FOUR YEAR UNDERGRADUATE PROGRAM (NEP- 2020)

PROGRAM: BACHELOR IN ARTS (2024- 28)

DISCIPLINE- GEOGRAPHY SESSION-2024-25

| | SESSION-2024 | F-23 | | |
|-------------|--|---------------|---|--|
| | DSC-01 to 08 | DSE- 01 to 12 | | |
| Course Code | Course Title | Course Code | e Course Title | |
| GOSC-01T | Fundamental of Physical Geography | GOSE-01T | Climatology and Occanography | |
| GOSC-01P | Cartography-Tools and Techniques | GOSE-01P | Study of Indian Weather Maps | |
| GOSC-02T | Fundamental of Human Geography | GOSE-02T | Soil and Bio- Geography | |
| GOSC-02P | Scale and Representation of Relief | GOSE-02P | Study of Geological Maps | |
| GOSC-03T | Economic Geography | GOSE-03T | Disaster Management | |
| GOSC-93P | Map Projection | GOSE-03P | Statistical Methods | |
| GOSC-04T | Geography Of India | GOSE-04T | Industrial Geography | |
| GOSC-04P | Representation of Statistical Data | GOSE-04P | Aerial Photograph | |
| GOSC-05T | Geography of Chhattisgarh | GOSE-05T | Rural Settlement Geography | |
| GOSC-05P | Distribution of Maps and 3-Dimensional Diagram | GOSE-05P | Principal of GIS | |
| GOSC-96T | History of Geographical Thought | GOSE-06T | Urban Geography | |
| GOSC-06P | Study and Interpretation of Topographical Maps | GOSE-06P | Fundamental of Remote Sensing | |
| GOSC-07T | Geomorphology | GOSE-07T | Political Geography | |
| GOSC-07P | Field Survey- Chain & Tape, Prismatic Compass and Plane Table Survey | GOSE=07P | Computer Cartography in Geography | |
| GOSC-08T | Regional Planning and Development | GOSE-08T | Sustainable Development | |
| GOSC-08P | Morphometric Analysis | GOSE-08P | Instrumental Survey- Dumpy level | |
| | | GOSE-09T | Rural Development in India | |
| | | GOSE-09P | Cartographical Analysis of Geographical | |
| | | | Patterns And System | |
| | • | GOSE-10T | Geography of Tourism | |
| | | GOSE-10P | Field Work-Tour And Tour Report | |
| | | GOSE-11T | Tribal Development in India | |
| | | | Project Report on Socie-Economic Survey | |
| | | GOSE-12T | Agriculture and Food security | |
| | | GOSE-12P | Field Study and Research Report | |
| | GE - 01 & 02 | | | |
| GOGE-01T | Fundamental of Physical Geography | | VAC | |
| GOGE-01P | Cartography-Tools and Techniques | GOVAC-01 | Geographical Knowledge in Ancient India | |
| | Fundamental of Human Geography | | SEC | |
| GOGE-02P | Scale and Representation of Relief | GOSEC-01 | Principle of Map Making | |

| Signature of Convene | r Members of CBoS : | 1 10. DY-S. Yadau | July . |
|----------------------|---------------------|----------------------------|--------|
| 1. Dr- B.L Sui | 15 Ds. D.D. Konshya | ally mes. chider |) () |
| 3) 9 Wy | | \sim 0 \sim M \sim N | laphie |
| (3) Maju | DA. Beck Sm | -1 | (06/25 |
| (A) 1016/24 | Dan Grsoman | www. Drot (1475) UM/T | Golt |
| 10 peals | · 9. Swd. GRACE KUS | VR-GY | |

Chairman

া Studies ্ৰভd Nandkumar Patel idyalaya, Raigarh (C.G Ced Nandkumar Patel

dyalaya, Raigarh (C.G)

Shaheed Nandkumar Patel

Vishwavidyalaya, Raigarh (C.G.)

FOUR YEAR UNDERGRADUATE PROGRAM (NEP- 2020)

· PROGRAM: BACHELOR IN ARTS (2024-28)

DISCIPLINE- GEOGRAPHY SESSION-2024-25

| | DSC-01 to 08 | DSE- 01 to 12 | | |
|-------------|--|---------------|--|--|
| Course Code | Course Title | Course Code | | |
| GOSC-01T | Fundamental of Physical Geography | GOSE-01T | Climatology and Oceanography | |
| GOSC-01P | Cartography-Tools and Techniques | GOSE-01P | Study of Indian Weather Maps | |
| GOSC-02T | Fundamental of Human Geography | GOSE-02T | Soil and Bio- Geography | |
| GOSC-02P | Scale and Representation of Relief | GOSE-02P | Study of Geological Maps | |
| GOSC-03T | Economic Geography | GOSE-03T | Disaster Management | |
| GOSC-03P | Map Projection | GOSE-03P | Statistical Methods | |
| GOSC-04T | Geography Of India | GOSE-04T | Industrial Geography | |
| GOSC-04P | Representation of Statistical Data | GOSE-04P | Aerial Photograph | |
| GOSC-05T | Geography of Chhattisgarh | GOSE-05T | Rural Settlement Geography | |
| GOSC-05P | Distribution of Maps and 3-Dimensional Diagram | GOSE-05P | Principal of GIS | |
| GOSC-06T | History of Geographical Thought | GOSE-06T | Urban Geography | |
| GOSC-06P | Study and Interpretation of Topographical Maps | GOSE-06P | Fundamental of Remote Sensing | |
| GOSC-07T | Geomorphology | GOSE-07T | Political Geography | |
| GOSC-07P | Field-Survey- Chain & Tape, Prismatic Compass and Plane Table Survey | GOSE-07P | -Computer Cartography in Geography | |
| GOSC-08T | Regional Planning and Development | GOSE-08T | Sustainable Development | |
| GOSC-08P | Morphometric Analysis | GOSE-08P | Instrumental Survey- Dumpy level | |
| | | GOSE-09T | Rural Development in India | |
| | | | Cartographical Analysis of Geographical Patterns And System | |
| | | GOSE-10T | Geography of Tourism | |
| | | GOSE-10P | Field Work-Tour And Tour Report | |
| | | GOSE-11T | Tribal Development in India | |
| | | GOSE-11P | Project Report on Socio-Economic Survey | |
| | | GOSE-12T | Agriculture and Food security | |
| - | | GOSE-12P | Field Study and Research Report | |
| | GE - 01 & 02 | | | |
| GOGE-01T | Fundamental of Physical Geography | | VAC | |
| GOGE-01P | | GOVAC-01 | Geographical Knowledge in Ancient India | |
| GOGE-02T | | | SEC | |
| GOGE-02P | Scale and Representation of Relief | GOSEC-01 | Principle of Map Making | |

Signature of Convener Members of CBOS: Dr.D. D. Kashard on to Dr. S. Taclau 22 1. Dr. B. L. Saw D (S) Dr.D. D. Kashard on the Tros. chicken 22 BAR. H. Thylcreffer & On. (Ku) J. P. Kuyin My J. Pros. chicken 23). M. S. Shiro Ambrelo Lahing B. Dr. S. SAHU - U. O. D. G. Dr. On Consoma mobile, 13. Dr. Sophio Ambrelo Lahing B. Dr. C. P. NA OND Lool of G. G. (Swit GRACE Kykin 14. Prof. (Mehr Jug Crole

> of Sources 2 1 2 4 ged Nandkumar Patel idyalaya, Raigarh (C.G

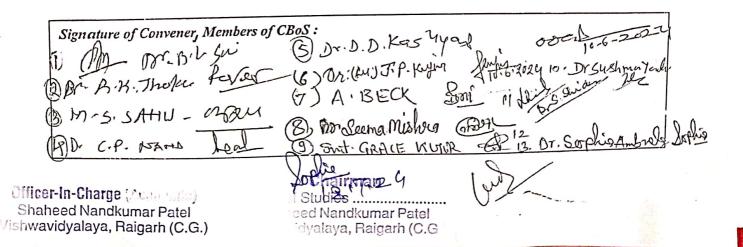
Officer-In-Charge (Available)
Shaheed Nandkumar Patel
Vishwavidyalaya, Raigarh (C.G.)

FOUR YEAR UNDERGRADUATE PROGRAM (2024 - 28) DEPARTMENT OF GEOGRAPHY

COURSE CURRICULUM

| P | PART-A: Introduction | | | | | |
|---|--|--|---|--|--|--|
| | ogram: Bachelor in ertificate/Diploma/Deg | | Semester - I | Session: 2024-2025 | | |
| 1 | Course Code | GOSC - 01 T | | meter de des dans la después antique de la constitución de se adoptivo de se d | | |
| 2 | Course Title | Fundamental of | Physical Geography | Market Control of the | | |
| 3 | Course Type | DSC | | | | |
| 4 | Pre-requisite (if, any) | As per the program | | | | |
| 5 | Course Learning. Outcomes(CLO) | At the end of this course, the students will be able to: 1- Understand the functioning of Earth systems and analyze geo morphological, climatic and oceanic factors. 2- Understand the Physical aspect of Geographical concepts which are relevant in day to day life 3- To record the temperature, pressure, humidity, rainfair and other climatic conditions and evaluate the local climate 4- Understand the Oceanic Features and Conditions. | | | | |
| 6 | Credit Value | 3 Credits | Credit = 15 Hours -learning & Observation | | | |
| 7 | Total Marks | Max. Marks: 100 Min Passing Marks:40 | | | | |

| PART | -B: Content of the Course | |
|----------|---|---------------|
| | Total No. of Teaching-learning Periods(01 Hr. per period) - 45 Periods (45 Hours |) |
| Unit | Topics (Course contents) | No. of Period |
| Ι | Fundamental of Physical Geography- Definition and Scope of Physical Geography, Origin of the Earth-Nebular Timory, Hoyle and Littleton Theory. Interior of the earth:- Composition and Structure. Folds and Faults- Origin and Classification. | 12 |
| П | Rocks: - Origin, Classification and Characteristics. ". eachering- Meaning, Types. Agents of Erosion- Winds, River and their resultant topographical features | . 10 |
| 111 | Atmosphere- Elements of Weather and Climate, Composition of the Atmosphere, Atmospheric Temperature, Pressure Belt, winds, Tropical Cyclone and Origin and mechanism of Monsoon. | 12 |
| IV | Hydrosphere- Relief of the Ocean Basins-Tetrahedral theory. Hydrological Cycle, Ocean Salinity, Ocean Temperature-vertical and horizontal Distribution, Ocean Currents (Pacific and Indian) | 11 |
| Keywords | Topographical Features, Erosion, Tetrahedral, Faults. | |



Text Books, Reference Books and Others

Text Books Recommended -

- 1- A.H. Strahler, Arthur Strahler, Introducing Physical Geography, John Wiley & Sons, New York, 2005
- 2- Strahler, A.N. and Strahler, A.H., Modern Physical Geography; John Wiley & Sons, 1992
- 3- Thornbury, W.D., Principles of Geomorphology, Wiley Eastern, 1969
- 4- Critchfield, H., General Climatology, Prentice-Hall, New York, 1975.
- 5- Savindra Singh-Physical Geography (Hindi and English Both) Prawalika Publication Prayagraj
- 6- Lal D.S. Physical Geography, (Hindi) Sharda Pustak Bhavan, Prayagraj, 2012
- 7- Lal D.S.-Climatology & Oceanography (Hindi and English Both) Sharda Pustak Bhavan Prayagraj
- 8- Mazid Husain- Bhautik Bhoogol, Rawat Publication, Jaipur, 2019
- 9- Alka Gautam- Bhautik Bhoogol, Rastogi Publication, Meerut,2012

Reference Books:

- 1- Holmes, A. Principle of Physical Geology, Nelson 1966
- 2- Monkhouse, F.J., Principles of Physical Geography, London Press. 1962
- 3- Dayal ,P. Geomorphology, Rajesh Publication New Delhi 6 th Edition-2017

Online Resources- (e-Resources / e-books and e-learning portals)

- > The Dictionary of Physical Geography by David S.G. Thomas ISBN: 9781118782316 Publication Date: 2016 http://www.physicalgeography.net/fundamentals/1b.html
- https://epustakalay.com/book/27260-bhautik-bhugol-by-dr-l-n-upadhyaya/
- https://open.umn.edu/opentextbooks/textbooks/926
- http://www.physicalgeography.net/fundamentals/contents.html
- https://books.google.co.in/books/about/Principles of Physical Geography.html?id=WHqvCwAAQBAJ&redir

OnlineResources=(e-Resources/e=books and e-learning portals)...

- www.ignou.ac.in
- www.egyankosh.ac.in
- www.iitm.ac.in
- www.eskillindia.org
- www.eshiksha.mp.gov.in
- www.vlab.co.in
- www.swayam.ac.in
- www.internshala.com

| PART-D: Assess | PART-D: Assessment and Evaluation | | | | | | |
|---|--|--|--|--|--|--|--|
| Suggested Continuous Ev Maximum Marks: Continuous Internal Asse | ssment(CIA): 30 Marks | | | | | | |
| End Semester Exam(ESE Continuous Internal Assessment (CIA): (By Course Teacher) | Internal Test / Quiz-(2): 20 +20 Assignment/Seminar-10 Total Marks -30 | Better marks out of the two Test / Quiz+ obtained marks in Assignment shall be considered against 30 Marks | | | | | |
| End Semester Exam (ESE): | Two section $-A \& B$ Section A: Q1. Objective $-10 x1 = 10$ Mark; Question B: Descriptive answer type qts., 1 out of | Q2. Short answer type- 5x4=20Marks f 2 from each unit- 4x10=40Marks | | | | | |

| Si | gnature of Convener, Me | embers of CBoS | Dr.D. I | s. Kasligad | ool 18. Drs. | Tadavas. |
|-----|--|----------------|--------------|--------------|----------------|---------------------------|
| h | in the sa I/N | 600 | Dr. CKN.J.J. | o. Kujim shi | MH. dur glass | |
| (2) | DY B. H. Thokus | (1) (7) | A. BECK | (Simi | 13. Dr. Sophis | - bolg-Sign |
| (3) | M-S-SAHU- | 02(2) M | Seemame | lag Took | 13. Dr. Sopris | 4/11/2 |
| 14 |) B4 C.P. NAM9 | leal 9.8 | ref GRACE | KUM. OF | | |
| | | A saint | | | - Vigairn | nan |
| | Officer-In-Charge | r Patel | | | Jophins | ,24 |
| | Shaheed Nandkuma Vishwavidyalaya, Raiga | arh (C.G.) | 1 V | | idyalaya. F | kumar Patel Raigarh (C |
| | 7101111 | | | | 3 7, | angain (C) |

| P | ART- A: II | ntroduction | 1 | | |
|---------------------------|------------------------------------|---|---|-----------------------|--|
| Program: Bachelor in Arts | | | Semester -I | Session: 2024-2025 | |
| (Ce | ertificate / Diploma / Deg | gree / Honors) | | | |
| 1 | Course Code | GOGE – 01 P | | | |
| 2 | Course Title | Practical 1 - Cartography-Tools and Techniques | | | |
| 3 | Course Type | Practical | | | |
| 4 | Pre-requisite (if, any) | As per program | | | |
| 5 | Course Learning. Outcomes (CLO) | At the end of this practical course the student will have an ability to 5- Understand the basic concepts of cartography 6- Learn and prepare the different kinds of maps. 7- Recognize basic themes of map making. 8- Develop an idea about different types of thematic mapping techniques. | | | |
| 6 | Credit Value | 1 Credits | Credit = 30 Hours Laboratory or Field learning/Training | | |
| 7 | Total Marks | Max. Marks: | 50 | Min Passing Marks: 20 | |

| | Total No. of learning-Training/performance Periods: 30 Periods (30 Ho | ours) + |
|--|--|------------------|
| Module | Topics (Course contents) | No. of Period |
| Lab./Field Training/ Experiment Contents of Course | 4- History of Cartography, Indian cartography, Modern cartography, Drawing Equipment's, 5- Characteristics Features of Map, classification of maps, Mapping methods. Tools of Map Making, Type of printed Shades. 6- Enlargement, Reduction and Combination of Maps- Graphical and Mechanical Methods. | 30 |
| Keywords | Cartography, Enlargement, Reduction, Graphical | |

Signature of Convener, Members of CRos: 600 12 7adow 2 1000 12

Officer-In-Charge (Academic) Shaheed Nandkumar Patel Vishwavidyalaya, Raigarh (C.G.)

Text Books, Reference Books and Others

- 4. Sharma, J.P. (2001): Prayogik Bhugol., Rastogi Publication, Mcerut 3rd edition.
- 5. Singh, R.L. and Singh, Rana P.B. (1993): Elements of Practical Geography. (Hindi and English editions). Kalyani Publishers, New Delhi.
- 6. Singh, L.R. (2006): Fundamentals of Practical Geography, Sharda Pustak Bhawan,
- 7- Haroon, M., Practical Geography, Mishra Trading Corporation, Varanasi, 2010
- 8- Chauhan, P R. 2005, Practical Geography, Vasundhara Prakashan, Gorakhpur
- 9- Istiyak.M. 1989,A Textbook of Practical Geography, Heritage Publication New Delhi

Online Resources-(e-Resources/e-books and e-learning portals)

- https://books.google.co.in/books
- https://uou.ac.in/sites/default/files/slm/DGIShttps://books.google.co.in/books?id=mZKhRkZ7qawC&printsec=copyright&redir_esc=y#v=onepage&q&f=false
- https://www.researchgate.net/publication/372371977 PRACTICAL GEOGRAPHY Prof RN Mishra Dr PK Sharma SAMPLE COPY

| PART -D: Asses | sment and Evaluation | , |
|---|---|--|
| _Suggested Continuous Eval | uation Methods: 50 Märks | |
| Continuous Internal Assess End Semester Exam (ESE): | 35 Marks | + |
| Continuous Internal Assessment (CIA): (By Course Teacher) | | Better marks out of the two Test / Quiz Fobtained marks in Assignment shall be considered against 15 Marks |
| End Semester Exam (ESE): | Laboratory / Field Skill Performance: On spot Asses D. Performed the Task based on lab. work E. Spotting based on tools & technology (written) F. Viva-voce (based on principle/technology) | - 20 Marks Course teacher as |

Signature of Convener, Members of CBoS: O DY Stadow We To 10124 Drown Sw S C Stadow We To 10124 Drown Down Down To 10124 Drown Down Down Down Delivery De

Officer-In-Charge (Andemis)
Shaheed Nandkumar Patel
Jiehwavidyalaya, Raigarh (C.G.)

ced Nahdkumar Patel Idyalaya, Raigarh (C.G

FOUR YEAR UNDERGRADUATE PROGRAM(2024 - 28) DEPARTMENT OF GEOGRAPHY

COURSE CURRICULUM

| | | Cours | e Curriculum | | |
|---|--|---|---|------------------------|---|
| PA | ART-A: Introdu | ction | | | |
| Pro (Ce | gram: Bachelor in Ar rtificate / Diploma / De | ts gree/Honors) | Semester - II | Session: 2024-2 | 025 |
| 1 | Course Code | | | | |
| 2 | Course Title | Fundamental of | Human Geography | | |
| 3 | Course Type | DSC | · | | |
| 4 | Pre-requisite(if, any) | As per the progra | ım | | atomicis acerdinale acerdinale acerdinale |
| 5 | Course Learning. Outcomes(CLO) | At the end of this course the student will e have an ability to 1- Gain knowledge about major themes of human Geography. 2- Acquire knowledge on the history and evolution of humans. | | | |
| 6 | Credit Value | 3 Credits | | learning & Observation | |
| _7 | | | | | |
| PAI | RT -B: Content Total No. of Teac | | riods(01 Hr. per period) - | 45 Periods (45 Hours |) |
| Un | it | Topic | s (Course contents) | | No. of Period |
| · I | Definition, nature an | d scope. Fundame n- nature relationsh | ntal concept in Human Geog nip:- Determinism, Possibilis Occupation | raphy. | 12 |
| 11 | Growth of population Socio- economic Pate Occupational Structu | n, distribution and d tern of Population – ure. | lensity of the world Literacy, Migration:- Cause:Concept of Optimum Popu | , ,, | 10 |
| Population and Under population. Human Settlement and Races- Types and characteristics of human settlement-Rural | | | | | |
| settlement and Urban | | Settlement. of Racial Classification, world distribution. | | 12 | |
| | | | unities (Gond, Eskimo, Bust | nmen). | |
| IV | Geography and Dev | elopment- Indicate | ors and measures of Regional gional variations, HDI. Con | al development,. | 11 |
| Kevwe | Determinism, Possi | bilism, Occupation | al Structure. Optimum Popul | ation, Racial | 1 |

| Signature of Convener, Members | of CBoS: | 11 (Dr S. Yarlay) | |
|-------------------------------------|---------------|----------------------|----------|
| Pr-BL-Sur | Ca) Distance | 11 Melighan | |
| Dr. R.K. The Merofylus | 6 | \ \frac{1}{2} | |
| M-S. STAHU-026 | Son & John | - 12 alien 100 | South |
| Dr Cup. MAND Real | (3) | 13 Dr. Saplia Ambral | - 2000 E |
| | Chairman | | 2. |
| Officer-In-Charge (Auto to Calling) | Studies Tolke | | 14 1,0 |

Shaheed Nandkumar Patel eed Nandkumar Raie Shaheed Nandkumar Patel seed Nandkumar Raie Shaheed Nandkumar Raie Shah

Keywords

Text Books, Reference Books and Others

Text Books Recommended -

- 10- James, M. Robenstein, An Introduction to Human Geography, Prentice Hall, New Jersey, 2001
- 11- Michael, Can, New Patterns: Process and Change in Human Geography Nelson, 1997
- 12- Hussain Mazid-Human Geography, (Hindi & English Both) Rawat Publication Jaipur
- 13- Garg H.S. Manav Bhoogol, SBPD Publication, Agra.
- 14- Haroon Mohammad, Manav Bhoogol, Wisdom Publication
- 15- Kausik S.D. Manav avam Arthik Bhoogol, Rastogi publication Meerut.
- 16- Maurya, S.D. Manav Bhoogol, Sharda Pustak Bhavan, Prayagraj.2009
- 17- Khullar, D. R. Human Geography, (In Hindi) Kalyani Publishers, Ludhiyana, 2016
- 18- Prasad, Gayatri, Cultural Geography, (In Hindi) Sharda Pustak Bhavan . Prayagraj.

Reference books:

- Bergwan, Edward E., Human Geography: Culture. Connections and Landscape, Prentice Hall, New Jersey. 1995
- Carr, M., Patterns, Process and change in Human Geography, MacMillan Education, London, 1987.
- Daniels Peter, Bradshaw Michael, Shaw Devil and Side way James, Human Geography: Issues for the Twenty First Century, Prentice Hall, New Jersey, 2001
- Clarke, JI, Population Geography of Developing Country, Pergamon press, Oxford, 1971

E-Books

- https://web.ung.edu/media/university-press/human-geography.pdf
- https://www.drishtijas.com/hindi/images/pdf/NCERT-Hindi-Class-12-Geography-Part-1.pdf
- http://assets.vmou.ac.in/GE05.pdf-Human Geography
- https://open.umn.edu/opentextbooks/textbooks/870

OnlineResources-(e-Resources/e-books and e-learning portals)

- www.ignou.ac.in
- www.egyankosh.ac.in
- www.iitm.ac.in
- www.eskillindia.org
- www.eshiksha.mp.gov.in
- www.vlab.co.in
- www.swayam.ac.in
- www.internshala.com

| PART-D: Assessment and Evaluation | | | | | | |
|---|--|--|--|--|--|--|
| Suggested Continuous I Maximum Marks: Continuous Internal As End Semester Exam (ES | 100 Marks sessment(CIA):30 Marks | | | | | |
| Continuous Internal Assessment (CIA): (By Course Teacher) | Internal Test / Quiz-(2): 20 +20 Assignment/Seminar- 10 Total Marks -30 | Better marks out of the two Test / Quiz+ obtained marks in Assignment shall be considered against 30 Marks | | | | |
| End Semester Exam (ESE): | Two section $-A & B$ Section A: Q1. Objective $-10 \times 1 = 10 \text{ Mark}$; Q2. Short answer type- $5x4 = 20 \times 10^{-2} = 20 \times 10^{-2}$ Section B: Descriptive answer type qts.,1out of 2 from each unit- $4x10 = 40 \times 10^{-2}$ | | | | | |

e of Convener, Members of Officer-In-Charge (idyalaya, Raigarh (C.G.

Shaheed Nandkumar Patel /ishwavidyalaya, Raigarh (C.G.)

| P | ART- A: II | ntroduction | n | | | |
|--|------------------------------------|--|---|--------------------|--|--|
| Program: Bachelor in Arts (Certificate / Diploma / Degree/ Honors) | | | Semester -II | Session: 2024-2025 | | |
| 1 | Course Code | GOSC – 02 P | | | | |
| 2 | Course Title | Practical 2 - Sca | le and Representation of R | elief | | |
| 3 | Course Type | Practical | | | | |
| 4 | Pre-requisite (if, any) | As per program . | | | | |
| 5 | Course Learning. Outcomes (CLO) | At the end of the this course the student will be able to 1- Understand and prepare different kinds of Scales and comprehend the concept of scales. 2- Identify the features of the land form through counters 3- Developed the Relief Map Making skills. 4- Gain in-depth knowledge on Drawing of Contour Features. | | | | |
| 6 | Credit Value | 1 Credits | Credits Credit = 30 Hours Laboratory or Field learning/Training | | | |
| 7 | Total Marks | Max. Marks: | ax. Marks: 50 Min Passing Marks: 20 | | | |

| PART -B: | | Content of the Course | | | |
|--|----------|---|------------------|--|--|
| | | Total No. of learning-Training/performance Periods: 30 Periods (30 Hours) | | | |
| Module | | Topics (Course contents) | No. of Period | | |
| Lab./Field Training/ Experiment Contents of Course | 2- 3- | Scale- Methods of representing Scale, Conversion of Scale Type of Linear Scale- Simple Scale, Time Scale, Comparative Scale, Diagonal Scale Representing of Relief- Pictorial, Mathematical and Combine Methods. Contours-Land forms Representing By Contours- Hill, Ridge, Plateau, V shaped Valley, U shaped Valley, Waterfall, | 30 | | |
| Keywords | Sca | ale, Diagonal ,Relief, V shaped Valley, Ridge | | | |

Signature of Convener, Members of CBOS: OSCAL DO. DV S. Yudau Mongarian Dr. B. L. Sini Dr. S. Sphie Ambrelo - Jophie Dr. C. P. Na ND Lead 9 Chilingian C. Julio 13. Dr. S. Sphie Ambrelo - Jophie Dr. C. P. Na ND Lead 9 Chilingian

Officer-In-Charge (Academic) Shaheed Nandkumar Patel Vishwavidyalaya, Raigarh (C.G.) Mandamar Patel yalaya, Raigarh (C.G.

Text Books, Reference Books and Others

Text Books-

- 1. Sarkar, A.K. (1997): Practical Geography: A Systematic Approach. Orient Publication , Kolkata.
- 2. Sharma, J.P. (2001): Prayogik Bhugol., Rastogi Publication, Meerut.
- 3. Singh, R.L. and Singh, Rana P.B. (1993): Elements of Practical Geography. (Hindi and English editions). Kalyani Publishers, New Delhi.
- 4. Singh, L.R. (2006): Fundamentals of Practical Geography, Sharda Pustak Bhawan,
- 5. Haroon, M., Practical Geography, Mishra Trading Corporation, Varanasi, 2010
- 6. Chauhan, P.R. 2005, Practical Geography, Vasundhara Prakashan, Gorakhpur
- 7. Istiyak.M. 1989,A Textbook of Practical Geography, Heritage Publication New Delhi
- 8. Mishra R.N., PK Sharma, Prayogik Bhoogol Rawat Publication, Jaipur, 2019
- 9. Khullar, D.R., Prayogatmak Bhoogol, Kalyani Publishers, Ludhiyana.

E books-

- 1- https://www.slideshare.net/NisarKhand/instrumental-surveying-practical-plane-table-survey
- 2- https://bbsbec.edu.in/wp-content/uploads/2020/01/com.pdf
- 3- https://surveyofindia.gov.in/documents/soichapter-v.pdf

| PART -D: Assessment and Evaluation | | | | | |
|------------------------------------|------------------------------|--------------|---------------------------|--------------------|--|
| Suggested Continuous Ev | valuation Methods: | | | | |
| Maximum Marks: | 50 Mai | rks | | * | |
| Continuous Internal Ass | essment (CIA): 15 Mar | ·ks | _ | | |
| End Semester Exam (ES) | E): 35 Mar | ks | | | |
| Continuous Internal | Internal Test / Quiz-(2): | 10 & 10 | Better marks out of the | two Test / Quiz | |
| Assessment (CIA): (By | Assignment/Seminar +Attend | lance - 05 | + obtained marks in Ass | ignment shall be | |
| Course Teacher) | Total Marks - | 15 | considered against | 15 Marks | |
| End Semester Exam | Laboratory / Field Skill Per | formance: | On spot Assessment | Managed by | |
| (ESE): | A. Performed the Task b | ased on lab | . work - 20 Marks | Course teacher | |
| | | | logy (written) – 10 Marks | as per lab. status | |
| | C. Viva-voce (based on pr | rinciple/tec | hnology) - 05 Marks | | |

| | - 1 | |
|--------------------------------------|------------------|------------------------|
| Signature of Convener, Members of CB | 305: (1) Oda 16. | DES. Yadau Like |
| 1014 12 12 10 | @ May 1 Mysel | 0 0 |
| M. S. SAHU -OBU | (9) Sont | Suplie Ambrelo- Inglio |
| Dr (1) | 13 DY | J Sefue H. |
| or Cip. MAND feel | Chairman | r Zivh |
| Officer-In-Charge (A. Standa) | of Judisa | 10/00/ |

Iyalaya, 19 Sigarh (C.G

Officer-In-Charge (A. S. 1995) Shaheed Nandkumar Patel Mishwavidyalaya, Raigarh (C.G.)

FOUR YEAR UNDERGRADUATE PROGRAM (2024 - 28) DEPARTMENT OF GEOGRAPHY

COURSE CURRICULUM

| P | ART-A: Introdu | ction | | | | |
|-----------|---|--|---|--------------------|--|--|
| Pr (Ca | ogram: Bachelor in ertificate/Diploma/De | Arts | Semester - I | Session: 2024-2025 | | |
| 1 | Course Code | GOGE – 01 T | | | | |
| 2 | Course Title | Fundamental of | Physical Geography | | | |
| 3 | Course Type | GENERIC | GENERIC | | | |
| 4 | Pre-requisite (if, any) | As per the progre | As per the program | | | |
| 5 | Course Learning. Outcomes(CLO) | At the end of this course, the students will be able to: 5- Understand the functioning of Earth systems and analyze geo morphological, climatic and oceanic factors. 6- Understand the Physical aspect of Geographical concepts which are relevant in day to day life 7- To record the temperature, pressure, humidity, rainfall and other climatic conditions and evaluate the local climate 8- Understand the Oceanic Features and Conditions. | | | | |
| 6 | Credit Value | 3 Credits | Credit = 15 Hours -learning & Observation | | | |
| 7 | Total Marks | Max. Marks: | 100 Min Passing Marks: 40 | | | |

| | Total No. of Teaching-learning Periods (01 Hr. per period) - 45 Periods (45 Hours | No. of Period |
|---------|--|---------------|
| Unit | Topics (Course contents) | No. of Period |
| I | Fundamental of Physical Geography- Definition and Scope of Physical Geography, Origin of the Earth- Nebular Theory, Hoyle and Littleton Theory. Interior of the earth:- Composition and Structure. Folds and Faults- Origin and Classification. | 12 |
| П | Rocks: - Origin, Classification and Characteristics. Weathering- Meaning, Types. Agents of Erosion- Winds, River and their resultant topographical features | 10 |
| III | Atmosphere- Elements of Weather and Climate, Composition of the Atmosphere, Atmospheric Temperature, Pressure Belt, winds, Tropical Cyclone and Origin and mechanism of Monsoon. | 12 |
| IV | Hydrosphere- Relief of the Ocean Basins-Tetrahedral theory. Hydrological Cycle, Ocean Salinity, Ocean Temperature-vertical and horizontal Distribution, Ocean Currents (Pacific and Indian) | 11 |
| eywords | Topographical Features, Erosion, Tetrahedral, Faults. | |

dyalaya, Raigarh (C.G.

Officer-In-Charge (Academic)
Shaheed Nandkumar Patel
Vichwavidyalaya, Raigarh (C.G.)

| P | ART- A: | ntroductio | n | | |
|---|---|---|--------------------------|--|--|
| | ogram: Bachelor in ertificate/Diploma/De | | Semester -I | Session: 2024-2025 | |
| 1 | Course Code | GOSC - 01 P | | | |
| 2 | Course Title | Practical 1 - Car | tography-Tools and Techi | niques | |
| 3 | Course Type | Practical | | | |
| 4 | Pre-requisite (if, any) | As per program | | | |
| 5 | Course Learning. Outcomes (CLO) | At the end of this practical course the student will have an ability to I- Understand the basic concepts of cartography 2- Learn and prepare the different kinds of maps. 3- Recognize basic themes of map making. 4- Develop an idea about different types of thematic mapping techniques. | | | |
| 6 | Credit Value | 1 Credits | | utory or Field learning/Training Min Passing Marks: 20 | |
| 7 | Total Marks | Max. Marks: | 50 | IVIIII I assing | |

| PART- | 3: Content of the Course Total No. of learning-Training/performance Periods: 30 Periods (30) | Hours) |
|---|---|------------------|
| | Total No. of learning-1 raining/performance 7 contents) | No. of Period |
| Module Lab./Field Training/ Experiment Contents of Course | History of Cartography, Indian cartography, Modern cartography, Drawing Equipment's, Characteristics Features of Map, classification of maps, Mapping methods. Tools of Map Making, Type of printed Shades. Enlargement, Reduction and Combination of Maps- Graphical and Mechanical Methods. | 30 |
| Keywords | Cartography, Enlargement, Reduction, Graphical | |

| Signature of Convener, Members of CBOS Are Pro- gow Oly Dr. R.K. Thake The way Tho - S. S. B. H. J CLOUM | (5) Event 12. | . S. |
|---|---------------|------|
| los C.A. MASON real | (3) Az | |
| Officer-In-Charge (Authority) Shaheed Nandkumar Patel Vishwavidyalaya, Raigarh (C.G.) | Mindies 1 | |

Text Books, Reference Books and Others

- 1. Chauhan, P.R. 2005, Practical Geography, Vasundhara Prakashan, Gorakhpur
- Sharma, J.P. (2001): Prayogik Bhugol., Rastogi Publication, Meerut 3rd edition.
- Singh, R.L. and Singh, Rana P.B. (1993): Elements of Practical Geography. (Hindi and English editions). Kalyani Publishers, New Delhi.
- 4. Singh, L.R. (2006): Fundamentals of Practical Geography, Sharda Pustak Bhawan,
- 5. Haroon, M., Practical Geography, Mishra Trading Corporation, Varanasi,2010
- 6. Istiyak.M. 1989, A Textbook of Practical Geography, Heritage Publication New Delhi

E books-

- 1. Map Work and Practical Geography https://books.google.co.in/books
- Practical Geography, S.B.P.D Publications https://uou.ac.in/sites/default/files/slm/DGIS-504.pdf.
- https://ncert.nic.in/ncerts/l/legy303.pdf/
- https://www.uou.ac.in/sites/default/files/slm/GE-203.pdf

| PART -D: Asses | sment and Evalua | ition | | |
|--|---|--------------------------|---|---------------------------|
| Suggested Continuous E Maximum Marks: Continuous Internal Asso | raluation Methods: 50 Mar ssment (CIA): 15 Mar | ks ks | | |
| Assessment (CIA): (By | Internal Test / Quiz-(2): Assignment/Seminar +Attend | 10 & 10 | Better marks out of the t + obtained marks in Assi considered against | ignment snall be |
| Course Teacher) End Semester Exam (ESE): | Total Marks - Laboratory / Field Skill Perf A. Performed the Task ba B. Spotting based on tools C. Viva-voce (based on pr | formance: Consed on lab. | On spot Assessment work - 20 Marks ogy (written) – 10 Marks | Managed by Course teacher |

| Signature of Convener, Members of C. Dr. B.L. Sur | BOS ® ONAL | - 10. Dr.s. | Jaclan | Jule |
|--|-------------|-------------------------------------|---------|-----------|
| M. B. H. mellingflux | OS Som | - 12 O. | | 0 0 |
| for CP WARN form | (9) (4) | T3-Dr. Sophio | Ambrela | , Sopline |
| Ostion In Charge (Actual House) | | airman (w) | | |
| Officer-In-Charge (Acad Marie) Shaheed Nandkumar Patel Vishwavidyalaya, Raigarh (C.G.) | Ped by dian | ilidkumar Patel 'a, Raigarh (C.G | | |
| | | ", raiyam (C.G | | |

FOUR YEAR UNDERGRADUATE PROGRAM(2024 - 28) DEPARTMENT OF GEOGRAPHY

COURSE CURRICULUM

| - | | | E CORRECTION | | THE PERSON NAMED IN COLUMN TWO IS NOT THE OWNER. |
|----|---|---|--|-------------------------|--|
| P | ART-A: Introdu | ction | | | |
| | ogram: Bachelor in Ar ertificate/Diploma/Do | | Semester - II | Session: 2024-202 | 25 |
| 1 | Course Code GOGE - 02 T | | | | |
| 2 | Course Title | Fundamental of | Human Geography | | |
| 3 | Course Type | GENERIC | | | |
| 4 | Pre-requisite(if, any) | As per the progre | 7711 | | |
| 5 | Course Learning. Outcomes(CLO) | At the end of this course the student will e have an ability to 7- Gain knowledge about major themes of human Geography. 8- Acquire knowledge on the history and evolution of humans. 9- Understand the approaches and processes of Human Geography as well as the diverse patterns of habitat and adaptations. 10-Ability to develop an idea about space and society 11- Understand the evolution of varied types of economic activities. 12- Assess the varied aspects of development and regional disparity, in order to formulate measures of balanced development and sustainable development. | | | |
| 6 | Credit Value | 3 Credits | Credit = 15 Hours - | learning & Observation | ! |
| 7 | Min Passing Marks:40 | | | | 40 |
| PA | RT -B: Content | of the Cour | rse ı | | |
| | Total No. of Teac | hing-learning Pe | riods(01 Hr. per period) - | 45 Periods (45 Hours) | No. of Period |
| Uı | nit | Topic | es (Course contents) | | No. of Period |
| | I Introduction to Hu Definition, nature an Understanding of ma determinism. Classif | id scope. Fundame | ntal concept in Human Geog hip:- Determinism, Possibili Occupation | graphy . sm and Neo- | 12 |
| I | Population and Settlement - Growth of population, distribution and density of the world. Socio- economic Pattern of Population - Literacy, Migration:- Causes, and types | | | 10 | |
| | Occupational Structure. Theory and Model of population growth:-Concept of Optimum Population, Over Population and Under population. | | | | |
| I | settlement and Urban | n Settlement. | and characteristics of hum | an settlement- Rural | 12 |
| | Human Races- Basis | of Racial Classific | ation, world distribution. | ahman) | |
| | | of selected comm | unities (Gond, Eskimo, Bu | snmen). | 11 |
| I | Geography and Dev Global pattern of dev Development. | velopment- Indicat velopment:- inter-ro | ors and measures of Region egional variations, HDI. Co | oncept of Sustainable | 11 |

Signature of Convener, Members of CBos & Drs teday like to Mills

(3) produce of Convener, Members of CBos & Drs teday like to Mills

(3) produce of Convener, Members of CBos & Drs teday like to Mills

(3) produce of Convener, Members of CBos & Drs teday like to Mills

(3) produce of Convener, Members of CBos & Drs teday like to Mills

(3) produce of Convener, Members of CBos & Drs teday like to Mills

(3) produce of Convener, Members of CBos & Drs teday like to Mills

(3) produce of Convener, Members of CBos & Drs teday like to Mills

(3) produce of Convener, Members of CBos & Drs teday like to Mills

(3) produce of Convener, Members of CBos & Drs teday like to Mills

(3) produce of Convener, Members of CBos & Drs teday like to Mills

(3) produce of CBos & Drs teday like to Mills

(4) produce of CBos & Drs teday like to Mills

(5) produce of CBos & Drs teday like to Mills

(6) produce of CBos & Drs teday like to Mills

(6) produce of CBos & Drs teday like to Mills

(7) produce of CBos & Drs teday like to Mills

(7) produce of CBos & Drs teday like to Mills

(8) produce of CBos & Drs teday like to Mills

(8) produce of CBos & Drs teday like to Mills

(9) produce of CBos & Drs teday like to Mills

(9) produce of CBos & Drs teday like to Mills

(9) produce of CBos & Drs teday like to Mills

(9) produce of CBos & Drs teday like to Mills

(9) produce of CBos & Drs teday like to Mills

(9) produce of CBos & Drs teday like to Mills

(10) produce of CBos & Drs teday like to Mills

(11) produce of CBos & Drs teday like to Mills

(12) produce of CBos & Drs teday like to Mills

(13) produce of CBos & Drs teday like to Mills

(14) produce of CBos & Drs teday like to Mills

(15) produce of CBos & Drs teday like to Mills

(15) produce of CBos & Drs teday like to Mills

(15) produce of CBos & Drs teday like to Mills

(15) produce of CBos & Drs teday like to Mills

(15) produce of CBos & Drs teday like to Mills

(15) produce of CBos & Drs teday like to Mills

(15) produce of CBos & Drs teday like to Mills

(15) produce of CBo

dyalaya, Raigarh (C.G

Determinism, Possibilism, Occupational Structure. Optimum Population, Racial

Officer-In-Charge (Academics)
Shaheed Nandkumar Patel
fishwavidyalaya, Raigarh (C.G.)

Keywords

i

Text Books, Reference Books and Others

Text Books Recommended -

- 1- James, M. Robenstein, An Introduction to Human Geography, Prentice Hall, New Jersey, 2001
- 2- Michael, Can, New Patterns: Process and Change in Human Geography Nelson, 1997
- 3- Hussain Mazid- Human Geography, (Hindi & English Both) Rawat Publication Jaipur
- 4- Garg H.S. Manav Bhoogol, SBPD Publication, Agra.
- 5- Haroon Mohammad, Manay Bhoogol, Wisdom Publication
- 6- Kausik S.D. Manav avam Arthik Bhoogol, Rastogi publication Meerut.
- 7- Maurya, S.D. Manav Bhoogol, Sharda Pustak Bhavan, Prayagraj. 2009
- 8- Khullar, D. R. Human Geography, (In Hindi) Kalyani Publishers, Ludhiyana, 2016
- 9- Prasad, Gayatri, Cultural Geography, (In Hindi) Sharda Pustak Bhavan . Prayagraj.

Reference books:

- 1- Bergwan, Edward E., Human Geography: Culture. Connections and Landscape, Prentice Hall, New Jersey. 1995
- 2- Carr, M., Patterns, Process and change in Human Geography, MacMillan Education, London, 1987.
- 3- Daniels Peter, Bradshaw Michael, Shaw Devil and Side way James, Human Geography: Issues for the Twenty First Century, Prentice Hall, New Jersey, 2001
- 4- Clarke, JI, Population Geography of Developing Country, Pergamon press, Oxford, 1971

E-Books

- https://web.ung.edu/media/university-press/human-geography.pdf
- https://www.drishtiias.com/hindi/images/pdf/NCERT-Hindi-Class-12-Geography-Part-1.pdf
- http://assets.vmou.ac.in/GE05.pdf-Human Geography
- https://open.umn.edu/opentextbooks/textbooks/870

OnlineResources-(e-Resources/e-books and e-learning portals)

- > www.ignou.ac.in
- > www.egyankosh.ac.in
- > www.iitm.ac.in
- > www.eskillindia.org
- > www.eshiksha.mp.gov.in
- > www.vlab.co.in
- > www.swayam.ac.in
- www.internshala.com

| PART-D: Assessment and Evaluation | | | | |
|--|--|--|--|--|
| Suggested Continuous F Maximum Marks: Continuous Internal As End Semester Exam (ES | . 100 Marks sessment(CIA):30 Marks | | | |
| Continuous Internal Assessment (CIA): (By Course Teacher) | Internal Test / Quiz-(2): 20 +20 Assignment/Seminar-10 Total Marks -30 | Better marks out of the two Test / Quiz+ obtained marks in Assignment shall be considered against 30 Marks | | |
| End Semester Exam (ESE): Two section – A & B Section A: Q1. Objective – 10 x1= 10 Mark; Q2. Short answer type- 5: Section B: Descriptive answer type qts., lout of 2 from each unit-4x10= | | Mark; Q2. Short answer type- 5x4 =20Marks ts.,lout of 2 from each unit-4x10=40Marks | | |

| Signature of Convener, Members of CBoS: To BL Gui B BY - R-K. Thoke Tolar 6 June 11 June 11 June 12 June 11 June 12 |
|---|
| 10 DY College, Members of CBOS: |
| m b L sui of |
| Drop. K. Thoke Toller 6 July 11 Plans Dr. Chr. |
| By S. S. Mans 14/04 (6) August 16 |
| |
| M-S-SAHU-GOU @ Soil 12 1. A halo Sophie |
| 1 2 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 |
| Or CP. Many Land & Son 13. Dr. Sorphia Ambrela. Sorphia |
| Och Mand Constant |
| (a) (b) (b) (b) |
| Officer-In-Charge (Mahring Officer-In-Charge) |
| Officer-In-Charge (Mahine Maria) |
| Chahaad Mandkumar Palei |
| Shaheed Nandkumar Patel Shaheed Nandkumar Patel Shaheed Nandkumar Patel Shaheed Nandkumar Patel |
| ayalaya, Hainarh (Co |

| P | ART- A: | ntroductio | n | |
|---|---|--|----------------------------|--|
| | ogram: Bachelor in ertificate/Diploma/De | | Semester -II | Session: 2024-2025 |
| 1 | Course Code | GOGE-02 P | | |
| 2 | Course Title | Practical 2 - Sca | le and Representation of R | Relief |
| 3 | Course Type | Practical | | |
| 4 | Pre-requisite (if, any) | As per program · | | |
| 5 | Course Learning. Outcomes (CLO) | At the end of the this course the student will be able to 5- Understand and prepare different kinds of Scales and comprehend the concept of scales. 6- Identify the features of the land form through counters 7- Developed the Relief Map Making skills. 8- Gain in-depth knowledge on Drawing of Contour Features. | | of Scales and comprehend the prough counters fills. f Contour Features. |
| 6 | Credit Value | 1 Credits | | atory or Field learning/Training Min Passing Marks: 20 |
| 7 | Total Marks | Max. Marks: | 50 | Italia a goone |

| PART - | B: Content of the Course | ırs) |
|--|---|------------------|
| Module | Total No. of learning-Training/performance Periods: 30 Periods (30 Houtername Topics (Course contents) | No. of Period |
| Lab./Field Training/ Experiment Contents of Course | Scale- Methods of representing Scale, Conversion of Scale Type of Linear Scale- Simple Scale, Time Scale, Comparative Scale, Diagonal Scale Representing of Relief- Pictorial, Mathematical and Combine Methods. Contours-Land forms Representing By Contours- Hill, Ridge, Plateau, V shaped Valley, U shaped Valley, Waterfall, | 30 |
| Keywords | Scale, Diagonal, Relief, V shaped Valley, Ridge | 7 - |

Signature of Convener, Members of CBos: (6 D-5-Yuclau 202 4 10 10 6 12 1)

Brown Brown Brown Brown Brown Ambrela - States

Took In Signature of Convener, Members of CBos: (6 D-5-Yuclau 202 4)

Brown Brown

Officer-In-Charge (Alamanian) (C Shaheed Nandkumar Patel Shaheed Nandkumar Patel

sed Nandkumar Patel dyalaya, Raigarh (C.G.

Text Books, Reference Books and Others

- Sarkar, A.K. (1997): Practical Geography: A Systematic Approach. Orient Publication Kolkata.
- Sharma, J.P. (2001): Prayogik Bhugol., Rastogi Publication, Mecrut.
- Singh, R.L. and Singh, Rana P.B. (1993): Elements of Practical Geography. (Hindi and English editions). Kalyani Publishers, New Delhi.
- Singh, L.R. (2006): Fundamentals of Practical Geography, Sharda Pustak Bhawan,
- 10- Haroon, M., Practical Geography, Mishra Trading Corporation, Varanasi, 2010
- 11- Chauhan, P R. 2005, Practical Geography, Vasundhara Prakashan, Gorakhpur
- 12-Istiyak.M. 1989, A Textbook of Practical Geography, Heritage Publication New Delhi
- 13- Mishra R.N., PK Sharma, Prayogik Bhoogol Rawat Publication, Jaipur, 2019
- 14- Khullar, D.R., Prayogatmak Bhoogol, Kalyani Publishers, Ludhiyana.

Online Resources – (e-Resources/e-books and e-learning portals)

- https://books.google.co.in/books
- https://books.google.co.in/books?id=mZKhRkZ7qawC&printsec=copyright&redir_esc=y#v=onepage&
- https://www.researchgate.net/publication/372371977 PRACTICAL GEOGRAPHY Prof RN Mishra Dr PK Sharma SAMPLE COPY

| PART -D: Asses | sment and Evaluation | | |
|--|--|---------------------------|-------------------------------------|
| Suggested Continuous Ev | valuation Methods: 50 Marks | | - |
| Continuous Internal Asse End Semester Exam (ESI Continuous Internal Assessment (CIA): | Internal Test / Quiz-(2): 10 & 10 Assignment/Seminar +Attendance - 05 | COMBIGUE | t 15 Marks Managed by |
| End Semester Exam (ESE): | Laboratory / Field Skill Performance: D. Performed the Task based on lab E. Spotting based on tools & technol F. Viva-voce (based on principle/tec | logy (written) - 10 Marks | Course teacher as per lab. statu |

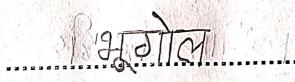
Signature of Convener, Members of CBoS: 6 D Officer-In-Charge (A) Shaheed Nandkumar Patel ar Patel rishwavidyalaya, Raigarh (C.G.) laya, Raigarh (C.G.

शहीद नंदकुमार पटेल विश्वविद्यालय, रायगढ़ (छ.ग.)

(छत्तीसगढ़ विश्वविद्यालय अधिनियम 1973 द्वारा स्थापित राजकीय विश्वविद्यालय)



राष्ट्रीय शिक्षा नीति – 2020 के तहत तृतीय एवं चतुर्थ सेमेस्टर नवीन पाठ्यक्रम (सत्र 2025–26)



FOUR YEAR UNDERGRADUATE PROGRAM (NEP- 2020)

PROGRAM: BACHELOR IN ARTS (2024- 28)

DISCIPLINE- GEOGRAPHY

SESSION-2024-25

| | DSC-01 to 08 | | DSE- 01 to 12 |
|--|--|-------------|--|
| Course Code | Course Title | Course Code | Course Title |
| GOSC-01T | Fundamental of Physical Geography | GOSE-01T | Climatology and Oceanography |
| GOSC-01P | Cartography-Tools and Techniques | GOSE-01P | Study of Indian Weather Maps |
| GOSC-02T | Fundamental of Human Geography | GOSE-02T | Soil and Bio- Geography |
| GOSC-02P | Scale and Representation of Relief | GOSE-02P | Study of Geological Maps |
| GOSC-03T | Economic Geography | GOSE-03T | Disaster Management |
| GOSC-93P | Map Projection | GOSE-03P | Statistical Methods |
| GOSC-04T | Geography Of India | GOSE-04T | Industrial Geography |
| GOSC-04P | Representation of Statistical Data | GOSE-04P | Aerial Photograph |
| GOSC-05T | Geography of Chhattisgarh | GOSE-05T | Rural Settlement Geography |
| GOSC-05P | Distribution of Maps and 3-Dimensional Diagram | GOSE-05P | Principal of GIS |
| GOSC-06T | History of Geographical Thought | GOSE-06T | Urban Geography |
| GOŚC-06P | Study and Interpretation of Topographical Maps | GOSE-06P | Fundamental of Remote Sensing |
| GOSC-07T | Geomorphology | GOSE-07T | Political Geography |
| GOSC_87P | Field Survey- Chain & Tape, Prismatic Compass and Plane Table Survey | GOSE=07P | Computer Cartography in Geography |
| GOSC-08T | Regional Planning and Development | GOSE-08T | Sustainable Development |
| GOSC-08P | Morphometric Analysis | GOSE-08P | Instrumental Survey- Dumpy level |
| 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1 | | GOSE-09T | Rural Development in India |
| | | GOSE-09P | Cartographical Analysis of Geographical Patterns And System |
| | THE STATE OF THE S | GOSE-10T | Geography of Tourism |
| the state of the s | | GOSE-10P | Field Work-Tour And Tour Report |
| 2 . 2 | | GOSE-11T | Tribal Development in India |
| | 。 | GOSE-11P | Project Report on Socio-Economic Survey |
| , ii. ii. | | GOSE-12T | Agriculture and Food security |
| 1 1 1 | | GOSE-12P | Field Study and Research Report |
| | GE - 01 & 02 | · A · Land | |
| GOGE-01T | Fundamental of Physical Geography | | VAC |
| GOGE-01P | Cartography-Tools and Techniques | GOVAC-01 | Geographical Knowledge in Ancient India |
| GOGE-02T | Fundamental of Human Geography | 1. H | SEC |
| GOGE-02P | Scale and Representation of Relief | GOSEC-01 | Principle of Map Making |

| —————————————————————————————————————— | |
|--|--|
| Signature of Convener Members of CBoS: | 10. DV-S. Yadau Jul |
| 1. Dr. Bil. ai Ph (Clash) D) Coshyoud- | Bus Chiden O. O. |
| 30 A Vay | Dr. Sophio Anglist 200145 |
| (3) MAIM TABLER SMI | |
| 1016/24 Dady Grace KUJUK-9 | 2 Prot (Mis) WMA GOLE |
| J. J | The Mark of the Control of the Contr |

Chairman

of Studies

eed Nandkumar Patel idyalaya, Raigarh (C.G Succes 1 29 ced Nandkumar Patel dyalaya, Raigarh (C.G.

Officer-Insthurge (Academis)
Shaheed Nandkumar Patel
Vishwavidyalaya, Raigarh (C.G.)

| PA | RT-A: Introdu | ction | | The state of the s |
|--|---------------------------------------|--|----------------|--|
| (Dipl | gram: Bachelor in oma/Degree/Honor | Arts | Semester - III | Session: 2024-2025 |
| 1 (| Course Code | GOSC - 03 T | | |
| | Course Title | ECONOMIC G | EOGRAPHY | |
| 3 (| Course Type DSC | | | |
| 4 Pre-requisite (if, any) As per program | | | | |
| 5 | Course Learning. Outcomes(CLO) | At the end of this course the student will be able to 1. Understand about the nature and scope of Economic Geography. 2. Understand the concept and classification of resources natural and miner 3. Identify the major Crops their production and distribution. 4. Understand the fundamentals of major economic theories, 5. Understand the conception of t | | f Economic Geography. n of resources natural and minerals. n and distribution |

100

3 Credits

Max. Marks:

Credit Value

Total Marks

Understand the economic activities-primary secondary and tertiary Understand the basic theories of Agriculture and Industrial location

Credit = 15 Hours -learning & Observation

Min Passing Marks: 40

| Tell in | Total No. of Teaching-learning Periods (01 Hr. per period) - 45 Periods (45 Hour | 's) |
|---------|---|--------|
| Unit | Topics(Course contents) | No. of |
| I. | Concepts of economic Geography Meaning scope and major concept of economic Geography, Resources meaning classification – renewable and non-renewable and their conservation. | 12 |
| II | Mineral resources: Iron ore and Bauxite, Power resource- Coal, Petroleum & Hydro- electricity Principal Crops- Rice Wheat, Sugar cane, Tea, Coffee, Cotton | 11 |
| Ш | Major Industries: Mineral based-Iron and Steel Industry, Cement Industry, Forest based- Paper Industries Agro based- Cotton Textile Industries, | 11 |
| IV | Theory of Agriculture location -Von Theunen, Agriculture regions of the world- D. Whittlesey Theory of Industrial location- Weber | 11 |

| Signature of Convener, Members of CBoS: OFF 10 DYS- Taclar WZ Dr. B. L. Sw. D. 6 Swy 11 Duty o'shide A. B. B. Thesear - I. | |
|--|-------|
| M. R. H. The Acuthlus O Son 13 Dr Sophio Andrew - Irolio | |
| par CD. and and your Day | |
| 200 12 - 1 20 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | ਰ |

Text Books, Reference Books and Others

Text Books Recommended -

- Alexander, J.W. (1988): Economic Geography. Prentice-Hall, New Delhi,.
- Bryson, J., Henry, N., Keeble, D. and Martin, R. (eds.) (1999): The Economic Geography Reader: Producing and Consuming Global Capitalism.JohnWileyandSons,Inc,NewYork.
- Clark, G.L., Gertler, M.S. and Feldman, M.P. (eds.) (2000): The Oxford HandbookofEconomicGeography.OxfordUniversityPress,USA.
- Coe, N. (2007): Economic Geography: A Contemporary Introduction. Blackwell Publishers, Inc., Massachusetts.
- Gautam, A. (2006): Aarthik Bhugo/Ke Moo/Tattava, Sharda Pustak Bhawan, Allahabad.

Online Resources-

e-Resources / e-books and e-learning portals

- https://epustakalay.com/book/55674-economic-geography-by-shankar-sahay-saxena/
- https://sahityabhawanpublications.com/product/economic-geography-hindi-book/
- https://himanshupublications.com/product/economic-resource-geography-hindi/
- https://books.google.co.in/books/about/Economic Geography %E0%A4%86%E0%A4%B0% E0%A5%8D%E0%A4%A5%E0%A4%BF%E0%A4%95.html?id=ElHnEAAAQBAJ&redir_e

OnlineResources-(e-Resources/e-books and e-learning portals)

- www.ignou.ac.in
- www.egyankosh.ac.in
- www.iitm.ac.in
- www.eskillindia.org
- www.eshiksha.mp.gov.in
- www.vlab.co.in
- www.swayam.ac.in
- www.internshala.com

| Suggested Continuous F | Evaluation Methods: | |
|---|---|--|
| Maximum Marks: | 100 Marks | |
| Continuous Internal As | sessment(CIA): 30 Marks | 경기 마다 그는 작가 걸릴때 하시다고 그녀일 |
| End Semester Exam (ES | SE): 70 Marks | |
| Continuous Internal Assessment (CIA): (By Course Teacher) | Internal Test / Quiz-(2): 20 +20 Assignment/Seminar- 10 Total Marks -30 | Better marks out of the two Test / Quiz+ obtained marks in Assignment shall be considered against 30 Marks |
| End Semester Exam | Two section - A & B | |
| (ESE): | Section A: Q1. Objective - 10 x1= 10 M | Mark; Q2. Short answer type- 5x4 =20Mark, lout of 2 from each unit-4x10=40Marks |

| | 7 May 12 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | | |
|---------------------------------------|--|---|-----------------|
| Signature of Convener, Members of CBo | S: (s) ore | _ 10 Drs.740 | lav II |
| Signature of Convener, Members of CBo | @ Ship |) · · · · · · · · · · · · · · · · · · · | |
| Dr. B. B. Moter Afun | | 11. the School | |
| M-SISAHU-CROOL | D Bin | 120 | 00. |
| 2016 | (g) (yola) | | halo- Lophis |
| be CP. NAND bad | (9) de | 13 Dr. Pating 1 | Ambrolo- loplie |
| | | | |
| | | 1 (03) | 1000 |
| | Lopha 17 | 24 | 0.0 |

| P | ART-A: Introdu | ction | | |
|---|---|--|--------------------------------|--|
| | rogram: Bachelor in iploma/Degree/Hono | the state of the s | Semester -III | Session: 2024-2025 |
| 1 | Course Code | GOSC - 03 P | The Marian Area | |
| 2 | Course Title | Practical 3 - MA | AP PROJECTION | · 明、特特特的特殊的证券有限的一个一个。 |
| 3 | Course Type | PRACTICAL | The state of the state of | and the state of t |
| 4 | Pre-requisite (if, any) | As per Programm | ne | |
| 5 | Course Learning. Outcomes(CLO) | Read and p Comprehe | nd locational and spatial as p | |
| 6 | Credit Value | 1 Credits | Credit =30 Hours Labora | tory or Field learning/Training |
| 7 | Total Marks | Max. Marks:50 | | Min Passing Marks:20 |

| | otal Moior lear ming | Fraining/performancePeriods:30 Periods (30 Hours) | |
|---|--|--|------------------|
| Module | | Topics (Course contents) | No. of Period |
| Training/ Experiment Contents of Course | Polar Zenithal Proje Polar Zenithal Projection with Tw Projection, Polyconi Area Projection, Ma | assification, Characteristics, Merit and demerit Gnomoniction, Stereographic Polar Zenitha Projection, Orthographiction, Conical Projection wit One Standard Parallel, Conica Standard Parallel, Bonne Projection Simple Cylindrical Projection, Cylindrical Equircators Projection, Galls Projection. | 30 |

| [] - [연기 : [하다] [하다] [하다] [[[[[[[[[[[[[[[[[[[| 7 7 1 |
|---|--|
| Signature of Convener, Members of CBoS | 10. Dr.S. Yaclau Jule |
| Dr. B. L. Sur Cop | 11 What Share |
| A. B. K. Theker Herr & Som | |
| M-5,5A+1U-12Qgu 8 CBAV | 13-Dr. Stophie Ambrelo. Stophie |
| Do Cp. Many hear 9 cal | 13-71, Solve Human & Sulp |
| CO O | |
| Local | in a lunch |
| Pier | 9 7 2 9 31ET 1 10 10 10 10 10 10 10 10 10 10 10 10 1 |
| | (S) |
| | |

Text Books, Reference Books and Others

- 1- Sarkar, A.K. (1997): Practical Geography: A Systematic Approach. Orient Publication Kolkata.
- 2. Sharma, J.P. (2001): Prayogik Bhugol., Rastogi Publication, Meerut.
- 3. Singh, R.L. and Singh, Rana P.B. (1993): Elements of Practical Geography. (Hindi and English editions). Kalyani Publishers, New Delhi.
- 4. Singh, L.R. (2006): Fundamentals of Practical Geography, Sharda Pustak Bhawan,
- 5- Haroon, M., Practical Geography, Mishra Trading Corporation, Varanasi, 2010
- 6- Chauhan, P R. 2005, Practical Geography, Vasundhara Prakashan, Gorakhpur
- 7- Istiyak.M. 1989,A Textbook of Practical Geography, Heritage Publication New Delhi
- 8- Mishra R.N., PK Sharma, Prayogik Bhoogol Rawat Publication, Jaipur, 2019
- 9- Khullar, D.R., Prayogatmak Bhoogol, Kalyani Publishers, Ludhiyana.

Online Resources – (e-Resources/e-books and e-learning portals)

- https://books.google.co.in/books
- https://uou.ac.in/sites/default/files/slm/DGIShttps://books.google.co.in/books?id=mZKhRkZ7qawC&printsec=copyright&redir_esc=y#v=onepage&g&f=false
- https://www.researchgate.net/publication/372371977 PRACTICAL GEOGRAPHY Prof RN Mishra Dr PK Sharma SAMPLE COPY

| PART -D: Assess | ment and | Evaluation | | Test of Median |
|------------------------------|-------------------|------------------------|---------------------------------|--------------------|
| Suggested Continuous Ev | aluation Methods | : DAMANYA DAYA TA | As the grain different of the p | 1 - 7 15 7 Phys. |
| Maximum Marks: | | 50 Marks | | |
| Continuous Internal Asse | essment (CIA): | 15 Marks | | |
| End Semester Exam (ESE | Σ): | 35 Marks | | |
| | Internal Test / C | | Better marks out of the | two Test / Quiz |
| | | nar +Attendance - 05 | + obtained marks in Ass | ignment shall be |
| (By Course Teacher) | Total Marks - | 15 | considered against | 15 Marks |
| End Semester Exam | Laboratory / Fiel | d Skill Performance: | On spot Assessment | Managed by |
| (ESE): | | the Task based on lab | | Course teacher |
| | | | logy (written) – 10 Marks | as per lab. status |
| April 1 Asserting to 1 1919. | C. Viva-voce (| based on principle/tec | hnology) - 05 Marks | 1, 13, 1,2 |

| Signature of Convener, Members of CL | BOS: TO OVER 10. DY Situdes Me |
|--------------------------------------|---|
| DAB. L- SW D | 6 July Drechider |
| M. S. SAFOU - MAYE | - 8 God 13 Dr. Suphia Ambrelo - Sophia |
| or Cop. NAND Lead | (3) D1. S1000 4(m) C117 |
| 5(.04/19) | O A S NAME OF THE OWNER OWNER OF THE OWNER |
| | 127,24 34,44, 1185 WES |

| P | ART- A: | ntroduction | n CORRECTION | |
|----|---|--|---|---|
| Pr | ogram: Bachelor in iploma/Degree/Honor | 1 Arts | Semester - IV | Session: 2024-2025 |
| 1 | Course Code | GOSC - 04 T | | |
| 2 | Course Title | GEOGRAPHY (| OF INDIA | |
| 3 | Course Type | DSC | <u> Santa da Arabara da Arabara</u> Santa da Arabara | |
| 4 | Pre-requisite (if, any) | As per Govt. norn | $n^{N-\sqrt{N}}$ | |
| 5 | Course Learning. Outcomes (CLO) | Understand Understand Understand Understand | tion of course, the students wi about the physiographic divis the seasonal variations of clir the biotic and abiotic resourc the growth density and distrib the economic activity primar | sion of India and drainage system. nate and monsoon of India. es of India. bution of population of India. |
| 6 | Credit Value | 3 Credits | Credit = 15 Hours - le | earning & Observation |

| Total No. of Teaching-learning Periods (01 Hr. per period) - 45 Periods (45 Hours) | | | | |
|--|--|------------------|--|--|
| Unit | Topics (Course contents) | No. of Period | | |
| 1,0 | Physical Features: Structure, relief, Drainage, Climate and Monsoon, Soil, Water resourc and Forest. | 12 | | |
| П | Agriculture-Major Cereals: Paddy, Wheat, Tea, Coffee, Sugarcane Population-Growth, Density, Distribution | 11 | | |
| ш | Mineral resources: Iron Ore, Bauxite, Coal, Petroleum & Natural gas, Atomic energy and Non- conventional energy resources | 11, | | |
| IV | Industries localization, development and production- Iron and Steel, Cotton Textile, Cement & Sugar Industries, Industrial Regions, SEZ Trade and Transport | 11 | | |
| Keywords | Physical Features, Minerals, Industries | m hal | | |

100

40

Min Passing Marks:

Max. Marks:

Total Marks

| | 그는 그들은 사람들이 되었다. 그는 사람들은 사람들은 사람들은 사람들은 사람들은 사람들이 되었다. 그는 사람들은 사람들은 사람들은 사람들은 사람들은 사람들은 사람들은 사람들은 |
|--------------------------------------|--|
| Signature of Convener, Members of CB | Bos @ pote 10. Dr S. Tadau hoz |
| Drof Korke My | @ Muta De chidle |
| M 5-SAZIU - WALL | (B) Control of the last of the |
| Por CP NAMED Real | (5) Some Ambrel - Arthur |
| | |
| | John 7,24 multiplication |
| | किंद्र ने ए र पेटक |

Text Books, Reference Books and Others

Text Books Recommended -

- Chauhan, P.R. and Prasad, M. (2003): Bharat Ka Vrihad Bhugol, Vasundhara Prakashan, Gorakhpur.
- Farmer, B.H.(1983): An Introduction to South Asia. Methuen, London
- Gautam, A. (2006): Advanced Geography ofIndia, Sharda Pustak Bhawan, Allahabad
- 4. Johnson, B.L.C. (1963):Development in South Asia. Penguin Books, Harmondsworth
- 5. Krishnan, M.S.(1982): Geology ofIndia and Bunna, CAS Publishers and Distributors, Delhi.
- 6. Khullar, D.R. (2007): India: A Comprehensive Geography, Kalyani Publishers, New oethi
- 7. Nag, P. and Gupta, S.S. (1992): Geography ofIndia, Concept Publishing Company, New Delhi.

Online Resources-

- https://www.iipa.org.in/upload/ind geo.pdf
- https://ncert.nic.in/textbook.php?kegy2=0-16
- > https://archive.org/details/indiaasacredgeography

Online Resources-

- www.ignou.ac.in
- www.egyankosh.ac.in
- www.iitm.ac.in
- www.eskillindia.org
- www.eshiksha.mp.gov.in
- www.vlab.co.in
- www.swayam.ac.in
- www.internshala.com

PART -D: Assessment and Evaluation

Suggested Continuous Evaluation Methods:

| IVERALISIUS STATE IND. | 0 Marks ssment (CIA): 30 Marks End Semes Internal Test / Quiz-(2): 20 +20 Assignment / Seminar - 10 Total Marks - 30 | ter Exam (ESE): 70 Marks Better marks out of the two Test / Quiz + obtained marks in Assignment shall be considered against 30 Marks |
|------------------------|--|---|
| End Semester Exam | Two section - A & B Section A: OI Objective - 10 x1=10 M | ark; Q2. Short answer type- 5x4 =20 Marks out of 2 from each unit-4x10=40 Marks |

Signature of Convener Members of CBoS:

FOUR YEAR UNDERGRADUATE PROGRAM (2024 - 28) DEPARTMENT OF GEOGRAPHY

COURSE CURRICULUM

| P | ART- A: | ntroduction | 1 | |
|----|--|--|--|---|
| | ogram: Bachelor in Arts iploma/Degree/Honors) | 33 | Semester-IV | Session: 2024-2025 |
| 1 | Course Code | GOSC-04 P | | |
| 2 | Course Title | Practical 4 - Rep | resentation of Statistical D | Data |
| 3 | Course Type | Practical | | |
| 4 | Pre-requisite (if, any) | As per Programme | riles or | |
| 5 | Course Learning. Outcomes (CLO) | 1- Read and I 2- Acquire kr and also th 3- To underst transforma | e ability to interpret them. and basic statistical method | and diagram from geographic data s and skills for cartographic n graphical representation of data |
| 6 | Credit Value | 1 Credits | | tory or Field learning/Training |
| 7_ | Total Marks | Max. Marks: | 50 | Min Passing Marks: 20 |

| PART-B | : Content of the Course | |
|--------------|--|------------------|
| . A ship the | Total No. of learning-Training/performance Periods: 30 Periods (30 Hor | ırs) |
| Module | Topics (Course contents) | No. of Period |
| Lab/Field | Representation of Statistical Data- Kinds of Diagram- | 1125 |
| Training/ | One Dimensional, Two Dimensional and Three Dimensional. | 30 |
| Experiment | Bar Diagram, Multiple Bar Diagram, Simple Pyramid Diagram, Block | |
| Contents of | Diagram, Wheel Diagram, Wind Rose, Band Graph, | |
| Course | | |
| Keywords | Statistical Data, Multiple, Three dimensional, Pyramid, wind rose. | Section 1 |

Signature of Convener, Members of CBoS: One 10. Do S. Tadau

Dr. 13-L- Swifty Of My 11 the CRISH

M-5-SAHU-GAU BOON 12

Dr. 12 13. Dr. Sophie Ambrel - Italia

Dr. 12 13. Dr. Sophie Ambrel - Italia

Dr. 12 13. Dr. Sophie Ambrel - Italia

Dr. 12 14 14 15 17 25.

Text Books, Reference Books and Others

- 1- Sharma, J.P. (2001): Prayogik Bhugol., Rastogi Publication, Meerut 3rd edition.
- 2- Singh, R.L. and Singh, Rana P.B. (1993): Elements of Practical Geography. (Hindi and English editions). Kalyani Publishers, New Delhi.
- 3- Singh, L.R. (2006): Fundamentals of Practical Geography, Sharda Pustak Bhawan,
- 4- Haroon, M., Practical Geography, Mishra Trading Corporation, Varanasi, 2010
- 5- Chauhan, P R. 2005, Practical Geography, Vasundhara Prakashan, Gorakhpur
- 6- Istiyak.M. 1989, A Textbook of Practical Geography, Heritage Publication New Delhi

Online Resources-(e-Resources/e-books and e-learning portals)

- https://books.google.co.in/books
- https://uou.ac.in/sites/default/files/slm/DGIShttps://books.google.co.in/books?id=mZKhRkZ7qawC&printsec=copyright&redir_esc=y#v=onepage&q&f=false
- https://www.researchgate.net/publication/372371977 PRACTICAL GEOGRAPHY Prof RN Mishra Dr PK Sharma SAMPLE COPY

| Suggested Continuous I | Sympton Methods: | April 1. The state of the state | the Sound, objection |
|---|---|--|---|
| Maximum Marks: Continuous Internal As EndSemester Exam(ES) | 50 Marks sessment(CIA): 15 Marks | | |
| Continuous Internal Assessment(C IA): (By Course Teacher) | Internal Test / Quiz-(2): 10 & 10 Assignment/Seminar +Attendance - 05 Total Marks - 15 | Better marks out of the +obtained marks in Assi considered against | gnment shall be 15 Marks |
| End Semester Exam (ESE): | Laboratory / Field Skill Performance: A. Performed the Task based on lab B. Spotting based on tools & technol C. Viva-voce (based on principle/tech | . work - 20 Marks logy (written) - 10 Marks | Managed by Course teacher as per lab. Status |

| | 7., |
|---|--|
| Signature of Convener, Members of CBoS: ODE | 1 10. Dr S. Yadau hus |
| M. S. SAHU - 12 DU (8) GOA | 13. Dr. Sophio Ambrelo - lophio |
| lor CP. Many Tool Q of | 13. DY 1 SOFTWO AT THE |
| Johns. | 5-24 W 3 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 |

| P | ART- A: | ntroductio | n | |
|---|--|--|--|--|
| | ogram: Bachelor i iploma/Degree/Honor | | Semester - III | Session: 2024-2025 |
| 1 | Course Code | GOSE - 01 T | ANALY MAINTANA | |
| 2 | Course Title | CLIMATOLOG | Y & OCEANOGRAPHY | |
| 3 | Course Type | DSE | | |
| 4 | Pre-requisite (if, any) | As per Programme | | |
| 5 | Course Learning. Outcomes (CLO) | Understand the Understand the bearing on plan Understand the Understand the | Monsoon system and comparet earth. Oceanic process and its imperfuture availability of resource Climatic change and Globa | nate and its impact in different scales. orehend the climatic aspects and its pact on land water. rees through Oceans. |
| 6 | Credit Value | 3 Credits Credit = 15 Hours - learning & Observation | | |
| 7 | Total Marks | Max. Marks: | 100 | Min Passing Marks: 40 |

| PART | -B: Content of the Course | Chine III | | | |
|--|---|------------------|--|--|--|
| Total No. of Teaching-learning Periods (01 Hr. per period) - 45 Periods (45 Hours) | | | | | |
| Unit | Topics (Course contents) | No. of Period | | | |
| I | Atmospheric composition and structure, Layers, Insolation, Temperature, Factors affectin distribution of temperature. Heat budget, Inversion of Temperature, Air Pressure and winds Circulation of winds. | 12 | | | |
| П | Atmospheric moisture, condensation, evaporation and Humidity. Cyclones- Tropical and Temperate, Monsoon -El-Nino & La Nina | 11 | | | |
| ш | General Introduction of Oceans, Ocean Relief, Temperature, Salinity- distribution and determinants Currents – Oceanic circulation and its impact | 11 | | | |
| IV | Waves & Tides, Marine Deposits, Coral Reef, Theories Ocean resources- minerals food, Power | 11 | | | |
| Keywords | Composition, structure of atmosphere, Monsoon, Temperature, Salinity of Ocean, Store food nou | se for | | | |

Signature of Convener, Members of CBoS: 3 Coch le chiden

Br. Or Son De Son De Chiden

Brown Describent

Brown Describen

Text Books, Reference Books and Others

Text Books Recommended -

- 1. Lal, D.S. :Climatology, Chaitanaya Publications, Allahabad, 1986.
- 2. Critchfiedid, J.H.: General Climatology, Prentico Hall, India, New Delhi, 1993.
- 3. Das, P.K.: Monsoons 'National Book Trust, New Delhi, 1987.
- 4. Fein, J.S. and Slephens, P.N.: Monsons. Wiley Interscience, 1987
- 5. Davis Rechard J.A.: "Oceanography-An Introduction to the Marine Environment". Wm. C. Brown Iowa, 1986

Online Resources-

- https://www.imdpune.gov.in/training/training%20notes/Climatology-IMTC.pdf
 https://www.bkbcollege.in/upload/dpt_book/1669712576.pdf
 - > https://www.scribd.com/document/649484125/CLIMATOLOGY-BY-DS-LAL

OnlineResources-(e-Resources/e-books and e-learning portals)

- www.ignou.ac.in
- www.egyankosh.ac.in
- www.iitm.ac.in
- > www.eskillindia.org
- www.eshiksha.mp.gov.in
- > www.vlab.co.in
- www.swayam.ac.in
- www.internshala.com

| Suggested Continuous Ev | aluation Methods: | |
|--------------------------|---|--|
| Maximum Marks: | 100 Marks | |
| Continuous Internal Asse | ssment (CIA): 30 Marks | |
| End Semester Exam (ESE | c): 70 Marks | |
| Continuous Internal | Internal Test / Quiz-(2): 20 +20 | Better marks out of the two Test / Quiz |
| Assessment (CIA): | Assignment / Seminar - 10 | + obtained marks in Assignment shall be |
| (By Course Teacher) | Total Marks - 30 | considered against 30 Marks |
| End Semester Exam | Two section - A & B | |
| | | Mark; Q2. Short answer type- 5x4 = 20 Mark |
| | Section B: Descriptive answer type qts. | lout of 2 from each unit-4x10=40 Marks |

Signature of Convener, Members of CBoS: 6) Cool of Signature of Convener, Members of CBoS: 6) Cool of Signature of Convener, Members of CBoS: 6) Cool of Signature of Convener, Members of CBoS: 6) Cool of Signature of Convener, Members of CBoS: 6) Cool of Signature of Cool of Signature of CBoS: 6) Cool of Signature of CBoS: 6) Cool of Signature of CBoS: 6) Cool of CBoS: 6) CBOS: 6) Cool of CBoS: 6) CBOS: 6) Cool of CBoS: 6) CBOS: 6) Cool of CBoS: 6) CBOS: 6) Cool of CBoS: 6) CBOS: 6) Cool of CBoS: 6) CBOS: 6) Cool of CBoS: 6) CBOS: 6)

FOUR YEAR UNDERGRADUATE PROGRAM (2024 - 28) DEPARTMENT OF GEOGRAPHY

COURSE CURRICULUM

| P | ART- A: I | ntroductio | n | Complete and standing the side |
|---|---------------------------------------|--|------------------------------|--|
| | ogram: Bachelor in iploma/Degree/Hono | | Semester - III | Session: 2024-2025 |
| 1 | Course Code | GOSE- 03 P | | hy the self-of the property of the |
| 2 | Course Title | Practical 3 - ST | UDY OF INDIAN WEATH | ER MAP |
| 3 | Course Type | PRACTICAL | | |
| 4 | Pre-requisite (if, any) | As per Programme | | |
| 5 | Course Learning. Outcomes (CLO) | Understand Understand Understand | ous seasons-summer, winter a | er and climate. Seteorological instruments aps, the method of description and rainy |
| 6 | Credit Value | 1 Credits | | ory or Field learning/Training |
| 7 | Total-Marks | Max. Marks: | 50 | Min Passing Marks: 20 |

| PART - | B: Content of the Course | | | |
|---|---|--------|--|--|
| Total No. of learning-Training/performance Periods: 30 Periods (30 Hours) | | | | |
| Module | Topics (Course contents) | No. of | | |
| Lab./Field Training/ Experiment Contents of Course | Difference between Weather and Climate and its elements, Importance of Weather Maps Indian Meteorological Observatories, Meteorological instruments, Representation o Weather elements on Map, Interpretation of Indian daily weather report – summer winter, rainy season. | 30 | | |
| Keywords | Weather, Climate, Monsoon, NLM, Interpretation, Instruments. | | | |

Signature of Convener, Members of CBoS: 3 OSCALAR ANDRES - Sophia Ambrelo Sophia Sophia Sophia Ambrelo Sophia So

Text Books, Reference Books and Others

Text Books Recommended -

- 1. Sharma J. P., 2010: Prayogic Bhugol, Rastogi Publishers, Meerut.
- 2. Singh R. L. and Singh R. P. B., 1999: Elements of Practical Geography, Kalyani Publishers.
- 3. Sarkar, A. (2015) Practical geography: A systematic approach. Orient Black Swan Private Ltd., New Delhi
- 4. Singh, L R & Singh R (1977): Manchitra or Pryaogatamek Bhugol, Central Book, Depot, Allahabad 1.
- 5. Singh R L and Duttta P K (2012) Prayogatama Bhugol, Central Book Depot, Allahabad
- 6. Prof. R.N.Mishra & P.K.Sharma (2023) Practical Geography, Pareek Publication Jaipur

Online Resources-(e-Resources/e-books and e-learning portals)

- https://books.google.co.in/books
- https://uou.ac.in/sites/default/files/slm/DGIShttps://books.google.co.in/books?id=mZKhRkZ7qawC&printsec=copyright&redir_esc=y#v=onepage&q&f=false
- https://www.researchgate.net/publication/372371977 PRACTICAL GEOGRAPHY Prof RN Mishra Dr PK Sharma SAMPLE COPY

| PART -D: | Assessment and Evaluation |
|---|---|
| Maximum Mar | ernal Assessment (CIA): 15 Marks exam (ESE): 35 Marks |
| Continuous Internal Assessment (CIA): (By Course Teacher) | Internal Test / Quiz-(2): 10 & 10 Assignment/Seminar + Attendance - 05 Total Marks - 15 Better marks out of the two Test / Quiz brained marks in Assignment shall be considered against 15 Marks |
| End Semester Exam (ESE): | Laboratory / Field Skill Performance: On spot Assessment Performed the Task based on lab. work Spotting based on tools & technology (written) Viva-voce (based on principle/technology) Managed by Course teacher as per lab. status |

Signature of Convener, Members of CBoS: Sold with Docality Docalit

अध्योगम्य ।

FOUR YEAR UNDERGRADUATE PROGRAM (2024 - 28)

DEPARTMENT OF GEOGRAPHY

| P | ART- A: | ntroduction | E CURRICULUM | |
|-----------|---|--|--|--|
| Pr (D) | ogram: Bachelor i iploma/Degree/Honors | n Arts | Semester - IV | Session: 2024-2025 |
| 2 | Course Code | GOSE - 02 T | | |
| 7° | Course Title | SOIL & BIOGE | OGRAPHY | N 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 |
| 3 | Course Type | DSE | | In text of O Carting and Property |
| 4 | Pre-requisite (if, any) | As per Programm | ne | |
| 5 | Course Learning. Outcomes (CLO) | Acquaint wi Describe the To analyze the conservation Explain the redistribution of Critically ass | he different issues regarding najor principles and processe pf plants & anima | iogeography governing the soil formation. |
| 6 | Credit Value | 3 Credits | | eurning & Observation |
| 7 | Total Marks | Max. Marks: | 100 | Min Passing Marks: 40 |

| PART -B: | Content of the Course | | | |
|---------------------------------------|--|------------------|--|--|
| Total | Total No. of Teaching-learning Periods (01 Hr. per period) - 45 Periods (45 Hours) | | | |
| Unit | Topics (Course contents) | No. of Period | | |
| I Nature of Biogeography | Definition, scope of Biogeography, Approaches of Biography, relation with other branches of science, Relevance of the study of Biogeography, Development of Biogeography | 12 | | |
| II Soil formation& conservation | FAO; Soil Degradation: Causes and Consequences; Soil Conservation | 11 | | |
| III Plant & animal community | Plant Community: Meaning and Concepts; Evolution and Classification of Plants; Plant Response to Environment: Adaptation, Succession, and Climax; Dispersal and Distribution of Plants. Phyto-geographical regions; Consequences of deforestation. Theory of evolution of species(DARVIN) and its critics. Factor influencing the Distribution, Dispersal and migration of animals; means and barriers; Zoogeographical regions of the world. Wild life management; Relevance of sanctuaries with special reference to India | 11 | | |
| IV – Biodiversity | Biodiversity; Concept, Types and Importance; Biodiversity Conservation; Biomes with Special Reference to Tropical Rain Forests, Tropical Monsoon Deciduous Forest, Tropical and Temperate Grass Lands National Forest Policy of India, Conservation of Biotic Resources., Social forestry and Participatory Management of Forest in India. | 11 | | |

Signature of Convener, Members of CBoS: 5 DYS. Yallan

Text Books, Reference Books and Others

Text Books Recommended -

- 1. Cox, C.B. and Moore, P.D. (1993): Biogeography: An Ecological and Evolutionary Approach, 5th Edition, Blackwell, Oxford.
- 2. Darlington, P. J. (1957): Zoogeography: The Geographical Distribution of Animals, Wiley, New York.
- 3. Haggett, R.J., (1998): Fundamentals of Biogeography, Routledge, London
- 4. Mathur, M.S. (1988): Essentials of Biogeography, Jaipur
- 5. Singh, Savindra (2020), Biogeography, Pravalika Publication, Allahabad
- 6. Singh, R.B. (2009): (Eds.) Biogeography and Biodiversity. Rawat Publication, New Delhi.

Online Resources-

- https://www.rawatbooks.com/environment/biogeography-
- https://www.routledge.com/Fundamentals-of-Biogeography/Huggett/p/book/9780415323475
- https://study.com/academy/lesson/biogeography-definitions-examples.html

OnlineResources-(e-Resources/e-books and e-learning portals)

- > www.ignou.ac.in
- > www.egyankosh.ac.in
- www.iitm.ac.in
- > www.eskillindia.org
- www.eshiksha.mp.gov.in
- www.vlab.co.in
- www.swayam.ac.in
- > www.internshala.com

| Continuous Internal Assessment (CIA): (By Course Teacher) | Internal Test / Quiz-(2): 20 +20 Assignment / Seminar - 10 Total Marks - 30 | + obtained marks in Assignment shall be considered against 30 Marks |
|---|--|---|
| End Semester | Two section – A & B Section A: Q1. Objective – 10 x1= 10 M Section B: Descriptive answer type qts.,1 | ark; Q2. Short answer type- 5x4 =20 Marks out of 2 from each unit-4x10=40 Marks |

Signature of Convener, Members of CBoS ODS tacles We Projosith

OD Dr. B.L. Saw J. Bosc. Children

O Some Dr. Sophia Ambrolo-John

O Cooper Dr

| P | ART- A: | ntroduction | | |
|---|---|---|-----------------|-----------------------|
| | ogram: Bachelor ir Iiploma/Degree/Hono | 201 1 1 | Semester - IV | Session: 2024-2025 |
| 1 | Course Code | GOSE - 02 P | | |
| 2 | Course Title | PRACTICAL 2 - | GEOLOGICAL MAPS | |
| 3 | Course Type | Practical | | |
| 4 | Pre-requisite (if, any) | As per Programme | | |
| 5 | Course Learning. Outcomes (CLO) | At the end of the semester student has ability to 1. To provide the knowledge of geological structure of the earth 2. To Understand the Geological periods 3. To acquainted knowledge of rocks and their pattern | | |
| 6 | Credit Value | 1 Credits . Credit = 30 Hours Laboratory or Field learning/Training | | |
| 7 | Total Marks | Max. Marks: | 50 | Min Passing Marks: 20 |

| | Total No. of learning-Training/performance Periods: 30 Periods (30 Hours) | a ph is s |
|---|---|------------------|
| Module | Topics (Course contents) | No. of Period |
| Lab/Field Training/ Experiment Contents of Course | Geological Maps- definition, types, importance Geological time, Rocks, basic concepts: dip, strike line, width& thickness of bed Construction of strike line, completion of bed, Cross sectional analysis of conformable- Unconformable series Cross section analysis of fold & fault | 30 |
| Keywords | Geological map, rocks. Strike line, cross section | |

Signature of Convener, Members of CBos: 10 Dr Stadow La Colobita

Dr. 15-L. Sent Dr. Suphio Ambalo, Isphie

13) Oran Brown Dr. Suphio Ambalo, Isphie

Brown Dr. Suphio Ambalo, Isphie

Brown Dr. Suphio Ambalo, Isphie

| P | ART-A: Introdu | ection | and the second second | |
|---|--|---|---|---|
| | ogram: Bachelor in Degree / Honors) | n Arts | Semester - V | Session: 2024-2025 |
| 1 | Course Code | GOSE - 03 T | Service through a | |
| 2 | Course Title | DISASTER MAN | AGEMENT | |
| 3 | Course Type | DSE | | |
| 4 | Pre-requisite(if, any) | As per Programme | | |
| 5 | Course Learning. Outcomes(CLO) | Understand Understand Gain know Study and a Students wi and risk mi | I the different types of disas ledge on the impacts Disast assess vulnerability of a geo ill be equipped with various tigation. | of studying disaster management ters and causes for disasters. ers on environment and society |
| 6 | Credit Value | 3 Credits | Credit = 15 Hours -le | earning & Observation |
| 7 | Total Marks | Max. Marks: | 100 | Min Passing Marks:40 |

| Total No. of Teaching-learning Periods(01 Hr. per period) - 45 Periods (45 Hours) | | | | |
|---|---|------------------|--|--|
| Unit | Topics (Course contents) | No. of Period | | |
| I | Concept of Hazards & Disasters, Vulnerability and risk. Natural and man made hazards, Types of hazards, Concept of disaster management | 10 | | |
| П | Disaster management cycle- Pre disaster management, During disaster management, Post Disaster review and management, Prevention, mitigation, preparedness, Adaptation. | 12 | | |
| m | Detail study of nature and characteristics of hazards:- Flood, Cyclone, Drought, Earthquake. Man -made hazards – Industrial, Fire and Ground water depletion, Virus epidemic Disasters, | 12 | | |
| IV | Indigenous community based disaster preparedness. Role of NDMA, NIDM, NDRF, Disaster working system. Role of NGOs and Dos & not Dos in disaster management. | 11 | | |

Signature of Convener, Members of CBoS: @ Do Staday fully

Dr. B. L. San Door Wee Shide

Dr. B.

Text Books, Reference Books and Others

Text Books Recommended -

- 1. Larry R. Collins-Disaster Management and Preparedness, Rutledge and Taylor & Francis Group
- 2. JACK RABIN , Disaster Management Handbook, Taylor & Francis, 2008
- 3. W. Nick Carter, Disaster Management A Disaster Manager's Hand book, Asian Development Bank
- 4. Shrivastava, A K., A Text book of Disaster Management, Scientific Publishers Jodhpur, Rajasthan
- 5. Singh Savindra(2014) Apda Prabandhan, Pravalika Publication, Prayagraj.
- 6. Husain Mazid(2018) Paryavaran avam Paristhaitiki, GK Publication, New Delhi.
- 7. Sinha, A.K(2023) .Disaster Management, (Hindi)Ganga Prakashan Pyagraj
- 8. Pathak G.K (2021) Apda Prabandhan, (In Hindi)Rajesh Publication New Delhi.
- 9. Garg H.S.- Disaster Management (IN Hindi)SBPD Publications, 2018

Online Resources-(e-Resources / e-books and e-learning portals)

- E books- Disaster Management and Information Technology https://link.springer.com/book/10.1007/978-3-031-20939-0
- https://www.academia.edu/33090026/DISASTER_MANAGEMENT P Krishna Sankar
- https://asdma.gov.in/pdf/publication/undp/disaster_management_in_india.pdf https://ncert.nic.in/textbook/pdf/khgy107.pdf

OnlineResources-(e-Resources/e-books and e-learning portals)

- > www.ignou.ac.in
- > www.egyankosh.ac.in
- > www.iitm.ac.in
- > www.eskillindia.org
- > www.eshiksha.mp.gov.in
- > www.vlab.co.in
- www.swayam.ac.in
- > www.internshala.com

| PART-D: Assessment and Evaluation Suggested Continuous Evaluation Methods: Maximum Marks: Continuous Internal Assessment(CIA):30 Marks End Semester Exam(ESE):70 Marks | | | |
|--|---|--|--|
| Continuous Internal Assessment (CIA): (By Course Teacher) | Internal Test / Quiz-(2): 20 +20 Assignment/Seminar- 10 Total Marks -30 | Better marks out of the two Test / Quiz+ obtained marks in Assignment shall be considered against 30 Marks | |
| End Semester Exam (ESE): | | Mark; Q2. Short answer type- 5x4 =20Marks .,1out of 2 from each unit-4x10=40Marks | |

Signature of Convener, Members of CBoS (O Dr S Macles Let)

Signature of Convener, Members of CBoS (O Dr S Macles Let)

Signature of Convener, Members of CBoS (O Dr S Macles Let)

Signature of Convener, Members of CBoS (O Dr S Macles Let)

Signature of Convener, Members of CBoS (O Dr S Macles Let)

Signature of Convener, Members of CBoS (O Dr S Macles Let)

Signature of Convener, Members of CBoS (O Dr S Macles Let)

Signature of Convener, Members of CBoS (O Dr S Macles Let)

Signature of Convener, Members of CBoS (O Dr S Macles Let)

Signature of Convener, Members of CBoS (O Dr S Macles Let)

Signature of Convener, Members of CBoS (O Dr S Macles Let)

Signature of Convener, Members of CBoS (O Dr S Macles Let)

Signature of Convener, Members of CBoS (O Dr S Macles Let)

Signature of Convener, Members of CBoS (O Dr S Macles Let)

Signature of Convener, Members of CBoS (O Dr S Macles Let)

Signature of Convener, Members of CBoS (O Dr S Macles Let)

Signature of Convener, Members of CBoS (O Dr S Macles Let)

Signature of Convener, Members of CBoS (O Dr S Macles Let)

Signature of Convener, Members of CBoS (O Dr S Macles Let)

Signature of Convener, Members of CBoS (O Dr S Macles Let)

Signature of Convener, Members of CBoS (O Dr S Macles Let)

Signature of CBoS (O Dr S Macles Let)

Signature of CBoS (O Dr S Macles Let)

Signature of CBoS (O Dr S Macles Let)

Signature of CBoS (O Dr S Macles Let)

Signature of CBoS (O Dr S Macles Let)

Signature of CBoS (O Dr S Macles Let)

Signature of CBoS (O Dr S Macles Let)

Signature of CBoS (O Dr S Macles Let)

Signature of CBoS (O Dr S Macles Let)

Signature of CBoS (O Dr S Macles Let)

Signature of CBoS (O Dr S Macles Let)

Signature of CBoS (O Dr S Macles Let)

Signature of CBoS (O Dr S Macles Let)

Signature of CBoS (O Dr S Macles Let)

Signature of CBoS (O Dr S Macles Let)

Signature of CBoS (O Dr S Macles Let)

Signature of CBoS (O Dr S Macles Let)

Signature of CBoS (O Dr S Macles Let)

Signat

FOUR YEAR UNDERGRADUATE PROGRAM (2024 - 28)

DEPARTMENT OF GEOGRAPHY
COURSE CURRICULUM

| P | ART-A: Introdu | ction | minimized to the second | |
|---|--|--|---------------------------|------------------------------------|
| | ogram: Bachelor in iploma/Degree/Hono | | Semester-III | Session: 2024-2025 |
| 1 | Course Code | GOSE - 03 P | The American Market | A Charles Blocks & Charles & Color |
| 2 | Course Title | Practical 3 - STATISTICAL METHODS | | |
| 3 | Course Type | PRACTICAL | | |
| 4 | Pre-requisite (if, any) | As per Programme | | |
| 5 | Course Learning. Outcomes(CLO) | After the completion of course, the students will have ability to: 1. Learn the significance of statistics in geography. 2. Understand the importance of use of data in geography 3. Recognize the importance and application of Statistics in Geography 4. Interpret statistical data for a holistic 5. understanding of geographical phenomena. Know about different types of sampling. 6. Develop an idea about theoretical distribution. 7. Learn to use tabulation of data. Gain knowledge about association and correlation | | |
| 6 | Credit Value | 1 Credits | Credit =30 Hours Laborate | bry or Field learning/Training |
| 7 | Total Marks | Max. Marks:50 | | Min Passing Marks:20 |

| Total No. of learning-Training/performancePeriods:30 Periods (30 Hours) | | | | |
|---|--|------------------|--|--|
| Module | Topics (Course contents) | No. of Period | | |
| Lab./Field Training/ Experiment Contents of Course | Use of Data in Geography: Significance of Statistical Methods in Geography; Sources of Data, Scales of Measurement (Nominal, Ordinal, Interval and Ratio.) Tabulation and Descriptive Statistics: Central Tendency - Mean, Median and Mode, Dispersion: Standard Deviation, Variance and Coefficient of Variation Sampling: Methods of sampling Purposive, Random, Systematic and Stratified, Correlation: Rank Correlation, Product Moment Correlation. | 30 | | |
| Keywords | Use and Sources of Data, Scales of Measurement, Central Tendency, Dispersion, Correla | ation. | | |

Signature of Convener, Members of CBoS: (DDrStacker & DrStacker &

Text Books, Reference Books and Others

Text Books Recommended -

- 1. Sharma J. P., 2010: Prayogic Bhugol, Rastogi Publishers, Meerut.
- Singh R. L. and Singh R. P. B., 1999: Elements of Practical Geography, Kalyani Publishers.
- Sarkar, A. (2015) Practical geography: A systematic approach. Orient Black Swan Private Ltd., New Delhi
- 4. Singh, LR & Singh R (1977): Manchitra or Pryaogatamek Bhugol, Central Book, Depot, Allahabad 1.
- Singh R L and Duttta P K (2012) Prayogatama Bhugol, Central Book Depot, Allahabad
- Prof. R.N.Mishra & P.K.Sharma (2023) Practical Geography ,Pareck Publication Jaipur

Online Resources-

- Map Work and Practical Geography https://books.google.co.in/books
- Practical Geography, S.B.P.D Publicationshttps://uou.ac.in/sites/default/files/slm/DGIS-504.pdf
- https://ncert.nic.in/ncerts/l/legy303.pdf
- https://www.uou.ac.in/sites/default/files/slm/GE-203.pdf

| Suggested Continuous Ev | ment and Evaluation aluation Methods: | | |
|--|---|--|--|
| Maximum Marks: | 50 Marks | | |
| Continuous Internal Asse End Semester Exam (ESI | E): 35 Marks | Better marks out of the | wo Test / Quiz |
| Assessment (CIA): (By | Internal Test / Quiz-(2): 10 & 10 Assignment/Seminar + Attendance - 05 Total Marks - 15 | + obtained marks in Assi considered against | gnment shall be 15 Marks |
| Course Teacher) End Semester Exam (ESE): | Laboratory / Field Skill Performance: A. Performed the Task based on lab B. Spotting based on tools & techno C. Viva-voce (based on principle/tec | logy (written) – 10 Marks | Managed by Course teacher as per lab. status |

Signature of Convener, Members of CBOS: 60 DY Stallar WZ