

NOTICE

All the teaching staff and Non-teaching staff of the department are here by inform that they should attend the meeting on date 4th August 2020 at 10.00 a.m. in Department of Physics related to Bridge course for B.Sc. I (Sem-I) year student which is scheduled on 10th August 2020 , to discuss the following agenda.

- ✓ Schedule of bridge course.
- ✓ Registration of students
- ✓ Syllabus designing
- ✓ Time-table
- ✓ Distribution of workload
- ✓ Preparation of Module as per syllabus



Dr. R. S. Meshram

Head

Department of Physics
N.H. College, Bramhapuri
Bramhapuri - 441200

SYLLABUS FOR BRIDGE COURSE PHYSICS

UNIT I

The international system of units, accuracy and precision of instruments, errors in measurement, significant figures, dimensions of physical quantities, dimensional formulae and dimensional equations.

UNIT II

Scalars and vectors, vector algebra, Work, energy-kinetic energy and potential energy, power, Waves-transverse and longitudinal waves, gravitation-acceleration due to gravity of earth, elastic properties of matter.

UNIT III

Calculation of least count, Use of Vernier Calipers, Screw Gauge, Travelling Microscope (Vernier and Circular), Use of multimeter, Color code system of resistance.

UNIT IV

Basic laws of physics, Conservation of energy, Basic laws of mechanics, Ohm's law, Basics of current, voltage, resistance.

Department of Physics


Bridge Course 2020- 21


B.Sc. Sem I

List of Students Enrolled

Sr.No.	Students Name
1	ABHINAY PUNDLIK WAKEKAR
2	AJAY LEMRAJ SURYAWANSHI
3	AKASH PRAMOD MESHRAM
4	CHETAN MOHAN RAUT
5	CHETAN SURESH KOKODE
6	DARSHANA HANAJI GAWAL
7	DEVANAND PREMDAS WANSKAR
8	DHARATI NARENDRA RAUT
9	GANESH ANANDRAO LADE
10	GAURAV HANSARAJ DODKE
11	GAURAV HARISHCHANDRA SHEBE
12	HEMANT KESHARILAL HIRAPURE
13	KALYANI GAJANAN LANDEKAR
14	KARTIK LEWAKAR NIMJE
15	KETAKI TUKARAM PARDHI
16	KUNAL DILIP MASKE
17	LINA RAVINDRA GHUTAKE
18	LOKESH RAJENDRA DHOMANE
19	LUKESH MANIK BHARDWAR
20	MAYUR GHANSHAM CHINCHEKAR
21	MINESH NAGESH DEWALKAR

22	MITALI BHAGWAN AMBONE
23	MOHIT NAMDEO GAOTURE
24	PRACHEE PRAKASH CHAHANDE
25	PRADNYA DEVENDRA MESHAM
26	PRAJWAL SURESH WANKHEDE
27	PRANJALI BHIMRAO DUDHE
28	PRIYANKA ANIL MASKE
29	PUJA RAJENDRA TARARE
30	PUNAM RAJU PANDAO
31	PUSHKAR CHETAN NAKADE
32	PUSHPAK PRAKASH SHIVARKAR
33	SHIVANI DEVIDAS TONDARE
34	TRUPTI GOPAL SHENDE
35	VAISHALI PUNDALIKRAO RAUT


Dr. R. S. Meshram
Course Co-ordinator


Head Department of Physics
Department of Physics
Neerajal Hitkarini College
Gramhapuri - 441208

Nevjabai Hitkarini College, Bramhapuri

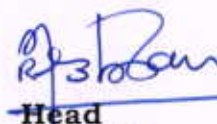
Department of Physics

Bridge Course in Physics

Time-Table (2020-21)

w.e.f. - 10/08/2020

Class	Day	Time	Faculty Name	Module
B.Sc -I Sem-I	Monday	2.00 pm. - 3.00 pm.	Prof. R. S. Meshram	Unit-II
		3.00 pm. - 4.00 pm.	Prof. D. M. Parshuramkar	Unit-III
	Tuesday	2.00 pm. - 3.00 pm.	Dr. A. N. Yerpude	Unit-II
		3.00 pm. - 4.00 pm.	Prof. D. M. Parshuramkar	Unit-III
	Wednesday	2.00 pm. - 3.00 pm.	Dr. A. N. Yerpude	Unit-I
		3.00 pm. - 4.00 pm.	Prof. R. S. Meshram	Unit-II
	Thursday	2.00 pm. - 3.00 pm.	Dr. A. N. Yerpude	Unit-I
		3.00 pm. - 4.00 pm.	Prof. R. S. Meshram	Unit-II
	Friday	2.00 pm. - 3.00 pm.	Prof. D. M. Parshuramkar	Unit-III
		3.00 pm. - 4.00 pm.	Prof. R. S. Meshram	Unit-I
	Saturday	2.00 pm. - 3.00 pm.	Prof. D. M. Parshuramkar	Unit-IV
		3.00 pm. - 4.00 pm.	Dr. A. N. Yerpude	Unit-IV



Head

Department of Physics
N. Hitkarini College, Bramhapuri
Bramhapuri - 441206

N.H.College Bramhapuri
DEPARTMENT OF ZOOLOGY
BRIDGE COURSE

SYLLABUS:

Systematics: Kingdom Protista- Salient features of Protozoa; Kingdom Animalia- Introduction to different Phyla: Porifera, Coelenterate, Platyhelminthes, Aschelminths, Annelida, Arthropoda, Mollusca, Echinodermata, Chordata.

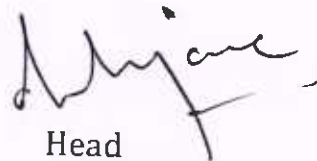
Physiology and Biochemistry: Introduction to organ systems- Digestive, Respiratory, Circulatory, Excretory, Skeletal, Muscular, Nervous, Endocrine and Reproductive system; Introduction to Biomolecules.

Genetics, Cell and Molecular Biology: Brief introduction- Mendel and his experiments, Cell Organelles, Central dogma of Molecular Biology - Replication, Transcription, Translation.

Ecology and Evolution: Brief description- Different ecosystems, origin and evolution of life.

Practical:

1. Safety, Cleanliness and hygiene of laboratory and ourselves.
2. Working and use of microscopes.
3. Demonstration of various lab instruments.
4. Demonstration of museum specimen.



Head

Department of zoology
Jayesh W. Hajare
Asst. Professor & Head
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Name: _____ Class: _____ Date: _____

N. H. College, Bramhapuri
Department of Zoology
Bridge Course Question paper
2020-21

Time: 1 Hrs.

Max. Marks:80

Note: Solve any 40 Question

Each Question carry 2 Marks

Use (✓) Mark for Correct Answer.

Que. 1. The phylogenetic system of classification was put forth by

- A) Carolus Linnaeus B) George Bentham and Joseph Dalton Hooker
C) Aristotle D) Theophrastus

Que. 2. Who proposed a five-kingdom classification and named kingdoms as Monera, Protista, Fungi, Plantae and Animalia?

- A) Herbert Copeland B) RH Whittaker
C) Carl Woese D) Carolus Linnaeus

Que.3. Monera devoid of cell wall are

- A) eubacteria B) mycoplasma
C) cyanobacteria D) actinomycetes

Que. 4. Bacteria differ from plants in that they do not have

- A) DNA B) RNA
C) Cell wall D) a well define nucleus

Que. 5. The main difference between Gram-positive and Gram-negative bacteria is in these

- A) cell membrane B) cell wall
C) ribosome D) Mitochondria

Que. 6. Extrachromosomal material of bacteria is found as

- A) Circular DNA B) Extrachromosomal DNA
C) Plasmid D) All of these

Que. 7. In bacteria, respiration occurs in

- A) Cytoplasmic membrane B) Mitochondria

C) Nuclear membrane

D) Endoplasmic reticulum

Que. 8. Flagella are absent in

A) Slime moulds

B) Diatoms

C) *Euglena*

D) Protozoans

Que. 9. Organization found in Protista is

A) Cellular level

B) Tissue level

C) Protoplasmic level

D) Organ level

Que.10. Coelom is found between

A) Ectoderm and endoderm

B) Mesoderm and ectoderm

C) Body wall and ectoderm

D) Mesoderm and endoderm

Que. 11. Which of the following has biradial symmetry?

A) *Paramecium*

B) Jellyfish

C) Cockroach

D) Sea anemone

Que. 12. Which of the following group is deuterostome?

A) Annelida, Mollusca, Chordata

B) Annelida, Arthropoda, Mollusca

C) Arthropoda, Mollusca, Echinodermata

D) Echinodermata, Hemichordata, Chordata

Que. 13. Canal system of Porifera is not concerned with

A) Respiration

B) Nutrition

C) Sexual reproduction

D) None of these

Que. 14. Tissue level of organization is found in

A) Porifera

B) Coelenterate

C) Annelida

D) Vertebrata

Que. 15. Nematocyst are present in

A) Cnidaria

B) Flatworms

C) Nematodes

D) Sponges

Que.16. Adult *Wuchereriabancrofti* attacks

A) Nervous system

B) Lymph vessels

C) Muscular system

D) Blood vessels

Que. 17. Which one is hermaphrodite?

A) *Ascaris*

B) *Trichuris*

C) *Megascolex*

D) *Enterobius*

Que. 18. The arthropods exoskeleton is composed of

- A) Several kinds of polysaccharides B) Layers of Proteins and polysaccharides called chitin
C) Several kind of proteins D) Single complex protein called arthropodin

Que. 19. Which of the following pigments is present in the blood of Arthropods?

- A) Chlorophyll B) Haemoglobin
C) Hemocyanin D) All of these

Que. 20. Phylum-Mollusca can be distinguished from other invertebrates by the presence of

- A) Bilateral symmetry and exoskeleton B) A mantle and gills
C) Shell and non-segmented body D) A mantle and non-segmented body

Que. 21. The nature of exoskeleton in Echinodermata is

- A) Silicious B) Tunicin
C) Calcareous D) Chitinous

Que. 22. The lining of intestine and kidneys in human is

- A) Keratinised B) Brush border
C) Ciliated D) None of these

Que. 23. Which of the following cells are round and biconcave in shape?

- A) White blood cells B) Red blood cells
C) Nerve cells D) Mesophyll cells

Que. 24. The vitamin, which is essential for blood clotting is

- A) Vitamin-A B) Vitamin-B
C) Vitamin-C D) Vitamin-K

Que. 25. Which are the longest cells in human body?

- A) Muscles cells of legs B) Bone cells
C) Nerve cells D) None of these

Que. 26. Coelom in Cockroach is

- A) Enterocoel B) Schizocoel
C) Pseudocoel D) Advanced coel

Que. 27. How many lens systems are present in a compound microscope?

- A) One B) Two
C) Three D) Four

Que. 28. Which one of the following organisms is not an example of eukaryotic cells?

A) *Escherichia coli*

B) *Euglena viridis*

C) *Amoeba proteus*

D) *Paramecium caudatum*

Que.29. The number of hydrogen bonds between adenine and thymine is

A) Two

B) Three

C) Four

D) Eight

Que. 30. Which form of RNA has a structure resembling clover leaf?

A) rRNA

B) hnRNA

C) mRNA

D) tRNA

Que. 31. DNA replication includes

A) DNA ligase

B) DNA polymerase and ligase

C) RNA polymerase

D) All of the above

Que. 32. Which enzymes joins DNA fragments?

A) DNA ligase

B) DNA polymerase

C) DNA gyrase

D) Topoisomerase

Que. 33. Balbiani rings of polytene chromosomes are the site of

A) RNA synthesis

B) DNA synthesis

C) DNA replication

D) Protein synthesis

Que. 34. In which stage of mitosis chromosomes arrange on equatorial plate?

A) Prophase

B) Metaphase

C) Anaphase

D) Telophase

Que. 35. Holoenzyme is

A) Non-protein and apoenzyme

B) Protein and apoenzyme

C) Enzyme protein and coenzyme

D) Enzyme non-protein and coenzyme

Que. 36. Which one is amino acid?

A) Pepsin

B) Proline

C) Cysteine

D) Renin

Que. 37. Which one of the following statements regarding enzyme inhibition is correct?

A) Competitive inhibition is seen, when a substrate competes with an enzyme for binding to an inhibitor protein.

B) Competitive inhibition is seen, when a substrate and the inhibitor compete for the active site on the enzyme.

C) Non-Competitive inhibition of an enzyme can be overcome by adding large amount of substrate.

D) Non-Competitive inhibitors often bind to the enzyme irreversibly.

Que. 38. The simplest amino acid is

A) Glycine

B) Lysine

C) Tyrosine

D) Aspartic acid

Que. 39. Number of ATP molecules produced by each NADPH is

A) Three

B) Two

C) One

D) Five

Que. 40. Which one is true for ATP?

A) ATP is prosthetic part of an enzyme

B) ATP is an enzyme

C) ATP is organic ion of enzyme

D) ATP is a coenzyme

Que. 41. In human body, the role of bile salts in digestion is to

A) Act as coenzymes during the digestion of carbohydrates

B) Emulsify fat and facilitate their absorption

C) aid in the break-up of proteins into amino acids and their absorption

D) Stimulate the pancreas to release its enzymes.

Que. 42. The pH of the digestive juices within the human small intestine is between 7.5 and 8.5. This environment is slightly

A) Basic

B) Acidic

C) Neutral

D) None of these

Que. 43. Pacemaker is

A) Instrument for measuring heart beat

B) Instrument for measuring pulse rate

C) AV node that provides impulse for heart beat

D) Sinu-auricular node that provides impulse for heart beat

Que. 44. The reabsorption of water in the kidney is under the control of

A) LH

B) ADH

C) STH

D) ACTH

Que. 45. Facultative reabsorption of water occurs in

- A) Kidney
- B) Ascending loop of Henle
- C) Collecting duct
- D) All of the above

Que. 46. Pectoral girdle constitutes

- A) Scapula and clavicle
- B) Radius and ulna
- C) Ilium and Ischium
- D) Maxilla and mandible

Que. 47. Sigmoid notch is present in

- A) Femur
- B) Radius-Ulna
- C) Tibio-fibula
- D) Humerus

Que. 48. Rod cells and Cone cells are present in

- A) Iris
- B) Cornea
- C) Sclerotic
- D) Retina

Que. 49. The roof of cerebrum is

- A) Centrocoel
- B) Pallium
- C) Arbor vitae
- D) Third ventricle

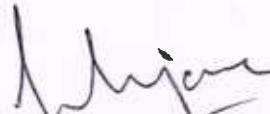
Que. 50. Gustatoreceptors are

- A) Rod cells of eyes
- B) Taste buds of tongue
- C) Epithelium of skin
- D) Cone cells of eyes

Answer key

Question Number	Answer
1	D
2	B
3	B
4	D
5	B
6	D
7	A
8	B
9	A
10	D
11	D
12	D
13	C
14	B
15	A
16	B
17	C
18	B
19	C
20	D
21	C
22	B
23	B
24	D
25	C
26	B
27	B
28	A
29	A
30	D
31	D
32	A
33	A
34	B
35	C
36	C
37	B
38	A
39	C
40	A
41	B

42	A
43	D
44	B
45	C
46	A
47	B
48	D
49	B
50	B


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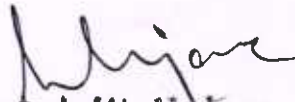
Department of Zoology

Bridge Course

Theory Marks 2020-21

SN-	Name of Students	Marks (Out of 80)
1	CHETAN RAMKRUSHNA SHIURKAR	55
2	CHETANSAHIL NANDKISHOR BURADE	60
3	DHANASHRI SANJAY RAUT	70
4	DIKSHA MANGESH DENG	55
5	DURGABAI KALIDAS ZODE	65
6	GAYTRI SUMRAN KARSAL	65
7	HARSHADA RAJKUMAR HARDE	60
8	ISHAN KHEMRAJ BORKAR	60
9	JIDNYASHA RAMESH BAWANTHADE	70
10	JIVIT RAJENDRAKUMAR MAHAJAN	55
11	KAJAL DEORAW KUMRE	70
12	KARTIK GOPAL MARAPE	55
13	LILESHWARI SHRIPRABHU DANE	70
14	MANISHA DHANRAJ THAKARE	65
15	MAYUR MILIND FULZELE	60
16	PUNIT ASHOK DHOTE	70
17	RAHUL NANDKISHOR THUTE	70
18	RASHMI RAMESH MEHER	65
19	RINA DILIP KUMBHARE	70
20	RINA DADAJI GADWAR	70
21	RIYA JANARDHAN MULMULE	65
22	ROHIT RAJU SAWSAKADE	70
23	ROSHAN NAJUK RAMTEKE	60
24	SAINATH CHAITU NAROTI	55
25	SAKSHI BHANUDAS BORKAR	65
26	SALONI CHANDRASHEKHAR	70
27	MOHURLE SAMIKSHA HEMANT DANGE	55

SN	Name of Students	Marks (Out of 80)
28	SHIWANI DILIP PRADHAN	65
29	SHRAVANI SAMBASHIO ZURMURE	72
30	SHREYASH DILIP THAKARE	66
31	HIWARE GAYATRI ISHWARRAO	68
32	JHAGARAH DEVDAS SAMBHURAM	53
33	JIRITKHAN SEJAL DINESH	55
34	KALSARPE KARINA DHULIDAS	66
35	KAMBLE TEJAS BHAURAO	69
36	KARHADE SAKSHI HATEEM	57
37	KHARKATE SAKSHI PREMDAS	58
38	KHARKATE MEGHA MADAN	68
39	ACHAL UDDHAO WAGHADE	65
40	ACHAL RAHUL CHAHANDE	54
41	ACHAL RASHMAN KORDE	63
42	AISHWARYA DIGAMBAR BANKAR	60
43	AMISHA DULARAM BOGA	67
44	ANJALI DINESH NAKTODE	60


Jayesh W. Hare
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Department of Zoology

Bridge Course

Practical Marks 2020-21

SN	Name of Students	Marks (Out of 20)
1	CHETAN RAMKRUSHNA SHIURKAR	17
2	CHETANSAHIL NANDKISHOR BURADE	18
3	DHANASHRI SANJAY RAUT	20
4	DIKSHA MANGESH DENG	17
5	DURGABAI KALIDAS ZODE	19
6	GAYTRI SUMRAN KARSAL	18
7	HARSHADA RAJKUMAR HARDE	17
8	ISHAN KHEMRAJ BORKAR	18
9	JIDNYASHA RAMESH BAWANTHADE	20
10	JIVIT RAJENDRAKUMAR MAHAJAN	17
11	KAJAL DEORAW KUMRE	20
12	KARTIK GOPAL MARAPE	17
13	LILESHWARI SHRIPRABHU DANE	20
14	MANISHA DHANRAJ THAKARE	18
15	MAYUR MILIND FULZELE	17
16	PUNIT ASHOK DHOTE	19
17	RAHUL NANDKISHOR THUTE	20
18	RASHMI RAMESH MEHER	18
19	RINA DILIP KUMBHARE	20
20	RINA DADAJI GADWAR	20
21	RIYA JANARDHAN MULMULE	17
22	ROHIT RAJU SAWSAKADE	20
23	ROSHAN NAJUK RAMTEKE	18
24	SAINATH CHAITU NAROTI	17
25	SAKSHI BHANUDAS BORKAR	18
26	SALONI CHANDRASHEKHAR	20
27	MOHURLE SAMIKSHA HEMANT DANGE	17

SN	Name of Students	Marks (Out of 20)
28	SHIWANI DILIP PRADHAN	18
29	SHRAVANI SAMBASHIO ZURMURE	19
30	SHREYASH DILIP THAKARE	20
31	HIWARE GAYATRI ISHWARRAO	15
32	JHAGARAHA DEVDAS SAMBHURAM	17
33	JIRITKHAN SEJAL DINESH	18
34	KALSARPE KARINA DHULIDAS	17
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42	AISHWARYA DIGAMBAR BANKAR	17
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44	ANJALI DINESH NAKTODE	16

N. H. College, Bramhapuri

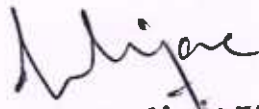
Department of Zoology

Bridge Course

Result 2020-21

SN	Name of Students	Marks (Out of 100)	Grade
1	CHETAN RAMKRUSHNA SHIURKAR	72	A
2	CHETANSAHIL NANDKISHOR BURADE	78	O
3	DHANASHRI SANJAY RAUT	90	O
4	DIKSHA MANGESH DENGE	70	A
5	DURGABAI KALIDAS ZODE	84	O
6	GAYTRI SUMRAN KARSAL	83	O
7	HARSHADA RAJKUMAR HARDE	77	O
8	ISHAN KHEMRAJ BORKAR	78	O
9	JIDNYASHA RAMESH BAWANTHADE	90	O
10	JIVIT RAJENDRAKUMAR MAHAJAN	72	A
11	KAJAL DEORAW KUMRE	90	O
12	KARTIK GOPAL MARAPE	72	A
13	LILESHWARI SHRIPRABHU DANE	90	O
14	MANISHA DHANRAJ THAKARE	83	O
15	MAYUR MILIND FULZELE	77	O
16	PUNIT ASHOK DHOTE	89	O
17	RAHUL NANDKISHOR THUTE	90	O
18	RASHMI RAMESH MEHER	83	O
19	RINA DILIP KUMBHARE	90	O
20	RINA DADAJI GADWAR	90	O
21	RIYA JANARDHAN MULMULE	82	O
22	ROHIT RAJU SAWSAKADE	90	O
23	ROSHAN NAJUK RAMTEKE	78	O
24	SAINATH CHAITU NAROTI	72	A
25	SAKSHI BHANUDAS BORKAR	83	O
26	SALONI CHANDRASHEKHAR	90	O
27	MOHURLE SAMIKSHA HEMANT DANGE	72	A

SN	Name of Students	Marks (Out of 100)	Grade
28	SHIWANI DILIP PRADHAN	83	O
29	SHRAVANI SAMBASHIO ZURMURE	91	O
30	SHREYASH DILIP THAKARE	86	O
31	HIWARE GAYATRI ISHWARRAO	83	O
32	JHAGARAHHA DEVDAS SAMBHURAM	70	A
33	JIRITKHAN SEJAL DINESH	73	A
34	KALSARPE KARINA DHULIDAS	83	O
35	KAMBLE TEJAS BHAURAO	87	O
36	KARHADE SAKSHI HATEEM	74	A
37	KHARKATE SAKSHI PREMDAS	74	A
38	KHARKATE MEGHA MADAN	87	O
39	ACHAL UDDHAO WAGHADE	82	O
40	ACHAL RAHUL CHAHANDE	72	A
41	ACHAL RASHMAN KORDE	79	O
42	AISHWARYA DIGAMBAR BANKAR	77	O
43	AMISHA DULARAM BOGA	85	O
44	ANJALI DINESH NAKTODE	76	O


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