

“Dissemination of Education for Knowledge, Science and Culture”

- Shikshanmaharshi Dr. Babuji Salunkhe

Shri Swami Vivekanand Shikshan Sanstha's

Vivekanand College, Kolhapur

Department of Microbiology

Internal Exam Notice

Date- 22/12/2021

All the students of B.Sc II are hereby informed that Department of Microbiology has decided to conduct Internal assessment on 27th December 2021 at 2:00 – 3:00 pm in Room No. 64. All the Students should present on time.



M. M. M.
for
Head

Department of Microbiology,
Vivekanand College, Kolhapur

M. M. M.

Vivekanand College, Kolhapur

Department of Microbiology

B.Sc II Internal Exam (2021-2022)

Date: 27/12/2021

Question Paper

1. All the cells in a culture divide at the same time.

- a) Synchronous b) Continuous c) Normal d) None of these

2..... growth is characterized by a double growth cycle consisting of two exponential phases separated by a distinct lag phase.

- a) Synchronous b) Diauxic c) Continuous d) Normal

3. method is widely used in milk industry to determine level of contamination before pasteurization.

- a) Electronic particle counter b) Petroffs-Hausser blood counter
c) Breed d) Plate count method

4. The culture maintained in the logarithmic phase and at a constant culture density for extended periods is called..... culture

- a) Synchronous b) Continuous c) Normal d) Diauxic

5 The population in phase is termed as youthful population.

- a) Lag b) Log c) Stationary d) Death

6. Droplets present in air are larger than..... in diameter.

- a) 0.1mm b) 0.1cm c) 1mm d) 0.01mm

7. *Mycobacterium tuberculosis* spread through

- a) Droplet b) Food c) Droplet nuclei d) Milk

8. The food supplied to germ free animal is made sterile by using.....

- a) Normal air b) Steam c) Irradiation d) Hot air



9. which of the following is not suitable medium for growth of organisms.
a) Food b) Milk c) Soil d) Air
10. Dust laden with air born pathogen is.....
a) Infectious dust b) Biodust c) Contaminated dust d) Pathogenic dust
11. The cells need for NADH is fulfilled by pathway.
a) EMP b) ED c) HMP d) TCA
12. The condensation of acetyl Co. A and oxaloacetic acid is catalyzed by enzyme.
a) Isocitrate synthase b) Citrate lyase c) Citrate synthase d) Pyruvate dehydrogenase
13. The enzyme KDPG aldolase is unique to pathway.
a) HMP b) ED c) TCA d) EMP
14. The enzyme hexokinase requires as a cofactor.
a) Ca^{++} b) Thymine pyrophosphate c) Mg^{++} d) Mn^{++}
15. accepts hydrogen from malate.
a) FAD b) NAD c) NADP d) FMN
16. are used for aeration in the fermentor.
a) Sparger b) Baffles c) Steam d) None
17. is used to control the foam production.
a) Impeller b) Sparger c) Baffles d) None
18. are used for proper mixing of nutrients in the fermentor.
a) Impeller b) Sparger c) Baffles d) None
19. The capacity of pilot plant fermentor islit.
a) 100 – 500 b) 1 – 2 c) 1,00,000 d) None
20. The metabolites required for growth and multiplication are called metabolites.
a) Primary b) Secondary c) Tertiary d) Quaternary



Vivekanand College, Kolhapur

Department of Microbiology

B.Sc II Internal Exam (2021-2022)

Date: 27/12/2021

Sr.NO	Name of student	Roll Number	Signature
1	AGA SAYMA SAMIR	7191	<i>Agasayma</i>
2	MOKASHI TANJILA BASHIR	7250	<i>Mokashi</i>
3	PATIL MRUNALI ALAS MAYURI VITTHAL	7260	<i>Patil</i>
4	BAGANIKAR VAISHNAVI MAHESH	7385	<i>Baganikar</i>
5	BARDESKAR STUTI KAITAN	7386	<i>Barde</i>
6	CHOUGALE PRIYANKA SANJAY	7387	<i>Chougale</i>
7	DABHOLKAR MEGHDUT VISHNU	7388	<i>Dabholkar</i>
8	DESAI TAMANNA SULTAN	7390	<i>Desai</i>
9	GHOSALKAR MANASI SURESH	7392	<i>Ghosalkar</i>
10	MUJAWAR NAAZ NAVAJ	7393	<i>Mujawar</i>
11	KAMBLE PAVANASHWARI MALLAPPA	7394	<i>Kamble</i>
12	KAMBLE SANJIVANI NILKANTH	7395	<i>Kamble</i>
13	KASHID SHANTANU SUNIL	7396	<i>Kashid</i>
14	KOLI PRIYANKA SUNIL	7397	<i>Koli</i>
15	UBALE PRATIBHA SARDAR	7398	<i>Udale</i>
16	KUMTHEKAR KRUSHNAKANT SURENDRA	7399	<i>Kumthekar</i>
17	NALAWADE SAKSHI SUNIL		<i>Nalawade</i>
18	PADWAL KISHORI NARAYAN	7403	<i>Padwal</i>
19	PATIL MADHURA BUDDHIRAJ	7404	<i>Patil</i>
20	PATIL SHIVANI RANGRAO	7405	<i>Patil</i>
21	JADHAV NISHA SHASHIKANT	7406	<i>Jadhav</i>
22	BASARE GAYATRI PRAMOD	7408	<i>Basare</i>
23	POWAR SHITAL EKANATH	7409	<i>Powar</i>
24	POWAR SHRUTIKA SAMBHAJI	7410	<i>Powar</i>
25	KILLEDAR MANASI SHEKHAR	7411	<i>Killedar</i>
26	SHIROLKAR DIPTÉE BAJIRAO	7412	<i>Shirolkar</i>
27	TAMBOLI SAYMA RASHID	7413	<i>Tamboli</i>
28	TADWALE AAROHI ANIL	7416	<i>Tadwale</i>
29	ZUNAKE SUYASH DNYANDEV	7417	<i>Zunake</i>





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

18/20

ENYadhav

Class B.sc. II

Div. 27/12/21

Roll No. 7399

Suppliment No. Krushnakant Surendra kumttekar

Subject Microbiology

Test / Tutorial No. B.sc II Internal exam 2021-22

i) A cell in a synchronous culture divide at the same time.
✓ (a) Synchronous (b) Continuous (c) Normal (d) None of above

ii) diauxic growth is characterized by a double growth cycle consisting of two exponential phases separated by distinct lag phase.
✓ (a) Synchronous (b) diauxic (c) continuous (d) Normal.

iii) plate count method is widely used in milk industry to determine level of contamination before pasteurization.
✓ (a) Electronic particle counter (b) Petroff's - Hausser blood count (c) Breed (d) Plate count method.

iv) The culture maintained in logarithmic phase and at constant culture density for extended period called continuous culture.

v) The population in log phase is termed as youthful population.

ii) Droplets present in air are larger than 0.1 mm in diameter.
(i) 0.1 mm (ii) 1 mm (iii) 0.1 cm (iv) 0.01 mm

ii) Mycobacterium tuberculosis spread through droplet nuclei

(viii) The food supplied to germ free animals is made ~~the~~ sterile through Irradiation.

(i) Normal air (ii) steam (iii) Irradiation (iv) Hot air.

(ix) Air is not suitable medium for growth of microorganisms.

x) Dust laden with air borne pathogen is called as Infectious dust.

(i) The cells need for NADH is fulfilled by EMP pathway.

(i) EMP (ii) ED (iii) Hmp (iv) TCA

i) condensation of acetyl CoA and OAA is catalysed by citrate synthase enzyme.

ii) The enzyme - KDPG aldolase is unique to ED pathway.

iii) The enzyme hexokinase requires Mg⁺⁺ as a cofactor.

NAD accepts hydrogen from malate.

i) Sparger is used for aeration in the fermentor.

ii) Impeller is used to control foam formation.

iii) Impeller are used for proper mixing of nutrients in the fermentor.

(ix) The capacity of pilot plant fermentor is 100-500 lit.

(xx) The metabolites required for growth and multiplication
✓ are called primary metabolites.



Class BSc II

Date: 27/12/2021
Div: 18/20

18/20

(Signature)

Roll No. 7409

Suppliment No. Shital Ekanath Pawar

Subject Microbiology

Test / Tutorial No. B.Sc II Internal exam

- 1) A cell in a synchronous culture divide at same time.
- 2) Diauxic growth is characterised by a double growth cycle consisting of two exponential phases separated by distinct lag phase.
- 3) Plate Count Method is widely used in milk industry to determine level of contamination before pasteurization.
- 4) The culture maintained in logarithmic phase and at a constant culture density for extended period is called synchronous culture.
- 5) The population in log phase is termed as youthful population.
- 6) Droplets present in air are larger than 0.1 mm in diameter.
- 7) Mycobacterium tuberculosis spread through Droplet nuclei.
- 8) The food supplied to germ free animals is made sterile through Irradiation.

- 9) Air is not suitable for growth of microorganism.
- 10) Dust laden with air borne pathogen is called as Infectious dust.
- 11) The cells need for NADH is fulfilled by HMP pathway.
- 12) Condensation of acetyl.co.A and OAA is catalysed by citrate synthase enzyme.
- 13) The enzyme KDPG aldolase is unique to ED Pathway.
- 14) The enzyme hexokinase require Mg⁺⁺ as a cofactor.
- 15) NAD accepts hydrogen from malate.
- 16) Sparger is used for aeration in the fermentor.
- 17) Impellar is used to control foam formation.
- 18) Impeller are used for proper mixing of nutrients in the fermentor.
- 19) The capacity of pilot plant fermentor is 100-500 lit.
- 20) The metabolites required for growth and multiplication are called primary metabolites.



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

Class B.Sc. II Div. 27-12-2021 Roll No. 7411
Suppliment No. Manasi Shekhar Killedar Subject Microbiology
Test / Tutorial No. Internal exam 2021-22

- 1) A cell in a synchronous culture divide at the same time.
- 2) Diauxic growth is characterised by a double growth cycle consisting of two exponential phases separated by distinct lag phase.
- 3) Plate Count Method is widely used in milk industry to determine level of contamination before pasteurization.
a) electronic particle counter b) Petroff's-Hausser blood Counter
c) Breed d) Plate count method
- 4) The culture maintained in logarithmic phase & at a constant culture density for extended period is called Continuous culture.
a) Synchronous b) Continuous c) Normal d) Diauxic

5) The population in Log phase is termed as youthful population.

6) Droplets present in air are larger than 0.1mm in diameter.

7) Mycobacterium tuberculosis spread through Droplet nuclei.

✓ a) Droplet b) Food c) Droplet nuclei d) milk

8) The food supplied to germ free animal is made sterile through Irradiation.

a) Normal air b) steam c) Irradiation d) Hot air

9) Air is not suitable medium for growth of microorganism.

10) Dust laden with air born pathogen is called as Infectious dust.

11) The cell need for NADH is fulfilled by HMP pathway.

12) ✓ Condensation of acetyl CoA & OAA is catalysed by citrate synthase enzyme.

13) ✓ The enzyme KDPG aldolase is unique to ED pathway.

14) ✓ The enzyme hexokinase require Mg⁺⁺ as a Cofactor

15) ✓ NAD accepts hydrogen from malate.

16) ✓ Sparger is used for aeration in the fermentor.

17) ✗ None is used to control foam formation.

a) impeller b) sparger c) Baffles d) None.

18) ✓ impeller is used for proper mixing of nutrients

19) ✓ The capacity of pilot plant fermentor is 100-500 lit

20) ✓ The metabolites required for growth & multiplication are called primary metabolites.



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

Class B.Sc II Div 27/12/21

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Roll No. 21587416

Suppliment No. Aarshi Anil Tadwale

Subject Microbiology

Test / Tutorial No. Internal Exam 2021-22

1. ✓ A cell in a synchronous culture divide at the same time
2. ✓ Diauxic growth is characterized by a double growth cycle consisting of two exponential phases separated by distinct lag phase
3. ✓ Breed method is widely used in milk industry to determine level of contamination before pasteurization
4. ✓ The culture maintained in logarithmic phase & at a constant culture density for extended period is called continuous culture.
5. ✓ The population in log phase is termed as youthfull population.
6. ✓ Droplets present in air are larger than 0.1mm in diameter.
7. ✓ Mycobacterium tuberculosis spread through droplet nuclei
8. ✓ The food supplied to germ free animals is made sterile through Irradiation

9. ✓ Air is not suitable medium for growth of microorganisms.

10. ✓ Dust laden with air born pathogen is called as Infectious dust

11. ✗ The cells need for NADH is fulfilled by TCA pathway

12. ✓ condensation of acetyl CoA & OAA is catalysed by citrate synthetase enzyme

13. ✓ The enzyme KDPG aldolase is unique to ED pathway.

14. ✓ The enzyme hexokinase requires Mg⁺⁺ as a Cofactor

15. ✓ NAD accepts hydrogen from malate

16. ✓ sparger is used for aeration in the fermentor

17. ✗ None is used to control foam formation

18. ✗ Baffles are used for proper mixing of nutrients in fermentor

19. ✓ The capacity of pilot plant fermentor is 100-500 lit

20.

The metabolites required for growth & multiplication are called Primary metabolites.

Vivekanand College, Kolhapur

Department of Microbiology

B.Sc II Internal Exam (2021-2022)

Date: 27/12/2021

Sr.NO	Name of student	Roll Number	Marks out of 20
1	AGA SAYMA SAMIR	7191	06
2	MOKASHI TANJILA BASHIR	7250	05
3	PATIL MRUNALI ALAS MAYURI VITTHAL	7260	15
4	BAGANIKAR VAISHNAVI MAHESH	7385	09
5	BARDESKAR STUTI KAITAN	7386	15
6	CHOUGALE PRIYANKA SANJAY	7387	16
7	DABHOLKAR MEGHDUT VISHNU	7388	06
8	DESAI TAMANNA SULTAN	7390	08
9	GHOSALKAR MANASI SURESH	7392	13
10	MUJAWAR NAAZ NAVAJ	7393	08
11	KAMBLE PAVANASHWARI MALLAPPA	7394	13
12	KAMBLE SANJIVANI NILKANTH	7395	09
13	KASHID SHANTANU SUNIL	7396	07
14	KOLI PRIYANKA SUNIL	7397	12
15	UBALE PRATIBHA SARDAR	7398	08
16	KUMTHEKAR KRUSHNAKANT SURENDRA	7399	18
17	NALAWADE SAKSHI SUNIL		07
18	PADWAL KISHORI NARAYAN	7403	15
19	PATIL MADHURA BUDDHIRAJ	7404	12
20	PATIL SHIVANI RANGRAO	7405	08
21	JADHAV NISHA SHASHIKANT	7406	08
22	BASARE GAYATRI PRAMOD	7408	07
23	POWAR SHITAL EKANATH	7409	18
24	POWAR SHRUTIKA SAMBHAJI	7410	11
25	KILLEDAR MANASI SHEKHAR	7411	18
26	SHIROLKAR DIPTEE BAJIRAO	7412	15
27	TAMBOLI SAYMA RASHID	7413	15
28	TADWALE AAROHI ANIL	7416	17
29	ZUNAKE SUYASH DNYANDEV	7417	17



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- Shikshanmaharshi Dr. Bapuji Salunkhe

Shri Swami Vivekanand Shikshan Sanstha's

Vivekanand College, Kolhapur

Department of Microbiology

Notice

Date –15/12/2021

All the students of B.Sc.III are hereby informed that Department of Microbiology has decided to conduct Internal assessment on 21th & 22 th December 2021 .Students should present in time.

Time Table (2021-2022)

Day & Date	Time	Subject
21/12/2021	11.30 AM to 12.00 PM	Immunology & Clinical Microbiology (Paper V- Section I)
	12.00 PM to 12.30 PM	Immunology & Clinical Microbiology (Paper V-Section II)
22/12/2021	11.30 PM to 12.00 PM	Industrial Microbiology & Microbial Biochemistry(Paper – Section VI Section I)
	12.00 PM to 12.30 PM	Industrial Microbiology & Microbial Biochemistry(Paper – Section VI Section II)



Vivekanand College, kolhapur

Department of Microbiology

B. Sc.III Internal Exam (2021-2022)

Subject- Immunology (Section I)

Time -11.30AM-12.00PM

Date-21/12/2021

Question Paper

Q. Choose the correct alternative & rewrite the sentence

1. The chaperon is associated with free class Ig α chain facilitate its folding and release after binding to β macroglobin is.....

- a.Calmexein b.Calreticulin c.Tapasin. d.Ubiquitin

2. NK cells do nots

- a.Contain perforins. b.have receptor that recognize MHC molecule
c Generate memory response d.Respond to virus infection.

3. Which of the following subunits have 3 ITAM domains

- a.gamma b.delta c.epsilon d.zeta

4. Which of the following act as a co receptor for B cell activation.

- a.GD-28 b.IgA c.CD 19 d.IL-2

5.T cell receptor is a hetrodimer which consist of..... chain

- a. α , β chain b.Y, δ chain c.both of above d.None of the above

6.B cell receptor are made up of.....

- a side chains b.Ig α and Ig β c.Protein & lipid complex d. Inhibitory and activating receptor.

7.TCR is expressed on T cell surface along with the signaling complex.

- a.CD3 b.CD4 c.CD8 d.CD9

8. On the surface of TH cell is present along with TCR

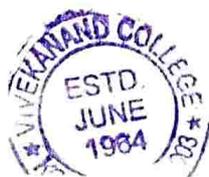
- a.CD3 b.CD4. c.CD8 d.CD9

9.Inhibitory and activating receptors are present on.....

- a.T cell b.B cell. c. NK cell d.Macrophage.

10. Phospholipid antigen are identified by TCR containing..... chains.

- a. α , β b.Y, δ c.epsilon, zeta d. epsilon, delta.



Vivekanand College, Kolhapur
Department of Microbiology
B.Sc III Internal Exam (2021-2022)

Subject –Clinical Microbiology (Section II)

Time-12.00-12.30 p.m

Date: 21/12/2021

Question Paper

Q. Choose the correct alternative & rewrite the sentence.

1. produced by Clostridium perfringens is responsible for food poisoning.
a. Beta b. Epsilon c. Alpha d. Iota
2. of the following is a virulent strain of Treponema pallidum.
a. Reiters strain b. Nichol's strain c. Kazan strain d. Noguchi strain
3. In type of leprosy, high CMI is observed.
a. Lepromatous b. Indeterminate c. Dimorphous d. Tuberculoid
4. In multibacillary leprosy, minimum organisms per lesions are observed.
a. Four b. Five c. Six d. Two
5. Hunterian chancres are observed in stage of syphilis.
a. Primary b. Secondary c. Latent d. Tertiary
6. Nagler's test is used for diagnosis of
a. Treponema pallidum b. Mycobacterium leprae c. Clostridium perfringens d. Pseudomonas aeruginosa
7. of the following is an acid fast organism.
a. Clostridium perfringens b. Mycobacterium leprae c. Pseudomonas aeruginosa d. Treponema pallidum
8. RPR test is an example of test.
a. Agglutination b. Complement fixation c. Flocculation d. Precipitation
9. is a strictly anaerobic organism.



a. *Treponema pallidum*

b. *Mycobacterium leprae*

c. *Clostridium perfringens*

d. *Pseudomonas aeruginosa*

10. VDRL test is used for diagnosis of organism.

a. *Pseudomonas aeruginosa*

b. *Treponema pallidum*

c. *Mycobacterium leprae*

d. *Clostridium perfringens*

Vivekanand College, Kolhapur

Department of Microbiology

B.Sc III Internal Exam (2021-2022)

Subject –Industrial Microbiology (Section I)

Time-12.00-12.30 p.m

Date: 22/12/2021

Question Paper

Q.Choose the correct alternative & rewrite the sentence.

1. Some of the highly toxic metabolite like mycotoxins are produced by ____
a. Fungus b. Bacteria c. Rickettsiae d. Yeast
2. Certain strains of *Aspergillus flavus* produce ____
a. Patulin b. Roquefortine c. Aflatoxin d. Penicillanic acid
3. Staphylococcal food poisoning is caused by ingestion of heat stable ____ produced by the organisms.
a. Exotoxin b. Enterotoxin c. Cytotoxin d. Neurotoxin
4. Fresh milk contains ____ as naturally present inhibitory substances to prevent the growth of microorganisms.
a. Lacternins & anticoliform factor b. Lysosomes
c. Benzoic acid d. Furfurals
5. A highly oxidized substrate would have ____
a. Positive Eh b. Negative Eh c. Neutral Eh d. Both Eh
6. ____ acids, in addition to lowering the pH of food also actively inhibit microorganisms.
a. Mineral b. Organic c. Inorganic d. Fatty
7. The incubation period in Staphylococcal food poisoning is usually ____
a. 2-4 hrs b. 24hrs c. 1 week d. 48 hrs



8. *Streptococcus lactic* produces _____ antibiotic that inhibit lactate fermenting microorganisms.

a. Penicillin b. Nisin c. Streptomycin d. Chloramphenicol

9. Aflatoxin causes mutation in _____ gene, an important gene in preventing cell cycle progression.

a. p⁵⁴ b. p³⁵ c. p⁵³ d. p³⁸

10. In the treatment of Salmonellosis _____ antibiotic is given to patient.

a. Streptomycin b. Cephalexin c. Azithromycin d. Ampicillin



Vivekanand College, Kolhapur

Department of Microbiology

B.Sc III Internal Exam (2021-2022)

Subject – Microbial Biochemistry (Section II)

Time-12.30-1.00 p.m

Date: 22/12/2021

Question Paper

2. Choose the correct alternative & rewrite the sentence.

1. _____ is essential for bioluminescence in bacteria.

- a. Acetate b. Aldehyde c. Amino acid d. Alkali

2. Cooperative binding of substrate is feature of _____

- a. Isozymes b. Ribozymes c. Allosteric enzymes d. Nanoenzymes

3. _____ gene codes for luciferase enzyme.

- a. Lux b. Cry c. Leu d. Lac

4. GOGAT system is involved in _____ assimilation.

- a. Sulfur b. Carbon c. Sodium d. Nitrogen

5. _____ is the primary acceptor of CO₂ in carbon assimilation.

- a. Ribulose kinase b. Ribulose 1,5 di PO₄ carboxylase
c. Ribulose monophosphate carboxylase d. Ribulose PO₄ carboxylase

6. Aspartate transcarbamoylase is an example of _____

- a. Ribozymes b. Isozymes c. Allosteric enzymes d. Abzymes

7. $V_0 = \frac{V_{max} [S]}{K_m + [S]}$

- a. km b. [s] c. V_{max} [S] d. V_{max}

8. The term enzyme was coined by _____

a. Robert Koch b. Elie Metchnikoff c. Wilhem Kuhne d. Isozymes

9. _____ is non proteomic, organic part of enzyme.

a. Cofactor b. Coenzymes c. Prosthetic group d. Isozyme

10. Allosteric enzyme show _____ type of curve when plotted against $[S]$ v/s V_0 .

a. Sigmoidal b. Hyperbolic c. Parabolic d. Closed curve



Vivekanand College, Kolhapur

Department of Microbiology

B.Sc III (2021-2022)

Internal Exam (Paper V) ~~VI~~

Date : 21/12/2021

Sr. No	Name of student	Signature
1	BAGADE KARINA SURAJ 04	<i>Karina</i>
2	BALUGADE SIDDHI ANANDA 04	<i>Siddhi</i>
3	BANAGE ANAGHA AVINASH 08	<i>A</i>
4	BANDIVADEKAR PRASAD ASHOK 05	<i>PAB</i>
5	BARAPATRE YASH SANDESH 07	<i>Yash</i>
6	DATAR PRANAV SHRIRAM 07	<i>Pranav</i>
7	DAVANG SHRADDHA ADINATH 08	<i>Shraddha</i>
8	DIXIT SUJATA RAMASHISH 09	<i>Sujata</i>
9	GHADAGE VAISHNAVI VINAYAK 03 07	<i>Vinayak</i>
10	GHADGE VAISHNAV DHARMARAJ 03	<i>Dharmaraj</i>
11	JADHAV ADITI AJAY 08	<i>Aditi</i>
12	JADHAV VINAYA MOHAN 08	<i>Vinaya</i>
13	KAMBLE SHIRISH SANJAY 03	<i>Shirish</i>
14	KATALE MAYUR MANOHAR 05	<i>Manohar</i>
15	KESARWANI ROMA BARAMDIN 05	<i>Roma</i>
16	KHOT ASHWINI SHIVAJI 09	<i>Ashwini</i>
17	KULKARNI DIVYA ASHOK 06	<i>Divya</i>
18	MAHADIK RUCHITA PRASHANT 05	<i>Ruchita</i>
19	MANE SNEHAL DIPAK 03	<i>Snehal</i>
20	MANUVEL ROHAN RAJSHEKHAR 03	<i>Rohan</i>
21	MORE RUTH MADAN 08	<i>Ruth</i>
22	MOULAVI SHAGUFTA RIZWAN AHMAD 05	<i>Shagufta</i>
23	MULLANI SANA CHAND 09	<i>Sana</i>
24	PANGE PRATIKSHA PRABHAKAR 04	<i>Pratiksha</i>
25	PATIL SHAMITA SHITAL 06	<i>Shamita</i>
26	PATIL SHWETA SANTOSH 05	<i>Shweta</i>
27	PATIL VAISHNAVI SURESH 07	<i>Vaishnavi</i>
28	POWAR PHULABAI PRAKASH 09	<i>Phulabai</i>
29	RANAMALE POOJA BANDOPANT 08	<i>Pooja</i>
30	SAKHALKAR VEDA SUNIL 06	<i>Vedha</i>
31	SALVANKAR SIDDHI DHANANJAY 09	<i>Siddhi</i>
32	SAWANT SANIYA RAJWARDHAN 06	<i>Saniya</i>
33	SHAIKH SANIYA SHAKIL 09	<i>Saniya</i>
34	WAKRUSH'E DIVYA VITTHAL 04	<i>Divya</i>





ज्ञान, विज्ञान आणि सुरांतरकार यांसाठी शिक्षण प्रसार
- शिक्षणमहर्षी डॉ. बापूजी साखुंबे

Signature of Supervisor

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

Class B.Sc III

Div.

Roll No.

Suppliment No. ASHWINI SHIVAJI KHOR

Subject MICROBIOLOGY

Test / Tutorial No. PAPER 5 SECTION - 1 IMMUNOLOGY

i. Choose the most correct alternative from given alternative -

1) Chaperones is associated with free class Ig α chain facilitates its folding and release after binding to B2 microglobulin is Tapasin

- a) Calnexin b) Calreticulin c) Tapasin d) Ubiquitin

2) NK cells do not Generate memory response.

a) have receptor that recognise MHC molecules.

b) Contains perforins

c) Generate memory response

d) respond to virus infections

3) Which of the following subunits have 3 ITAM domains Zeta.

a) δ

b) δ

c) ϵ

d) ϵ zeta

4) Which of the following act as coreceptor for B cell activation

a) CD28

b) IL-2

c) IgA

d) CD19

5) TCR is a heterodimer which consists of c) both of the above

a) α & β chain

b) γ & δ chain

c) both of the above

d) None of the above

6) BCR are made up of b) $Ig\alpha$ & $Ig\beta$

- a) Side chains b) $Ig\alpha$ & $Ig\beta$ c) Protein & lipid complex
d) Inhibitory and activating receptors

7) TCR is expressed on T cell surface along with the a) CD_3 signalling complex.

- a) CD_3 b) CD_4 c) CD_8 d) CD_9

~~8) On the surface of T_H cells b) CD_4 is present along with TCR.~~

- a) CD_3 b) CD_4 c) CD_8 d) CD_9

~~9) Inhibitory and activating receptors are present on c) NK cells~~

- a) T cell b) B cell c) NK cell d) Macrophage

~~10) Phospholipid antigens are identified by TCR containing b) γ, δ chains.~~

- a) α, β b) γ, δ c) ϵ, ζ d) ϵ, δ

09/10 allie



"ज्ञान, विज्ञान आणि सुसंस्कार यांसाठी शिक्षण प्रसार"
- शिक्षणमहर्षी डॉ. बापूजी साबुंबे

Signature of
Supervisor

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

Class B. Sc III Div _____ Roll No. _____
Suppliment No. ASHWINI SHIVAJI KHOT Subject MICROBIOLOGY
Test / Tutorial No. PAPER 5 SECTION - II CLINICAL MICROBIOLOGY

3. c) α Toxin produced by Clostridium perfringens is responsible for food poisoning.

a) β b) ϵ c) α d) i

4. b) Nichol of the following is a virulent strain of Treponema pallidum.

a) Reiter b) Nichol c) Kazan d) Noguchi

5. In tuberculoid leprosy high LMI is observed

a) Lepromatous b) indeterminate c) Demorphous
d) Tuberculoid

6. In multibacillary leprosy minimum a) 4 organisms per lesions are observed.

a) 4 b) 5 c) 6 d) 2

7. Hunterian chancres are observed in a) Primary stage of syphilis.

a) Primary b) secondary c) latent
d) Tertiary

6. Nagler's Test is used for diagnosis of c) Clostridium perfringens

- ~~a) Treponema pallidum~~ b) Mycobacterium laprae
~~d) Clostridium perfringens~~ d) Pseudomonas aeruginosa

7. b) M. laprae of the following is an acid fast organism.

- a) Clostridium perfringens b) Mycobacterium laprae
c) Pseudomonas aeruginosa d) Treponema pallidum

8. RPR test is an example of c) Flocculation Test

- ~~a) Agglutination~~ b) complement fixation
~~d) Flocculation~~ d) Precipitation

9. c) C. perfringens is a strictly anaerobic organism.

- a) Treponema pallidum b) Mycobacterium laprae
~~d) Clostridium perfringens~~ d) Pseudomonas aeruginosa

10. VDRL test is used for diagnosis of a) T. pallidum

- ~~a) T. pallidum~~ b) M. laprae
c) C. perfringens d) P. aeruginosa



ज्ञान, विज्ञान आणि सुरसंस्कार यांसाठी शिक्षण प्रसार
- शिक्षणमहर्षी डॉ. बापूजी साळुंखे

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

Class B.Sc. III Div Roll No.

Suppliment No. Phulabai Prakash Powar Subject Microbiology

Test / Tutorial No. Paper V Sec - I - Immunology

Q.1 Choose the most correct alternative from given alternatives

1. The chaperon is associated with free class IgG chain facilitates its folding and release after binding to β -2 macroglobin is calreticulin

- a) Calnexin b) Calreticulin
c) Tapain d) Ubiquitin

2. NK cells do not

- a) have receptors that recognize MHC molecules
b) contain perforins
c) generate memory response
d) respond to virus infection
- Ans: generate memory response

3. Which of the following subunits have sITAM domains

- a) Gamma c) Epsilon
b) delta d) Zeta
- Ans = Zeta

4. Which of the following act as a co-receptor for B-cell activation.

- a) CD28 b) IL-2
c) CD19 d) CD19
- Ans = CD19

5) T-cell receptor is a heterodimer which consist of

- a) α β chain b) γ and δ chain
c) Both of the above d) None of the above

Ans : Both of the above

6) B-cell receptors are made up of Ig α and Ig β

a) Side chains b) Ig α and Ig β

c) Protein and lipid

d) inhibitory and ~~activator~~ receptor activating receptor

7) TCR is expressed on T-cell surface along with the CD3 signalling complex

a) CD3

b) CD4

c) CD8

d) CD9

8) On the surface of TH cells CD4 is present along with TCR.

a) CD3

b) CD4

c) CD8

d) CD9

9) Inhibitory and activating receptors are present on NK cell

a) T-cell

b) B-cell

c) NK cell

d) Macrophage

10) Phospholipid Antigens are identified by TCR containing γ , δ chains

a) α , β

b) γ , δ

c) ϵ , ζ (zeta)

d) ϵ , δ (delta)

10/10



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

Class B.Sc. III Div _____ Roll No. _____

Suppliment No. Phulabai Prakash Pawar Subject Microbiology

Test / Tutorial No. Paper V - Sec II - Clinical microbiology

1) alpha toxin produced by C. perfringens is responsible for ~~food poisoning~~

1) β (beta) 2) ϵ

3) δ (alpha) 4) Iota

2) Nichol of the following is a virulent strain of T. pallidum

a) Reiter

b) Nichol

c) kasan

d) Noguchi

3) Tuberculoid leprosy high CFI is observed

a) lepromatous

b) Indeterminate

c) Dimorphous

d) tuberculoid

4) In multibacillary leprosy minimum 4 organisms per lesions are observed

a) 4

b) 5

c) 6

d) 2

5) Hunterian chancre's are observed in Primary stage of syphilis

a) Primary

b) secondary

c) Latent

d) tertiary

6) Nagler's test is used for diagnosis of C. perfringens

a) T. pallidum

b) M. leprae

c) C. perfringens

d) Pseudomonas aeruginosa

7) _____ of the following is an acid fast organism

- a) C. perfringens b) ~~Mycobacterium leprae~~ c) P. aeruginosa d) T. pallidum

Ans: M. leprae (Mycobacterium leprae)

8) RPR test is an example of _____ test

- a) agglutination b) complement fixation
c) flocculation d) ~~precipitation~~

Ans: Flocculation

9) C. perfringens is a strictly anaerobic organism.

- a) T. pallidum b) M. leprae c) C. perfringens d) P. aeruginosa

Ans: C. perfringens

10) VDRL test is used for diagnosis of Treponema pallidum

- a) M. leprae b) C. perfringens c) P. aeruginosa d) T. pallidum