Letter No. : 1760 /VDHSS/2021   Date : 22.12.2021

NOTICE

It is for the information of +2 2nd year students of Arts/Commerce/Science that the 3rd Quarter-End Examination - 2022 is going to be held according to the following schedule. All the +2 2nd year students are advised to take note of the schedule and attend the examinations strictly according to the schedule. They must come to the college with their valid Identity Cards, proper uniform and must maintain the S.O.P. Covid-19 protocol.

3RD QUARTER END THEORY EXAMINATION SCHEDULE						
DATE AND DAY	**Science**		**Arts**		**Commerce**	
Time	08.00 AM to 08.45 AM	08.45 AM to 09.30 AM	10.00 AM to 10.45 AM	10.45 AM to 11.30 AM	12.00 Noon to12.45 PM	12.45 PM to 01.30 PM
06.01.2022 (Thursday)	English	MIL(Odia)	English	MIL(Odia)	English	MIL(Odia)
07.01.2022 (Friday)	Physics	Chemistry	Political Science	Economics	BSM	BMS
08.01.2022 (Saturday)	Mathematics	Biology	History	Logic	CAC	ACT
10.01.2022 (Monday)	Statistics	Multi-Skill / T & H (Science/Arts / Commerce)	Sociology	Optional (Odia)	MIL(Hindi), MIL(AE), MIL(Sanskrit) ,MIL(Telugu) (Science/ Arts/ Commerce)	

PRACTICAL/PROJECT EXAMINATION SCHEDULE: 23.12.2021 TO 05.01.2022

➢ Practical/Project Examinations of **Science and Arts streams** (including vocational subjects) shall be conducted in their respective practical classes between 23rd Dec.-2021 and 5th Jan 2022.

➢ Students of **Commerce stream** must submit their project reports on or before 5th Jan 2022 to the respective subject teachers.

The pattern of Question and mark distribution in Theory paper of 3rd Quarter-End Examinations shall be as below:

The Pattern of Question in Theory Paper (for all streams)

Time Allowed - 45 minutes,   Full Marks-20

A. Six very short Questions (All compulsory) (Multiple choice Type/Fill in the blanks/ one word answer/ one sentence answer type)   6x1=6 marks

B. Three short questions to be answered out of Four given requiring not more than 4 minutes to answer each   3x2=6 marks

C. Two questions to be answered out of three given requiring not more than 8 minutes to answer each
                    2x4=8 marks

Practical Examination Pattern (for Science stream)

Time Allowed – 2 hours   Full Marks-10

A. Experiment – 6 marks

B. Viva Voce - 2 marks

C. Record – 2 marks

Project Examination Pattern (for Commerce stream)

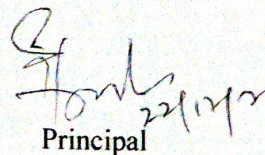Full Marks-10

A. Project Report – 10 marks

B. **Project Report should be handwritten and must be within 2 pages**

Project Examination Pattern (for Vocational subjects)

Full Marks-10

A. Project Report – 07 marks

B. Viva Voce – 03 marks

C. Project Report should be handwritten and must be within 06 pages

The syllabus for different subjects of different streams are given below.

Principal

Vikram Deb Higher Secondary School

Compulsory English

Syllabus for +2 2nd Year 3rd Quarter-End Examination

Full Marks — 20
Time — 45 mins

(1) <u>Section-A</u> (6×1 = 6 Marks)

Topic —— Phrasal Verbs

(2) <u>Section-B</u> (3×2 = 6 Marks)

Topics —— (i) The Portrait of a Lady ⎫
(ii) A Psalm of Life ⎭ Book-I

(3) <u>Section-C</u> (2×4 = 8 Marks)

Topics —— (i) Stay Hungry. Stay Foolish (Book-II)

(ii) News Reporting ⎫
(iii) Short Essay Writing ⎬ Book-III
(within 120 words) ⎭

Subodh
06/12/21   06.12.2021

Alternative English (Arts/Science/Commerce)
Syllabus for +2 2nd Year 3rd Quarter-End Examination

Full Marks—20
Time—45 mins

(1) **Section-A** (6×1=6 Marks)

Topics —
(i) Revision of Prepositions and Phrasal Verbs
(ii) Linking Devices

(2) **Section-B** (3×2=6 Marks)

Topics —
(i) Our Environment
(ii) The World of Business
(iii) The Goat Paths

(3) **Section-C** (2×4=8 Marks)

Topics —
(i) The Tree
(ii) The Hour of Truth
(iii) Dialogue Writing
(iv) Brochure Writing

6/12/2021

Sribandhu
06-12-2021

+2 2nd yr Science MIL(O)
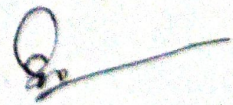
<u>I-Unit</u>

① ଶ୍ରୀଗୁରୁଙ୍କ କର୍ମାଭିନବ

<u>II Unit</u>

① ବଢ଼ପଣ

<u>III Unit</u>

① 'ଆକାଶ କହିଃ'

<u>IV Unit</u>

① ଚେରପୁ କାମ୍ପ

(ଖ) ଜାତୀୟ ଅର୍ଥବୋଧକ ଶବ୍ଦ

(ଗ) ବହୁବ୍ରୀ

Mathematics
Syllabus for 3rd quarter end exam.

+2 2nd year Science.

1. Integration
   → By partial fraction & by parts.
   → Evaluation of simple integrals of the different types.

   → Application of the integrals.

2. Matrices And Determinants.

Botany

→ Unit I

Reproduction in plants :-
→ Development of Monocot & Dicot Embryo
→ Development of fruit and seed with its significance
→ Special types of fertilization

→ Unit III

→ Biofortification
→ Microbes in human welfare.

→ Unit V

→ Biodiversity and its conservation
→ Organism and Environment.

PRACTICAL

1. Pedalogy
(pH & Moisture content & Water holding capacity.)

PRACTICAL

2. Study of effect of photosynthesis on wavelength of light and dissolved CO_2.

3. Spotting
4. Study of effect of transpiration by Farmer's Potometer

2/12/21

Zoology (Theory)

1) Unit-I-b(ii)
Reproductive health

2) Unit-III (a.)
Health and diseases (human)

3) Unit-IV (b)
Application of biotechnology in Health and Agriculture

PRACTICAL ZOOLOGY

1. All experiments.
(i) To test the action of salivary amylase on starch
(ii) To test the presence of urea/sugar in given sample solution
(iii) To determine the pH of water samples.

02/12/21   02/12/2021.

Syllabus for 3rd Quarter-End Examination-2021

Subject : Statistics

Class : +2 Second year Science

Theory Syllabus

Unit-IV TIME SERIES: Definition, uses and components of Time Series, Measurement of trend: Freehand Semi Average. Moving Average and Least Squares Method

Unit-V INDEX NUMBERS: Need meaning and uses of Index Numbers, Important steps in the construction of index number. Problems in the selection of items. Idea of base year and Current Year. Average System of Weighing. Weighted index number: Laspeyre's, Paasche's and Fisher's ideal index numbers. Unit. Time Reversal, Factor Reversal and Circular Tests. Base shifting ,splicing and deflating of index numbers.

Practical Syllabus :

Computation of index numbers by weighted average of price relatives: Laspeyre's Paasche's and Fisher's Formula

Sri P K Sahu

PHYSICS

Unit- II Current Electricity:

Electric current, drift velocity, mobility and their relation with electric current, Ohm's law, electrical resistance, conductance, resistivity, conductivity, effect of temperature on resistance, V – I characteristics (linear and non-linear), electrical energy and power. EMF and potential difference, internal resistance of a cell, combination of cells in series and parallel, Kirchhoff's laws and simple applications. Wheatstone bridge and Meter Bridge. Potentiometer-Principle and its applications to measure potential difference and for comparing EMF of two cells; measurement of internal resistance of a cell.

Unit-VIII Atoms and Nuclei

1. Atoms: Alpha- particle scattering experiment, Rutherford's model of atom, its limitations, Bohr model, energy levels, hydrogen spectrum.

2. Nuclei: Atomic nucleus, its composition, size, nuclear mass, nature of nuclear force, mass defect, binding energy per nucleon and its variation with mass number, nuclear fission, fusion, Radioactivity, alpha, beta and gamma particles/ rays and their properties, radioactive decay law, half life and decay constant.

PRACTICAL

1. To determine resistance per cm of a given wire by plotting a graph for V versus I.
2. To find resistance of a given wire and hence determine the resistivity of its material.
3. To verify the laws of combination (series) of resistances using a metre bridge.
4. To verify the laws of combination (parallel) of resistances using a metre bridge.
5. To compare the EMF of two given primary cells using potentiometer.
6. To determine resistance and figure of merit of a galvanometer.
7. To find the focal length of a concave mirror.
8. To find the focal length of a convex lens.
9. To determine angle of minimum deviation for a given prism by plotting a graph between the angle of incidence and the angle of deviation.
10. To draw the I-V characteristic curve of a P-N junction in forward bias and reverse bias.
11.To draw the characteristic curve of a zener diode.

CHEMISTRY

Unit IV: Chemical Kinetics

Rate of a reaction (Average and instantaneous), factors affecting rate of reaction: concentration, temperature, catalyst, order and molecularity of a reaction, rate law and specific rate constant, integrated rate equations and half life (only for zero and first order reactions), concept of collision theory (elementary idea, no mathematical treatment), Activation energy, Arrhenius equation.**Unit Unit X: Haloalkanes and Haloarenes Haloalkanes:**

Nomenclature, nature of C-X bond, preparation from alcohols, halogenations of alkanes, alkenes, Sandmeyer's reaction, halogen exchange reaction, physical properties and chemical properties, nucleophilic substitution reactions (unimolecular and bimolecular), stereochemical effect of substitution reaction, elimination reaction, Electrophilic substitution reactions (halogenations, nitration, sulphonation), Friedel-Crafts reaction, reaction with metals (Wurtz Fittig and Fittig reaction), optical rotation. Page 5 of 7 Haloarenes: Nature of C - X bond, substitution reactions (Directive influence of halogen in monosubstituted compounds only.

PRACTICAL

1. Identification of unknown basic radicals

Tourism & Hospitality

+2 2nd year 3rd Term end Examination.

Syllabus

2021

① Employbility skills

Unit - 3

information & communication Technology skills

② vocational skills

Unit - 3

Etiquette & Hospitable conduct

FOOD Processing (M·S)

Syllabus for +2 2nd Year 3rd Quater - End Examination

Fullmark - ~~30~~ 20

Time Allotted - 45 Min

Vocational Book - (BOOK-1)

Unit - 3 → Pastry Craft

Unit - 4 → Documentation & Record Keeping

Employability Skills Book (Book-2)

Unit - 4 → Entrepreneurship & Entrepreneur

Unit - 5 → Green Skills