KARANDE VRUSHALI SANJAY | 4 | 8 | 6 | 7 | 9 |
| 20 | 9320 | KOLEKAR SHREYAS DHANANJAY | 4 | 8 | 6 | 6 | 7 |
| 21 | 9321 | KUMBHAR SANTOSH ARUN | 1 | 2 | 2 | 4 | 7 |
| 22 | 9322 | MADHAV GAURI PRABHAKAR | 4 | 7 | 4 | 6 | 8 |

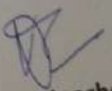


C.M. HEAD
DEPARTMENT OF BIOTECHNOLOGY (ENTIRE)
VIVEKANAND COLLEGE, KOLHAPUR
(EMPOWERED AUTONOMOUS)

| | | | | | | | |
|----|------|--------------------------------|---|---|---|---|----|
| 23 | 9323 | MAGDUM SOHAN SUNIL | 4 | 7 | 4 | 6 | 7 |
| 24 | 9324 | * NIRWANE VISHAKHA CHANDRAKANT | 4 | 7 | 4 | 8 | 8 |
| 25 | 9325 | PATHAN ALIM ALATIF | 4 | 8 | 4 | 7 | 8 |
| 26 | 9326 | PATIL ABHISHEK SURESH | 1 | 2 | 2 | 2 | 8 |
| 27 | 9327 | * PATIL AKANKSHA SHIVAJI | 4 | 7 | 4 | 5 | 8 |
| 28 | 9328 | * PATIL SHIVANI SHRIKANT | 4 | 7 | 4 | 6 | 10 |
| 29 | 9329 | * PATIL SHRUTIKA SUBHASH | 4 | 7 | 6 | 5 | 8 |
| 30 | 9330 | PATIL TEJAS SANJAY | 5 | 9 | 4 | 7 | 8 |
| 31 | 9331 | * PUJARI POONAM SUKHADEV | 4 | 7 | 4 | 7 | 8 |
| 32 | 9332 | * RAJGURU PRIYANKA DHANAJI | 5 | 7 | 4 | 7 | 9 |
| 33 | 9333 | * RANDIVE SAKSHI MANIK | 4 | 8 | 6 | 8 | 8 |
| 34 | 9334 | * ROTE SAKSHI SANJAY | 4 | 8 | 6 | 9 | 7 |
| 35 | 9335 | SARDA SAHIL SAGAR | 5 | 9 | 7 | 6 | 8 |
| 36 | 9336 | * SHINDE DISHA SAMBHAJI | 4 | 9 | 6 | 5 | 8 |
| 37 | 9337 | * SHINTRE SNEHA ANIL | 4 | 8 | 4 | 9 | 9 |
| 38 | 9338 | * SUTAR SHEJAL PRAKASH | 5 | 9 | 7 | 4 | 6 |
| 39 | 9339 | TAMBOLI YUNUS YASIN | 4 | 6 | 4 | 4 | 5 |
| 40 | 9340 | KAMBLE PRADHUMN KUMAR | 4 | 5 | 4 | 4 | 5 |




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 DEPARTMENT OF BIOTECHNOLOGY (ENTIRE)
 VIVEKANAND COLLEGE, KOLHAPUR
 (EMPOWERED AUTONOMOUS)


 Class teacher
 Mr. A.L. Upadhye

Vivekanand College Kolhapur (Autonomous)

Dept. of Biotechnology (Entire)

Academic Year 2021-22

Notice

Date 27.04.2022

Hereby informed to all students of B.Sc.I, II,III Biotechnology (Entire) that there is arrangement of Internal Exam Term work for Sem.II,IV,VI for following subjects as follows.

| Sr. No. | Name of Subject/Paper | Date |
|---------|-----------------------------|------------|
| 1 | DSC-B-Chemistry | 07.05.2022 |
| 2 | DSC-B-Biochemistry | 09.05.2022 |
| 3 | DSC-B-Animal Science | 10.05.2022 |
| 4 | DSC-B-Statistics | 11.05.2022 |
| 5 | DSC-B-Computer | 12.05.2022 |
| 6 | DSC-B- Cell Biology | 13.05.2022 |
| 7 | DSC-B-Microbiology | 14.05.2022 |
| 8 | DSC-B-Developmental Biology | 17.05.2022 |



| Sr. No. | Name of Subject/Paper | Date |
|---------|--|------------|
| 1 | DSC-1345D Immunology | 10.05.2022 |
| 2 | DSC-1346D Advances in Cell Biology | 11.05.2022 |
| 3 | DSC -1347D Plant Biochemistry | 12.05.2022 |
| 4 | DSC -1348D Environmental Biotechnology | 13.05.2022 |
| 5 | DSC-1349D Molecular Biology II | 14.05.2022 |
| 6 | DSC-1350D Animal Tissue Culture | 17.05.2022 |

S. ✓
HEAD
DEPARTMENT OF BIOTECHNOLOGY (ENTIRE)
VIVEKANAND COLLEGE, KOLHAPUR
(EMPOWERED AUTONOMOUS)

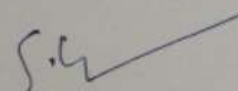
| Sr. No. | Name of Subject/Paper | Date |
|---------|--|------------|
| 1 | DSE-1355-F Advances in Genetic Engineering | 04.05.2022 |
| 2 | DSE-1356-F Food and Microbial Biotechnology | 05.05.2022 |
| 3 | DSE- 1357-F Application of Biotechnology in Health | 06.05.2022 |
| 4 | DSE-1358-F Bioinformatics | 07.05.2022 |

The nature of Internal may be multiple-choice / Fill in the blank / one word sentence / one sentence /one word.

Time: 11:30 to 12:30

12:30 onwards Routine




 (Mr.S.G.Kulkarni)
 HEAD
 DEPARTMENT OF BIOTECHNOLOGY (ENTIRE)
 VIVEKANAND COLLEGE, KOLHAPUR
 (EMPOWERED AUTONOMOUS)

Name - Prachi Totiba Adav Roll NO :- 9101

Subject - Animal science

Class - Bsc Biotech (Ent) FY

- Q.1. Animals with notochord are called chordates
- Q.2. Presence of compound eyes is a characteristic features of phylum Arthropods
- Q.3. Class Turbellaria is present in Platyhelminthes phylum
- Q.4. Water vascular system typically found in phylum Porifera sponges
- Q.5. Animals of phylum Mollusca are soft bodied, unsegment, trophoblastic & mostly shelled.
- Q.6. The adult ascaris is found in small intestine of man.
- Q.7. Total no. of moults in life cycle of ascaris are two
- Q.8. The late tail fin in bony fishes is described as
- Q.9. Tail less amphibians are included in order A. urodella.
- Q.10. Three chambered heart is present in amphibians

$\frac{8}{15}$

NAME : NISHA SUBRACH BISSALU
CLASS : BIOTECH (ent) F.Y.
SUB :- Animal science.
Roll No - 9102

- Q1. Animals with notochord are called Chordates.
- Q2. Presence of compound eyes is a characteristic feature of Arthropods.
- Q3. Clostridium is present in Platyhelminthes phylum.
- Q4. Water vascular system typically found in sponges.
- Q5. Animals of phylum Mollusca are soft bodied unsegmented, triploblastic and mostly shelled.
- Q6. The adult ascaris is found in small intestine of man.
- Q7. Total no. of moults in life cycle of ascaris are 2.
- Q8. The tail fin in bony fishes is described as
- Q9. Tail less amphibians are included in order
- Q10. Three chambered heart is present in Amphibian.
- Q11. The venum of cobra is

8
15

Sejal Sharda Bugate
BSc. Biotech (Ent) FT
9103 Animal science

1. Animals with notochord cord ~~vertebrates~~ Cordates
2. Presence of compound eyes is a characteristic feature of phylum Arthropods
3. Class turbellaria is present in phylum Platyhelminths
4. Water vacuolate system typically found in sponges
5. Animals of phylum are soft bodied, unsegmented, diploblastic and mostly shelled mollusca
6. The adult ascaris is found in small intestine of man
7. Total no. of ~~more~~ moults in life cycle of Ascaris are 2
8. The tail fin in body fishes is described as
9. Tail less amphibians are included in order Anura



Signature of Supervisor _____

"ज्ञान, विज्ञान आणि सुसंस्कार वास्तवी शिक्षण प्रसार"
- शिक्षणमहर्षि पूरुष डॉ. बापूजी साळुंके

Shri Swami Vivekanand Shikshan Sanstha Kolhapur's
VIVEKANAND COLLEGE, KOLHAPUR

CLASS BSC. Biotech DIV. Entire 1st ROLL NO. 9140.

SUPPLIMENT NO. _____ SUBJECT Developmental Biology

TEST/TUTORIAL NO. _____

1. The apical cell Theory was proposed by Nageli in 1858.
2. According to histogen theory the apical meristem of growing region of the stem and root is differentiated into three pleurone, periblem and Ground Meristem.
protoderm, procambium.
3. According to Tunica corpus Theory Apical Meristem of Shoot Apex consist of two zones Tunica & corpus.
4. According to Quiscent center concept there is an only root apex called quiscent center in many roots.
5. In Kooper-Kooper theory the sequence of divisions are called T-center.
6. is a type of asexual reproduction in which there is no fusion of male & female gamate & still vivabal embryo is form within the embryo sac.



Signature of Supervisor _____

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- शिक्षणमहर्षि पुण्य द. भायली सायबो

07/15
Shri Swami Vivekanand Shikshan Sanstha Kolhapur's
VIVEKANAND COLLEGE, KOLHAPUR

Bsc I
CLASS Biotech Entire DIV. ROLL NO. 9248

SUPPLIMENT NO. SUBJECT Development Biology

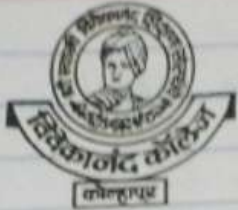
TEST/TUTORIAL NO.

- 1) The Apical cell theory was proposed by Nagelf 1858. ✓
- 2) According to histogen theory the apical meristem of growing region of the stem and Root is differentiated into three
① Dermatogen
② pleome
③ periblem
OX
- 3) According to tunica-carpous theory meristem of shoot apex consist of two zones tunica & carpous.
OX
- 4) According to Queient centre concept there is an Inactive centre (reservoir) called Queient centre in many root. ✓
- 5) In Kope - Kope theory the sequence of Division are called Transvers longitudinal daughter cell T shaped. ✓
- 6) Apomixis is a type of asexual reproduction in which there is no fusion of male & female gamete and still viable embryo is formed within the embryo sac. ✓

06
15

Signature of Supervisor

" ज्ञान, विज्ञान आणि सुसंस्कार यांचाही शिक्षण प्रसार " - शिक्षणमहर्षी व. पु. डॉ. बापूजी साठुंबे



Shri Swami Vivekanand Shikshan Sanstha's VIVEKANAND COLLEGE, KOLHAPUR

Class B.Sc. Biotech. Entire Div IYRoll No. 9148

Suppliment No. _____

Subject Developmental Biology

Test / Tutorial No. _____

Q.1. The apical cell theory was proposed by Nagelli in 1858.

1. According to histogen theory the apical meristem of growing region of the stem and root is differentiated into ~~3~~ three

3. According to tunica carpous theory meristem of shoot apex consist of two zones tunica & carpous.

4. According quiscent centre concept there is an axillary called quiscent centre in many roots.

5. In corpe-kappe theory the sequence of division are axillary called

6. Apomixis is a type of asexual reproduction in which there is no fusion of male & female gamete & still viable embryo is formed within the embryo sac.

7. Apospory is also called as somatic apospory.

8. The term self incompatibility was coined by STOUT.

Vaishnavi U. Savardekar.
Roll no. 9237

05
10

Internal examination in immunology

B.Sc II biotechnology Entire

Q-1. Fill in the blanks.

1. ~~OX~~ Racial is a total or relative resistance shown by all members of species to a pathogen.

2. Immunity acquired by an individual by receiving sensitized white blood cells from donor called as Acquired ^{immunity} passive (Artificial)

3. Inflammation is an important non-specific defense reaction to the tissue injury caused by pathogen.

4. The bacterial flora of the host body produces various antimicrobial substances such as Colicin.

5. The cells formed from fusion of many no. of macrophages are called as Monoleucocytes.

6. T cytotoxic cell carry CD⁸⁺ cell surface marker.

7. ~~OX~~ lymphoid lineage produces phagocytes and other cells.

8. Outer area of lymph node i.e. cortex contains B cells.

9. Red pulp of spleen corresponds to Cortex of lymph node.

10. On contact with an appropriate antigen the mature B cell undergoes immunocompetence.

Name - Aniket Balasaheb Kadam
Roll no. 9215

Immunology
B.Sc. Biotech (Entire) II

Internal examination in immunology

B.Sc II biotechnology Entire

Q.1. Fill in the blanks.

- 27/10
1. Species immunity is a total or relative resistance shown by all members of species to a pathogen.
 2. Immunity acquired by an individual by receiving sensitized white blood cells from donor called as Passive immunity.
 3. Inflammation is an important non-specific defense reaction to the tissue injury caused by pathogen.
 4. The bacterial flora of the host body produces various antimicrobial substances such as colicine.
 5. The cells formed from fusion of many no. of macrophages are called as Giant cells.
 6. T cytotoxic cell carry CD8 cell surface marker.
 7. Myeloid lineage produces phagocytes and other cells.
 8. Outer area of lymph node i.e. cortex contains B cells.
 9. Red pulp of spleen corresponds to Cortex of lymph node.
 10. On contact with an appropriate antigen the mature B cell undergoes
- OK
- OK

07
10

Advances in Cell Biology

Name: Medinee P. Shah

BSC Biotech Entire SY

Roll no. 9238

Cell-biology

- Q1. Disulphide bond formation is facilitated by disulphide isomerase protein in ER lumen. ✓
- Q2. COP-2 vesicles involve in transportation of protein from Golgi Apparatus to ER. ✗
- Q3. Translation^{ca} of protein into the ER during their synthesis on membrane-bound ribosome is called as co-translational translocation. ✓
- Q4. separase enzyme is involved in cleavage of cohesin. ✓
- Q5. CDK-4 and CDK-6 bind to D cyclin. ✓
- Q6. Rb protein most commonly binds to mostly E2F transcription factor. ✓
- Q7. BAX protein holds APAF-1 present on outer-surface of mitochondria. ✗
- Q8. During meiosis-I, homologous chromosomes exchange their genetic material by the process of synapsis formation. Recombination. ✗
- Q9. In metastasis; process neoplastic cell spread throughout the body through circulatory or lymphatic system. ✓



Shri Swami Vivekanand Shikshan Sanstha's
VIVEKANAND COLLEGE (Autonomous), KOLHAPUR

Class Biotech (entire) Div. Roll No. 9203
Name Syabira N Atharwar Subject Molecular Biology - II
Suppliment No.
Test / Tutorial No. Internal examination

7/10

- 1] Indole base plays an important role as a substituent between A & G in a wobble.
- 2] Genetic code is ^{non} ambiguous means - It means that 1 codon only codes for single amino acid
- 3] EF-Ts fact elongation factor is necessary to regenerate GTP in protein translation.
- 4] Half-feedback regulation of tryptophan operon is called as attenuation control
- 5] Give + example of UGA, AUG genetic code variation.

In its housekeeping form is required to induce lactose operon.

Camp - cap complex

C cyclic Amp - catabolically active promoter

Signature of Supervisor _____



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- शिक्षणमहर्षी प. पू. डॉ. बापूजी साबुंबुखे

**Shri Swami Vivekanand Shikshan Sanstha's
VIVEKANAND COLLEGE, KOLHAPUR**

Class BSc II Biotech Ent. Div

Roll No. 9240

Suppliment No. _____

Subject Animal tissue culture

Test / Tutorial No. Internal Examination - I

Name - Aaditya Navalkishor. Sharma

7/16
Seen

Q1)

→ Quarantine room is used to study a particular cell line or to do experiments on viruses or antigens.

Q2)

→ Ross Harrison is known as 'The Father of tissue culture.'

Q3)

→ Complete media components :-

Macronutrients

Micronutrients

Vitamins

Growth regulators

Hormones

Amino acids

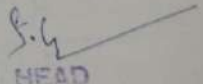
Minerals - Iron, Manganese, Calcium, etc.

Vivekanand Education Society's
VIVEKANAND COLLEGE KOLHAPUR (AUTONOMOUS)
B Sc Part III Biotechnology (Entire)

| Sr No | Roll No | Student Name | E 2021-22 | | EBT SEM IV | | Part biochem | |
|-------|---------|-----------------------------|-----------|----|------------|----|--------------|----|
| | | | CIE | CA | CIE | CA | CIE | CA |
| 1 | 9301 | *ALAVE AARYA RAJENDRA | 4 | 20 | 4 | 17 | 4 | 17 |
| 2 | 9302 | *ARAB JAKIYA ABDULMAJID | | | | | | |
| 3 | 9303 | *ATHANIKAR SABIRA NIJAM | 7 | 35 | 9 | 32 | 8 | 33 |
| 4 | 9304 | *AWALKAR ANCHAL NANDKUMAR | 6 | 33 | 5 | 24 | 6 | 30 |
| 5 | 9305 | *BEDEKAR PRANAV ANIL | | | | | | |
| 6 | 9306 | *CHAVAN PRATIKSAH ANANDA | | | | | | |
| 7 | 9307 | *CHAVAN RUTUJA RAJESH | 4 | 27 | 6 | 25 | 5 | 27 |
| 8 | 9308 | *CHIKHALE ROSHAN PRAKASH | 4 | 24 | 4 | 21 | 4 | 25 |
| 9 | 9309 | *CHOUGALE NIKITA BHARAT | 4 | 23 | 4 | 22 | 4 | 22 |
| 10 | 9310 | *CHOUGULE KSHITIJ JAGANNATH | 4 | 20 | 6 | 18 | 9 | 24 |
| 11 | 9311 | *DESHPANDE VAIBHAVI HARISH | 4 | 14 | 4 | 16 | 4 | 14 |
| 12 | 9312 | *GHORPADE PRITAM RAMESH | 5 | 14 | 4 | 14 | 4 | 14 |
| 13 | 9313 | *HAWAL ANUSHKA ANIL | | | | | | |
| 14 | 9314 | *INAMDAR VARDA RAHUL | 4 | 24 | 5 | 27 | 5 | 22 |
| 15 | 9315 | *KADAM ANIKET BALASAHEB | 04 | 31 | 06 | 35 | 04 | 26 |
| 16 | 9316 | *KAMBLE EKATA HEMANT | 7 | 31 | 4 | 32 | 4 | 28 |
| 17 | 9317 | *KAMBLE MRUNALI SHAHAJI | 4 | 23 | 4 | 16 | 4 | 23 |
| 18 | 9318 | *KHONDAL JAYRAM DNYANDEV | | | | | | |
| 19 | 9319 | *KORANE PRATIKSHA TANAJI | 6 | 28 | 4 | 15 | 4 | 17 |
| 20 | 9320 | *KOSHTI SHRIDHAR SHRIKANT | 4 | 14 | 4 | 16 | 4 | 15 |
| 21 | 9321 | *KULKARNI GAYATRI RAGHUNATH | 5 | 29 | 6 | 28 | 4 | 21 |
| 22 | 9322 | *MADHALE SHUBHAM RAVINDRA | | | | | | |
| 23 | 9323 | *MANE UTKARSHA GAJENDRA | 4 | 25 | 4 | 18 | 5 | 24 |
| 24 | 9324 | *NALAWADE SOURABH DATTATRAY | 10 | 14 | 5 | 14 | 5 | 14 |
| 25 | 9325 | *PALKAR SHARVARI MANIKSEN | 04 | 26 | 08 | 33 | 05 | 29 |
| 26 | 9326 | *PARKAR SIDDHI SUNIL | 4 | 29 | 4 | 17 | 4 | 19 |
| 27 | 9327 | *PATIL AARYA VIJAY | 6 | 14 | 4 | 14 | 4 | 17 |
| 28 | 9328 | *PATIL ANJALI RAJENDRA | 4 | 24 | 5 | 22 | 4 | 27 |
| 29 | 9329 | *PATIL AVADHOOT MOHAN | 4 | 19 | 5 | 22 | 5 | 24 |
| 30 | 9330 | *PATIL DIVYA SURESH | 7 | 24 | 4 | 24 | 4 | 26 |
| 31 | 9331 | *PATIL NAMRATA DHARMGONDA | 8 | 30 | 9 | 30 | 7 | 27 |
| 32 | 9332 | *PATIL PORNIMA YUVRAJ | 4 | 28 | 6 | 24 | 4 | 21 |
| 33 | 9333 | *PATIL RUTUJA ANANDRAO | 4 | 23 | 4 | 26 | 4 | 20 |
| 34 | 9334 | *PATIL SHWETA TANAJI | 5 | 22 | 6 | 23 | 6 | 27 |
| 35 | 9335 | *PATIL VAISHNAVI RAJENDRA | 4 | 21 | 6 | 21 | 4 | 20 |

| | | | | | | | | | | | | | | |
|----|------|--------------------------------|----|----|----|----|---|----|---|----|---|----|----|----|
| 36 | 9336 | SARNAIK PRATHAMESH KIRAN | 4 | 21 | 7 | 28 | 4 | 17 | 9 | 17 | 4 | 14 | 6 | 17 |
| 37 | 9337 | *SAVARDEKAR VAISHNAVI UMESH | 9 | 27 | 6 | 30 | 8 | 30 | 5 | 32 | 4 | 22 | 8 | 26 |
| 38 | 9338 | *SHAH MEDINEE PRASANNA | 9 | 26 | 8 | 34 | 7 | 31 | 8 | 35 | 8 | 30 | 7 | 29 |
| 39 | 9339 | SHAIKH FIRAS DILAWAR | 4 | 14 | 8 | 19 | 8 | 15 | 9 | 11 | 4 | 7 | 6 | 7 |
| 40 | 9340 | SHARMA ADITYA NAVAL KISHOR | 7 | 24 | 4 | 21 | 4 | 27 | 8 | 25 | 4 | 27 | 8 | 29 |
| 41 | 9341 | SHINDE SHUBHAM SUBHASH | 4 | 21 | 9 | 29 | 7 | 28 | 9 | 22 | 4 | 22 | 7 | 22 |
| 42 | 9342 | SHINDE SWANAND ARUN | | | | | | | | | | | | |
| 43 | 9343 | SHIRKE HARSHWARDHAN DATTATRAYA | 4 | 24 | 09 | 31 | 4 | 27 | 9 | 33 | 4 | 24 | 6 | 27 |
| 44 | 9344 | *SIDDHANAİK RADHIKA BAPU | 6 | 26 | 5 | 28 | 6 | 26 | 8 | 29 | 4 | 25 | 9 | 23 |
| 45 | 9345 | *SURVE MAITHILI VIKRANT | 10 | 32 | 6 | 25 | 8 | 27 | 6 | 34 | 7 | 24 | 10 | 19 |
| 46 | 9346 | *SUTAR SNEHA VIKAS | 4 | 16 | 6 | 22 | 6 | 21 | 8 | 25 | 5 | 21 | 7 | 21 |
| 47 | 9347 | *TAHASILDAR SANIKA SAMRAT | 4 | 16 | 4 | 14 | 4 | 16 | 4 | 21 | 4 | 14 | 7 | 18 |
| 48 | 9348 | *VARUTE ANKITA ASHWINKUMAR | 6 | 30 | 7 | 29 | 8 | 27 | 8 | 32 | 4 | 26 | 10 | 30 |
| 49 | 9349 | *WADAKAR SHREYA SUNIL | 5 | 27 | 4 | 28 | 4 | 25 | 4 | 22 | 6 | 18 | 8 | 28 |
| 50 | 9350 | *WADEYAR MADHUMITA MALHARI | 4 | 25 | 4 | 22 | 5 | 22 | 4 | 18 | 4 | 16 | 6 | 24 |
| 51 | 9351 | *ZAPATE SHWETA SHEKHAR | | | | | | | | | | | | |
| 52 | 9352 | *KHAMKAR SKASHTA | | | | | | | | | | | | |




 HEAD
 DEPARTMENT OF PEDAGOGY (ENTIRE)
 VIVEKANAND COLLEGE, SOLAPUR
 (EMPOWERED AUTONOMOUS)



" ज्ञान, विज्ञान आणि सुसंस्कार वांछाटी शिक्षण प्रसार "

- शिक्षणमहर्षी प. यू. डॉ. बापूजी साबुळे

Shri Swami Vivekanand Shikshan Sanstha's VIVEKANAND COLLEGE, KOLHAPUR

Class Bsc. III Div Biotech Entire Roll No. 9319

Suppliment No. _____ Subject Application of Biotechnology in health

Test / Tutorial No. Internal exam - 1 7/11

① Vaccine :- Vaccine is in which pathogenic organism is used which lost their pathogenicity to cause disease.

Ex:- Attenuated vaccine, subunit vaccine.

②

② Among DNA & recombinant vaccine recombinant vaccine is preferred

bcz it is harmless

and it is made up of 3 or more organs [which lost their virulent capacity]

- It is useful for more than 2 disease.

③

Size of Hepatitis B virus - 42nm.

④

Attenuated vaccine Advantages:-

In this vaccine half killed org^m is used which lost their virulence capacity.

⑤

2 peptides :-