GURU JAMBHESHWAR UNIVERSITY OF SCIENCE & TECHNOLOGY, HISAR
(Established by State Legislature Act 17 of 1995)
'A+' Grade, NAAC Accredited State Govt. University

Acad./AC-III/BOS&R-33/2023/ 6347
Dated: 28/11/23

To

The Controller of Examinations
GJUS&T, Hisar.

Geo/23/54
30/10/23

**Sub: Approval of scheme of examination and syllabi of Integrated B.Sc. (Hons./Hons. with Research) – M.Sc. Geography (1st & 2nd semester) being run in University Teaching Department w.e.f. academic session 2023-24.**

Sir,

I am directed to inform you that the Vice-Chancellor, on the recommendations of Dean, Faculty of Humanities and Social Sciences on 25.10.2023, is pleased to approve the scheme of examinations and syllabi of Integrated B.Sc. (Hons./Hons. with Research) – M.Sc. Geography (1st & 2nd semester) being run in University Teaching Department w.e.f. academic session 2023-24 under Section 11(5) of the University Act, 1995 in anticipation of approval of the Academic Council.

A copy of the scheme of examinations & syllabi of above said programme is enclosed herewith.

You are therefore, requested to take further necessary action accordingly.

Yours faithfully

DA: As above

Assistant Registrar (Academic)
for Registrar
28/11/23

Endst. No. Acad./AC-III/BOS&R-33/2023/ 6348-49 Dated: 28/11/23

A copy of the above is forwarded to the following for information and necessary action:-

1. Dean, Faculty of Humanities and Social Sciences, GJUS&T, Hisar.
2. Chairperson, Deptt. of Geography, GJUS&T, Hisar alongwith scheme of examinations and syllabi of Integrated B.Sc. (Hons./Hons. with Research) – M.Sc. Geography (1st & 2nd semester) being run in University Teaching Department w.e.f. academic session 2023-24. He is requested to arrange to upload the scheme of examinations & syllabi of above said programme on the website of the University.

Assistant Registrar (Academic)
28/11/23

GURU JAMBHESHWAR UNIVERSITY OF SCIENCE & TECHNOLOGY, HISAR

DEPARTMENT OF GEOGRAPHY

# Scheme and Instruction for Integrated B. Sc. (Hons. /Hons. with Research in Geography) - M.Sc. Geography Programme for 1st year session 2023-24

The Integrated B.Sc. (Hons. /Hons. with Research in Geography) - M.Sc. Geography is an integrated undergraduate and post graduate course designed is accordance with the provisions of the NEP 2020 program. The course curriculum is structured to reflect the University's belief that multi-disciplinary thinking is the key to develop comprehensive understanding.

The course Integrated B.Sc. (Hons. / Hons. with Research in Geography) under the NEP-2020 offers multiple entry and exist options for the students pursuing the course. The award of certificate, diploma and degree to the students pursuing B.Sc. (Hons. /Hons. with Research in Geography) - will be as mentioned below:

| Year | Type of Certificate/Diploma/Degree | Qualification title/nomenclature and programme duration |
|---|---|---|
| 1st Year | Undergraduate Certificate | Undergraduate Certificate in Geography |
| 2nd Year | Undergraduate Diploma | Undergraduate Diploma in Geography |
| 3rd Year | Bachelor's degree | Bachelor of Science in Geography. |
| 4th Year | Bachelor's degree (Honours/Honours with Research) | Bachelor of Science in Geography (Honours with Research) |
| 5th Year | Master's degree | Master of Science in Geography. |

Note: In case of any confusion or conflict with the rules and regulation of the university, the rules and regulation of the university shall prevail and decision of the Vice Chancellor will be final.

The Integrated B.Sc. (Hons. / Hons. with Research in Geography)- M.Sc. Geography programme is divided into ten semesters (two semesters in first year, two semesters in the second year, two semesters in the third year, two semester in fourth year and two semesters in fifth year). Every semester ordinarily shall be of 21 weeks of duration inclusive of teaching and examination. A student has to secure a minimum of 50% credits from the major discipline for the 3-year/4-year UG degree to be awarded a single major. The 04 credits shall be equivalent to 100 marks which shall be classified into the ratio of 70% external and 30% internal. The division of marks is as under:

| **Suggested Evaluation Methods** | |
|---|---|
| Internal Assessment :<br><br>➢ **Theory**<br>• Class Participation : **05** Marks<br>• Seminar / presentation / assignment / quiz / class test etc. : **05 Marks**<br>• Mid-Term Exam : **10 Marks** | End-Term Examination<br><br>50 Marks |
| ➢ **Practicum**<br>• Class Participation : **NIL**<br>• Seminar / Demonstration / Viva-Voce/Lab records etc. : **10 Marks**<br>• Mid-Term Exam : **NIL** | 20 Marks |

The Internal Assessment awarded to a student in any particular course will be based on performance of the students in two minor tests, Attendance and Co-curricular Activities (Assessment, Vivo-Voce, Presentation, Live assignment, Subject Quiz, Group Discussion, Case Study, etc.)

The students who fail in internal assessment as well as in aggregate will have the option to improve their score in the internal assessment giving a special chance to such students. However, no student will be allowed to improve his/her score of internal assessment, if he/she has already scored 40% marks in aggregate as well in external examination. A student who could not secure 40% marks in external will have to reappear in the external examination of the respective paper as per university rules.

**Instructions to the examiners and students for the Major Test of 70 marks:**

The examiner is required to set nine questions in all. The first question will be compulsory consisting of five short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

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# Guru Jambheshwar University of Science and Technology, HISAR

## Scheme of Examination for Undergraduate programme

## B.sc (Hons./Hons.with Research in Geography-M.sc Geography only for 1st year

## According to Curriculum Framework for Undergraduate Programmes as per NEP 2020

(Multiple Entry – Exit, Internships and Choice Based Credit System)

To be Implemented w.e.f. Academic Session 2023-24

| Course Type | Course Code | Nomenclature of Paper | Credits | Contact hours | Internal Marks | End term Marks | Total Marks | Duration of exam (Hrs.) T + P |
|---|---|---|---|---|---|---|---|---|
| **SEMESTER-1st** | | | | | | | | |
| DSC-A1 | 23-GEO-101 | Geomorphology | 3 | 3 | 20 | 50 | 70 | 3 |
| | 23-GEO-101 (P) | Geomorphology (Practical) | 1 | 2 | 10 | 20 | 30 | 3 |
| DSC-A2 | 23-GEO-102 | Fundamentals of Resource Geography | 3 | 3 | 20 | 50 | 70 | 3 |
| | 23-GEO-102(P) | Fundamentals of Resource Geography (Practical) | 1 | 2 | 10 | 20 | 30 | 3 |
| MIC-1 | 23-GEO-103 | Geography of India | 3 | 3 | 20 | 50 | 70 | 3 |
| | 23-GEO-103(P) | Geography of India (Practical) | 1 | 2 | 10 | 20 | 30 | 3 |
| MDC-1 | 23-GEO-104 | Basics of Remote-sensing Technology | 3 | 2 | 25 | 50 | 75 | 3 |
| SEC1 | 23-SEC-105G | Fundamentals in Statistical Methods | 3 | 2 | 25 | 50 | 75 | 3 |
| VAC | | Teaching of Guru Jambheshwar Ji | 2 | 2 | 15 | 35 | 50 | 3 |
| AEC | | Hindi | 2 | 2 | 15 | 35 | 50 | 3 |
| | | | 22 | | | | 550 | |
| **SEMESTER-2nd** | | | | | | | | |
| DSC-A3 | 23-GEO-201 | Cartographic Techniques in Geography | 3 | 3 | 20 | 50 | 70 | 3 |
| | 23-GEO-201(P) | Cartographic Techniques in Geography (Practical) | 1 | 2 | 10 | 20 | 30 | 3 |
| DSC-A4 | 23-GEO-202 | Human Geography of India (Theory) | 3 | 2 | 20 | 50 | 70 | 3 |
| | 23-GEO-202(P) | Human Geography of India (Practical) | 1 | 2 | 10 | 20 | 30 | 3 |
| MIC-2 | 23-GEO-203 | Climatology and Oceanography | 3 | 3 | 20 | 50 | 70 | 3 |
| | 23-GEO-203(P) | Climatology and Oceanography (Practical) | 1 | 2 | 10 | 20 | 30 | 3 |
| MDC-2 | 23-GEO-204 | Concepts of GIS Technology | 3 | 2 | 25 | 50 | 75 | 3 |
| SEC2 | 23-SEC-205G | Concepts of Disaster Management | 3 | 2 | 25 | 50 | 75 | 3 |
| AEC2 | | English | 2 | 2 | 15 | 35 | 50 | 3 |
| VAC2 | | Environmental Science | 2 | 2 | 15 | 35 | 50 | 3 |
| | | | 22 | | | | 550 | |

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# SEMESTER- I

| DSC-A1 | | | |
|---|---|---|---|
| **Session : 2023-24** | | | |
| **Part A – Introduction** | | | |
| Subject | Geography | | |
| Semester | I | | |
| Name of the Course | Geomorphology | | |
| Course Code | 23-GEO-101 | | |
| Course Type : (CC/MCC/MDC/CCM/DSEC/VOC /DSE/PC/AEC/VAC) | DSC | | |
| Level of the course (As per Annexure-I) | 100-199 | | |
| Pre-requisite for the course (if any) | NA | | |
| Course Learning Outcomes (CLOs) : | After completing this course, the learner will be able to :<br>1. Understand about the knowledge of Surface of earth<br>2. Enrich skills about geological system and various Landforms.<br>3. understand the Earth interior and its characteristics<br>4. Acquire knowledge about different types of Rocks and their characteristics<br>5. Attain skills in solving various practical problems associated with physical aspects. | | |
| Credits | Theory | Practical | Total |
| | 3 | 1 | 4 |
| Contact Hours | 3 | 2 | 5 |
| Max. Marks : 100<br>Internal Assessment Marks : 20 + 10 = 30<br>End Term Exam Marks : 50 + 20 = 70 | Time : 03 Hours | | |
| | | | |

| Part B – Contents of the Course | | |
|---|---|---|
| **Instructions for Paper – Setter** | | |
| **Unit** | **Topics** | **Contact Hours** |
| I | 1. Nature and scope of Geomorphology, Origin of the Earth<br>2. Interior of the Earth, Geological Time Scale | 11 |
| II | 3. Theory of Isostasy, Theory of Continental Drift<br>4. Theory of Plate Tectonics, Rocks and Their Types | 11 |
| III | 5. Earthquakes and Volcanoes, Weathering, causes and its types<br>6. Earth movements and resultant landforms. | 12 |
| IV | 7. Cycle of Erosion, Theory of M.Davis and W. Penck<br>8. Land forms Associated with River and Underground Water<br>Glaciers, Aeolian Topography and Coastal | 11 |
| V* | Instructions for external practical examiner: There will be three questions in all and candidate has to attempt two exercises.<br><br>Distribution of marks for evaluation<br>Exercise = 10 marks<br>File record = 5 marks<br>Viva-Voce = 5 marks | 30 |

| | | |
|---|---|---|
| | Practical Record : A project file consisting of 8 exercises on the below mentioned themes :-<br><br>1. Identification and collection of rocks samples (2 exercises).<br><br>2. Relief Aspect: (5 exercises).<br><br>a) Area height Curve<br>b) Altimetric frequency curve<br>c) Hypsographic curve<br>d) Hypsometric integral curve<br>e) Clinographic curve<br>3. Slope Analysis: (2 exercises).<br><br>f) Wentworth's method of average slope<br><br>g) G. H. Smith's method of relative relief | |

| Suggested Evaluation Methods | | |
|---|---|---|
| | Internal Assessment :<br><br>➢ **Theory**<br>• Class Participation : **05** Marks<br>• Seminar / presentation / assignment / quiz / class test etc. : **05 Marks**<br>• Mid-Term Exam : **10 Marks** | End-Term Examination<br><br>50 Marks |
| | ➢ **Practicum**<br>• Class Participation : **NIL**<br>• Seminar / Demonstration / Viva-Voce/Lab records etc. : **10 Marks**<br>• Mid-Term Exam : **NIL** | 20 Marks |

**Part – C : Learning Resources**

**Recommended Books/e-resources/LMS :**


1. Bloom AL. 2002. Geomorphology: A systematic Analysis of late Cenozoic landforms. Prentice-Hall PrivateLimited, New Delhi.
2. Embleton, C and Thormne. J. 1979. Process in Geomorphology. London, Edward Arnold.
3. Kale VS and Gupta A. 2001. Introduction to Geomorphology. Orient Longman, Hyderabad.
4. Ritter DF., Kochel RC. and Miller JR. 1995. Process Geomorphology. Dubuque, Win C. Brown Publishers.
5. Sharma HS and Kale VS 2009. Geomorphology in India, Prayag Pustak Bhawan, Allahabad.
6. Sharma, VK. 2010. Introduction to Process Geomorphology. Tayler and Francis's, London.
7. Sharma, VK. 1992. Earth's Surface Processes and Forms. Tata McGraw Hill Publications, New Delhi.
8. Singh S. 2002. Geomorphology, Prayag Pustak Bhawan, Allahabad.
9. Strahler AH. 2013. Introducing Physical Geography, Wiley and Sons, New York.
10. Thornbury, WD. 2004. Principles of Geomorphology, John Wiley Sons, New York.


* Applicable for course having practical components.

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| DSC-A2 | | | |
|---|---|---|---|
| **Session : 2023-24** | | | |
| **Part A – Introduction** | | | |
| Subject | Geography | | |
| Semester | I | | |
| Name of the Course | Fundamentals of Resource Geography | | |
| Course Code | 23-GEO-102 | | |
| Course Type : (CC/MCC/MDC/CCM/DSEC/VOC /DSE/PC/AEC/VAC) | DSC | | |
| Level of the course (As per Annexure-I) | 100-199 | | |
| Pre-requisite for the course (if any) | NA | | |
| Course Learning Outcomes (CLOs) : | After completing this course, the learner will be able to :<br>1. Acquaint with nature, techniques and field of resource geography.<br>2. Enhance knowledge about classification and development process of natural resources.<br>3. Provide knowledge on location, conservation and management methods of resources for sustainable development.<br>4. Provide knowledge about concepts, policies, problems and models of natural resource utilization.<br>5. Attain skills in mapping and monitoring of land, water, forest and mineral resources. | | |
| Credits | Theory | Practical | Total |
| | 3 | 1 | 4 |
| Contact Hours | 3 | 2 | 5 |
| Max. Marks : 100<br>Internal Assessment Marks : 20 + 10 = 30<br>End Term Exam Marks : 50 + 20 = 70 | Time : 03 Hours | | |

| Part B – Contents of the Course | | |
|---|---|---|
| **Instructions for Paper – Setter** | | |
| Question 1 is compulsory comprising of five sub parts spread over entire syllabus (two marks for each sub part), to be answered in 15-20 words. There will be eight long questions, two from each unit. The candidate has to answer four long questions, at least one question from each unit. All questions carry equal marks. | | |
| **Unit** | **Topics** | **Contact Hours** |
| I | 1. Nature, scope, techniques and importance of resource geography.<br>2. Concepts of resource: exploitation, accumulation, poverty and resource degradation. | 11 |
| II | 3. Classification of resources: renewable and non-renewable, biotic and abiotic resources.<br>4. Relationship between natural resources and development process. Role of technology in natural resource development. | 11 |
| III | 5. Distribution, utilization, problem and management of land and water resources.<br>6. Distribution, utilization, problem and management of forest and mineral resources. | 12 |
| IV | 7. Models of natural resources process: Zimmermann's primitive and Kirk's decision models.<br>8. Sustainable, resource development; Policies and challenges of natural resource management. | 11 |
| V* | Instructions for external practical examiner: There will be three questions in all and candidate has to attempt two exercises.<br><br>Distribution of marks for evaluation<br>Exercise = 10 marks<br>File record = 5 marks<br>Viva-Voce = 5 marks | 30 |

| | | |
|---|---|---|
| | Practical Record : A project file consisting of 8 exercises on the below mentioned themes :-<br><br>1. Preparation of land use/land cover map of an area from topographical sheets and aerial photographs (2 exercises).<br>2. Mapping of forest cover of an area from topographical sheets And aerial photographs (2 exercises).<br>3. Mapping of water bodies of an area from topographical sheets and aerial photographs (2 exercises).<br>4. Decadal changes in country-wise production of coal and iron ore with comparative decadal changes (2 exercises). | |

**Suggested Readings:**


1. Barbier, Edward B (2005) Natural Resources and Economic Development, Cambridge University Press.
2. Borton, I and R W Kates (1984) Readings in Resource Management and Conservation, University of ChicagoPress, Chicago.
3. Bruce, Mitchell (1989) Geography and Resource Analysis, John Wiley and Son, New York.
4. Eliot Hurst, M E (1972) A Geography of Economic Behavior: An Introduction, Duxbury Press, California.
5. Fabricius, C and Eddie Koch (2004) Rights, Resources and Rural Development: Community based NaturalResource Management in Southern Africa, Earthscan, London.
6. Guha, J L and P R Chattroj (1994) Economic Geography-A Study of Resources, The World Press Pvt. Ltd.Calcutta.
7. Martino, R L (1969) Resource Management. McGraw Hill Book Co., London.
8. Negi, B S (2000) Geography of Resources, Kedar Nath and Ram Nath, Meerut.
9. Owen, Oliver (1971) Natural Resource Conservation: An Ecological Approach, McMillion, New Delhi.
10. Raja, M (1989) Renewable Resources, Development, Concept Publication, New Delhi.
11. UNDP & World Resource Institute (2005) The Wealth of the Poor-Managing Ecosystems to Fight Poverty,World Resources Institute, Washington, DC.
12. Zimmermann, E. W. (1951) World Resources and Industries, Harper and Brothers, New Delhi.


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| MIC-1 | | | |
|---|---|---|---|
| **Session : 2023-24** | | | |
| **Part A – Introduction** | | | |
| Subject | Geography | | |
| Semester | I | | |
| Name of the Course | Geography of India | | |
| Course Code | 23-GEO-103 | | |
| Course Type : (CC/MCC/MDC/CCM/DSEC/VOC /DSE/PC/AEC/VAC) | DSC | | |
| Level of the course (As per Annexure-I) | 100-199 | | |
| Pre-requisite for the course (if any) | NA | | |
| Course Learning Outcomes (CLOs) : | After completing this course, the learner will be able to :<br>1. Provide knowledge about the physiography of our nation.<br>2. Understand the agriculture and irrigation system.<br>3. Understand the basic demographic structure and literacy.<br>4. Provide awareness about the resources and industries of our nation.<br>5. *acquire knowledge of socio-economic and demographic data. | | |
| Credits | Theory | Practical | Total |
| | 3 | 1 | 4 |
| Contact Hours | 3 | 2 | 5 |
| Max. Marks : 100<br>Internal Assessment Marks : 20 + 10 = 30<br>End Term Exam Marks : 50 + 20 = 70 | Time : 03 Hours | | |

| Part B – Contents of the Course | | |
|---|---|---|
| **Instructions for Paper - Setter** | | |
| Question 1 is compulsory consisting of five sub parts spread over entire syllabus (two marks for each sub parts), to be answered in 15-20 words. There will be eight long questions, two from each unit. The candidate has to answer four long questions, at least one question from each unit. All questions carry equal marks. | | |
| **Unit** | **Topics** | **Contact Hours** |
| I | 1. Physical divisions and drainage system.<br>2. Climate, soils and natural vegetation. | 12 |
| II | 3. Agricultural crops: major crops and cropping pattern, green revolution and its impacts.<br>4. Development of irrigation sources – canals and tube wells. | 11 |
| III | 5. Population: distribution, density and growth.<br>6. Population composition: sex ratio, rural and urban, literacy, work force, language and religion. | 11 |
| IV | 7. Resources: Production and distribution of iron ore, coal, petroleum, hydro power, solar and thermal power.<br>8. Industries: iron and steel, sugar and cotton textile; transport and communication. | 11 |
| V* | Instructions for external practical examiner: There will be three questions in all and candidate has to attempt two exercises.<br><br>Distribution of marks for evaluation<br>Exercise = 10 marks<br>File record = 5 marks<br>Viva-Voce = 5 marks | 30 |
| | Practical Record : A project file consisting of 8 exercises on the below mentioned themes :-<br><br>1. Identification and delineation of watershed of major rivers on map.<br>2. Land use pattern of India (pie chart) | |

| | | |
|---|---|---|
| | 3. Occupational structure of India (pie chart)<br>4. Distribution and population density map of India (choropleth and dot method)<br>5. Age and sex structure (pyramid diagram)<br>6. Identification of the major industrial region of India by cartogram.<br>7. Rainfall deviation diagram of at least 20 years.<br>8. Cropping intensity and irrigation intensity (bivariate method) | |

**Suggested Evaluation Methods**

Internal Assessment :

- **Theory**
  - Class Participation : **05** Marks
  - Seminar / presentation / assignment / quiz / class test etc. : **05 Marks**
  - Mid-Term Exam : **10 Marks**

- **Practicum**
  - Class Participation : **NIL**
  - Seminar / Demonstration / Viva-Voce/Lab records etc. : **10 Marks**
  - Mid-Term Exam : **NIL**

**Suggested Readings:**


1. Dubey, R. N.,1974: Economic Geography of India, Kitab Mahal, Allahabad
2. Hussain Majid (2015): Geography of India, Mc Graw Hill Education.
3. Joshi, H. L.,1990: Industrial Geography of India, Rawat Publications, Jaipur
4. Nag, P. and Sengupta, S., 1992: Geography of India, Concept publications. Co., New Delhi.
5. Singh, R. L.: India: A Regional Geography, N.G.S.I., Varanasi, 1971
6. Sharma, T. C. and Coutinho, O. 1988: Economic and Commercial Geography of India. Vikas PublishingHouse Pvt. Ltd,New Delhi.
7. Singh, S. and Saroha, J. 2019. Geography of India, Mc Graw Hill Education.
8. Tiwari, R. C.: Geography of India, Prayag Pustak Bhawan, Allahabad.


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**MDC-1**

**Session: 2023-24**

**Part A – Introduction**

| | |
|---|---|
| Subject | Geography |
| Semester | I |
| Name of the Course | Principal of Remote Sensing Technology |
| Course Code | 23-GEO-104 |
| CourseType: (CC/MCC/MDC/CC-M/DSEC/VOC/DSE/PC/AEC/VAC) | MDC |
| Level of the course (As per Annexure-I | 100-199 |
| Pre-requisite for the course (if any) | N.A. |
| Course Learning Outcomes (CLO): | After completing this course, the learner will be able to:<br>1. Understand the basic concepts in remote sensing with various satellites used in the collection of remotely sensed data<br>2. Enrich skills about recognize and measure real-world features with world latest technology<br>3. Understand various satellites used in the collection of remotely sensed data.<br>4. Acquire knowledge about different type's application in the field of natural resources management for sustainability.<br>5* attain skills in solving various practical problem associated with application of Remote Sensing. |

| Credits | Theory | Tutorial | Total |
|---|---|---|---|
| | 3 | 0 | 3 |
| Contact Hours | 2 | 1 | 3 |

| Part B-Contents of the Course | | |
|---|---|---|
| **Instructions for Paper-Setter** | | |
| **Unit** | **Topics** | **Contact Hours** |
| I | Definition; History of Remote Sensing; Electromagnetic Radiation (EMR), Characteristics; Electromagnetic Spectrum (EMS); Energy Interaction in The Atmosphere; Energy Interactions with The Earth's Surface. Atmospheric Windows; Types of Remote Sensing with Respect to Wavelength Regions. | 7 |
| II | Sensor and Platforms. Types of Platforms and Sensors– Airborne Remote Sensing; Space Borne Remote Sensing; Orbital Elements of Satellite; Sensor Types Characteristics: Active and Passive Remote Sensing; Imaging Systems; Non-Imaging Sensors; Characteristics of Optical Sensors; Resolution. | 7 |
| III | Remote Sensing Satellites and Data Products: Overview of Different Satellite and Sensors for Earth Observations– Coarse; Medium and High- Resolution Missions (IRS Mission, Landsat Series; SPOT; Ikonos; Quickbird; ASTER; Sentinel; Aqua and Terra (MODIS); SAR and Future Missions. | 8 |
| IV | Image Interpretation: types of images- Panchromatic, False and True colour combination and elements of image interpretation. Various Application of Optical remote sensing in the field of Land & water Resources, and Forest Resources | 8 |

**Suggested Evaluation Methods**

| | |
|---|---|
| **Internal Assessment: 25**<br>➢ **Theory**<br>• Class Participation: **07 Marks**<br>• Seminar/presentation/assignment/quiz/class test etc.: **08 Marks**<br>• Mid-Term Exam: **10 Marks** | **End-Term Examination:**<br><br>**50 Marks** |

**Recommended Books/e-resources/LMS:**


1. Lillesand, T., Kiefer, R. W., & Chipman, J. (2014). Remote Sensing and Image Interpretation.
2. John Wiley & Sons. Rees, W. G. (2012). Physical Principles of Remote Sensing. Cambridge University Press.
3. Jensen, J. R. (2009). Remote Sensing of The Environment: An Earth Resource Perspective 2/E. Pearson Education India.
4. Sabins, F. F. (2007). Remote Sensing: Principles and Applications. Waveland Press
5. Avery, T.E. and Berlin, G. L.( 1992) Fundamentals of Remote Sensing and Air Photo Interpretation. 514 Ed, Macmillan, New York, USA.
6. Aggarwal, C.S. And Garg, P. K. (2000) Remote Sensing. A.H. Wheeler & Co. Ltd, New Delhi.
7. Campbell, J. B. (2002) Introduction to Remote Sensing. 3rd ed., Taylor & Francis, New

York, USA.
8. Jensen, J.R. (1996). Introductory Digital Image Processing A remote sensing perspective. Prentice Hall Seies in GIS , USA
9. Jensen, J.R. (2006). "Remote Sensing of the Environment – An Earth Resources Perspective", Pearson Education, Inc. (Singapore) Pvt. Ltd., Indian edition, Delhi.
10. Joseph, George and Jeganathan, C. (2017). "Fundamentals of Remote Sensing", 3rd Edition, Universities press (India) Pvt. Ltd., Hyderabad.
11. Kumar, M. (2000) Text book on Remote Sensing. NCERT, New Delhi.
12. Lillesand, Thomas M. and Kiefer, Ralph, W. (2007). "Remote Sensing and Image Interpretation", 4th Edition, John Wiley and Sons, New York
13. 10. Vyas, P. R. (2015) RS and GIS Basic and Application. Rawat Publication

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| SEC-1 | | | |
|---|---|---|---|
| **Session : 2023-24** | | | |
| **Part A – Introduction** | | | |
| Subject | Geography | | |
| Semester | I | | |
| Name of the Course | Fundamentals of Statistical Techniques | | |
| Course Code | 23-SEC-105G | | |
| Course Type : (CC/MCC/MDC/CCM/DSEC/VOC /DSE/PC/AEC/VAC) | SEC | | |
| Level of the course (As per Annexure-I) | 100-199 | | |
| Pre-requisite for the course (if any) | NA | | |
| Course Learning Outcomes (CLOs) : | After completing this course, the learner will be able to :<br>1. to train the students to use the techniques of statistical analysis<br>2. Deals with simple tools and techniques, which will help a student in data collection, presentation, analysis and drawing inferences. | | |
| Credits | Theory | Tutorials | Total |
| | 3 | 0 | 3 |
| Contact Hours | 2 | 1 | 3 |
| Max. Marks : 75<br>Internal Assessment Marks : 25<br>End Term Exam Marks : 50 | Time : 03 Hours | | |

| Part B – Contents of the Course | | |
|---|---|---|
| **Instructions for Paper – Setter** | | |
| **Unit** | **Topics** | **Contact Hours** |
| I | 1. Primary data and secondary data : definition, sources and method of collection – quantitative data : time series data, cross section data and pooled data – qualitative data – presentation of data – simple table, complex table<br><br>2. Discrete frequency distribution – continuous or grouped frequency distribution – relative frequency distribution – cumulative frequency distribution : less than and more than – presentation of data (diagram) | 07 |
| II | 3. Meaning of average – types of average: arithmetic mean, median, mode, geometric mean, harmonic mean-quartiles (individual series, discrete series and continuous series – deciles (for individual series, discrete series and continuous series) – percentiles (individual series, discrete series and continuous series.<br><br>4. Meaning of dispersion – types of dispersion : range, quartile deviation, mean deviation, standard deviation and variance (along with absolute measure, the relative measure or coefficient of each type of dispersion) | 08 |
| III | 5. Coefficient of variation – combined standard deviation – Lorenz curve (application in income distribution)...<br><br>6. Measure of inequality: location quotient and Lorenz curve. | 07 |
| IV | 7. Sampling: theory, methods, distribution and chance errors<br><br>8. Spearman's rank correlation and Karl Pearson's correlation coefficient test of significance.<br><br>Simple linear regression model: properties of least square estimate, coefficient of determination | 08 |
| **Suggested Evaluation Methods** | | |
| | Internal Assessment : 25<br><br>➢ **Theory**<br>• Class Participation : **07** Marks<br>• Seminar / presentation / assignment / quiz / class test etc. : **08 Marks**<br>• Mid-Term Exam : **10 Marks** | End-Term Examination<br><br>50 Marks |

## Part – C : Learning Resources

**Suggested Readings**

1. A.L. Nagar and R.K. Das (2006), Basic Statistics, Second Edition Oxford University Press, New Delhi.

2. S.P. Gupta (2000), Statistical Methods, Sultan Chand and Sons, New Delhi.

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Course Code 105 Title

Maximum Marks:50 गुरू जम्भेश्वर की शिक्षाएं (Total Credits:2)

Internal-15

External-35

Time Allowed: 1Hour

(क) गुरू जम्भेश्वर जी का जीवन परिचय एवं उनके प्रमुख सिद्धान्त।

(ख) जम्भवाणी और जाम्भाणी साहित्य के प्रमुख ग्रंथ।

(ग) गुरू जम्भेश्वर जी के उन्नत्तीस धर्म–नियम।

(घ) गुरू जम्भेश्वर जी का पर्यावरण संरक्षण में योगदान।

(ड.) वर्तमान युग में गुरू जम्भेश्वर जी के सिद्धान्तों की प्रासंगिकता।

अनुशासिंत ग्रन्थः–

| ग्रन्थ का नाम | लेखक का नाम |
|---|---|
| 1. जम्भसार भाग 1–2 | स्वामी श्री कृष्णाचन्द्र आचार्य |
| 2. जाम्भोजी बिश्नोई सम्प्रदाय और साहित्य भाग1–2 | डॉ0 हीरालाल माहेश्वरी |
| 3. शब्दवाणी–मूल और टीका | डॉ0 हीरालाल माहेश्वरी |
| 4. जाम्भोजी की वाणी | डॉ0 सूर्य शंकर पारीक |
| 5. जाम्भवाणी मूल संजीवनी व्याख्या | डॉ0 किशनाराम बिश्नोई |
| 6. गुरू जम्भेश्वर – विविध आयाम | डॉ0 किशनाराम बिश्नोई |
| 7. जाम्भा पुराण | स्वामी कृष्णानन्द |
| 8. पर्यावरण संरक्षण और खेजड़ली बलिदान | डॉ0 बनवारी लाल सहू |
| 9. गुरू जम्भेश्वर जीवन और साधना | डॉ0 किशनाराम बिश्नोई |

## AEC-1
## पेपर/कोर्स का नाम:

# हिंदी

**Maximum Marks: 50** **(Total Credits: 2)**
**Internal Assessment: 15**
**External Assessment: 35**
**Time Allowed: 1 Hour**

Programme Outcomes:
कार्यक्रम प्रतिफल: हिंदी भाषा को गहराई से तथा तर्कसंगत तथ्यों के साथ समझने के लिए क्रिटिकल रीडिंग महत्वपूर्ण और मददगार होती है। इस कोर्स के माध्यम से विद्यार्थी साहित्यिक पाठ्य सामग्री को विश्लेषणात्मक और व्याख्यात्मक तरीके से समझने का प्रयास करेंगे। यह पाठ्यक्रम हिंदी से इतर अन्य सभी विभिन्न विषयों में अध्ययनरत विद्यार्थियों को हिंदी साहित्य को व्यापक तरीके से पढ़ने, समझने एवं विद्यार्थियों में आलोचनात्मक दृष्टि विकसित करने का अवसर प्रदान करेगा।

पाठ्यक्रम विषय वस्तु:
पद्य भाग:
1 कबीर के दोहे (1 से 10)
2 तुलसी की कवितावली ( 1 से 10 पद्यांश)
3 मैथिलीशरण गुप्त की कविता- (भारत-भारती)
4 रामधारी सिंह दिनकर की कविता- (कलम आज उनकी जय बोल)
5 महादेवी वर्मा की कविता- (मैं नीर भरी दुख की बदली)
गद्य भाग-
1 चंद्रधर शर्मा गुलेरी की कहानी- "उसने कहा था"
2 सियारामशरण गुप्त की कहानी- "काकी"
3 भीष्म साहनी की कहानी- "चीफ की दावत"
4 उषा प्रियंवदा की कहानी- "वापसी"
5 किसी प्रसिद्ध हिंदी कहानीकार की कहानी अथवा हिंदी उपन्यासकार के उपन्यास का आलोचनात्मक विश्लेषण।

निर्देश-
निर्धारित पाठ्यक्रम विषय वस्तु के दोनों भागों से प्रश्न पूछे जाएंगे। प्रत्येक खंड से 5-5 अंकों के 10 आलोचनात्मक प्रश्न व्याख्या संबंधी एवं समीक्षात्मक प्रश्न पूछे जाएंगे।

संदर्भ ग्रन्थ:

1 मध्यकालीन काव्य कुंज - सं. रामसजन पांडेय
2 हिंदी की प्रसिद्ध कहानियां- सं. अमरकांत
4 कथाभूमि- सं. चितरंजन मिश्र
5 तुलसीदास की आलोचनात्मक दृष्टि- डॉ रामविलास शर्मा
6 कबीर चिंतन- डॉ रमेश मिश्र
7 कबीर का सामाजिक दर्शन- डॉ प्रह्लाद मौर्य
8 दीपगति- महादेवी वर्मा

# SEMESTER- II

| DSC-A3 | | | |
|---|---|---|---|
| **Session : 2023-24** | | | |
| **Part A – Introduction** | | | |
| Subject | Geography | | |
| Semester | II | | |
| Name of the Course | Cartographic Techniques in Geography | | |
| Course Code | 23-GEO-201 | | |
| Course Type : (CC/MCC/MDC/CCM/DSEC/VOC /DSE/PC/AEC/VAC) | DSC | | |
| Level of the course (As per Annexure-I) | 100-199 | | |
| Pre-requisite for the course (if any) | NA | | |
| Course Learning Outcomes (CLOs) : | After completing this course, the learner will be able to :<br>1. Understand and differentiate types of map scales.<br>2. Become aware about the applications of map scales.<br>3. Gains the basic understanding of map making and will be able to prepare different kinds of thematic maps.<br>4. Apprehend the knowledge about surveyingand survey tools.<br>5. *acquire skills to make use of scales and making thematic maps and diagrams. | | |
| Credits | Theory | Practical | Total |
| | 3 | 1 | 4 |
| Contact Hours | 3 | 2 | 5 |
| Max. Marks : 100<br>Internal Assessment Marks : 20 + 10 = 30<br>End Term Exam Marks : 50 + 20 = 70 | Time : 03 Hours | | |

## Part B – Contents of the Course

### Instructions for Paper – Setter

Question 1 is compulsory consisting of five sub parts spread over entire syllabus (two marks for each sub parts), to be answered in 15-20 words. There will be eight long questions, two from each unit. The candidate has to answer four long questions, at least one question from each unit. All questions carry equal marks.

| Unit | Topics | Contact Hours |
|---|---|---|
| I | 1. Nature and scope of cartography, historical and recent development.<br>2. Drawing instruments: properties and characteristics; drawing techniques. | 11 |
| II | 3. **Scale :** types, significance and applications.<br>4. **Maps :** classification, characteristics, significance and limitations. | 11 |
| III | 5. Basic concepts of surveying and survey equipment's, coordinate system and map : magnetic and true north, plar and rectangular.<br>6. Techniques of map enlargement and reduction; map producing agencies in India (GSI, SOI, FSI, NATMO, NBBSLUP, NRSC, AISSLUP and IMD). | 11 |
| IV | 7. Methods and representation of climatic data.<br>8. Methods and representation of socio-economic data. | 12 |
| V* | Instructions for external practical examiner: There will be three questions in all and candidate has to attempt two exercises.<br><br>Distribution of marks for evaluation<br>Exercise = 10 marks<br>File record = 5 marks<br>Viva-Voce = 5 marks | 30 |
| | Practical Record : A project file consisting of 8 exercises on the below mentioned themes :-<br><br>1. Graphical representation of scales (2 exercises) | |

| | | |
|---|---|---|
| | 2. Construction of thematic maps (3 exercises)<br>3. Representation of data by one, two and three-dimensional diagrams (3 exercise). | |

**Suggested Readings:**


1. Misra, R.P. and Ramesh, A. 1999. Fundamentals of Cartography, Concept Publishing Company, New Delhi
2. Monkhouse, F.J. and Wilkinson, H.R. 1980. Maps and Diagrams. B. I. Publications, New Delhi.
3. Singh, R. L. 1986. Elements of Practical Geography. Kalyani Publishers, New Delhi.


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| DSC-A4 — A(4) | | | |
|---|---|---|---|
| **Session : 2023-24** | | | |
| **Part A – Introduction** | | | |
| Subject | Geography | | |
| Semester | II | | |
| Name of the Course | Human Geography | | |
| Course Code | 23-GEO-202 | | |
| Course Type : (CC/MCC/MDC/CCM/DSEC/VOC /DSE/PC/AEC/VAC) | DSC | | |
| Level of the course (As per Annexure-I) | 100-199 | | |
| Pre-requisite for the course (if any) | NA | | |
| Course Learning Outcomes (CLOs) : | After completing this course, the learner will be able to :<br>1. Gain knowledge about the fundamentals of human geography.<br>2. Enhance the knowledge of race and religion.<br>3. Understand the organization of space.<br>4. Familiarize with world economic systems.<br>5. Gain knowledge of mapping socio-economic and demographic data. | | |
| Credits | Theory | Practical | Total |
| | 3 | 1 | 4 |
| Contact Hours | 3 | 2 | 5 |
| Max. Marks : 100<br>Internal Assessment Marks : 20 + 10 = 30<br>End Term Exam Marks : 50 + 20 = 70 | Time : 03 Hours | | |

| Part B – Contents of the Course | | |
|---|---|---|
| **Instructions for Paper - Setter** | | |
| Question 1 is compulsory consisting of five sub parts spread over entire syllabus (two marks for each sub parts), to be answered in 15-20 words. There will be eight long questions, two from each unit. The candidate has to answer four long questions, at least one question from each unit. All questions carry equal marks. | | |
| **Unit** | **Topics** | **Contact Hours** |
| I | 1. Definition, nature and scope of human geography.<br>2. Development of human geography approaches to study human geography, branches and relation with other social sciences. | 11 |
| II | 3. Human race: Meaning, classification of races and their global diffusion and distribution.<br>4. Religion: meaning, nature and classification. Evolution and global distribution of major religions in the world. | 11 |
| III | 5. Organization of space: central place theory, agricultural location model and industrial location model.<br>6. Distribution, density and growth of population: Determinants and world pattern. | 11 |
| IV | 7. World pattern of development: economy and polity.<br>8. World pattern of migration: streams and determinants. | 12 |
| V* | Instructions for external practical examiner: There will be three questions in all and candidate has to attempt two exercises.<br><br>Distribution of marks for evaluation<br>Exercise = 10 marks<br>File record = 5 marks<br>Viva-Voce = 5 marks | 30 |

| | | |
|---|---|---|
| | Practical Record : A project file consisting of 8 exercises on the below mentioned themes :-<br><br>1. Composition of major religions of the world (1 exercise).<br>2. Methods of representing population distribution and density (2 exercises)<br>3. Flow diagram of migration streams of world population (1 exercise).<br>4. Plotting of isotims and isodapane (2 exercises).<br>5. Spatial and temporal growth of world population (2 exercises). | |

**References:**


1. Aitken, S and Valentine, G. (2006), Approaches to Human geography, Sage.
2. Johnston, R.J., Gregory D. Pratt G. and Watts M., (2005, 5th ed.), the Dictionary of Human Geography, Blackwell.
3. Kitchin R., Thrift, N, (eds.) (2009), the International Encyclopedia of Human Geography, Elsvier.
4. Benko,G. and Strohmayer, U. (2004), Human Geography, a History for the 21st Century,Arnold, London.
5. Cloke, P., Crang, P., Goodwin, M., (2004), Envisioning Human Geographies
6. Cloke, P. and Johnston, R.,(eds.), (2005), Spaces of Geographical Thought, Deconstructing Human Geography's Binaries, Sage.
7. Atkinson, D., Jackson, P., Sibley, D. and Washbourne, N. (eds.) (2005), Cultural Geography:A Critical Geography of Key Concepts, Tauris, I.B.
8. Norton William, (2002), Human Geography, Oxford, 4th edition
9. Barnes, T. and Gregory, D., 1997, Reading Human geography, Arnold.
10. Smith, D. M. (1977): Human Geography, A Welfare Approach, Arnold
11. Peet, R. (ed) (1987): Radical Geography, Maroufa Press, Rawat, New Delhi, 2003
12. Ambrose, P. G. (1969): Analytical Human Geography, Longman, London
13. De Blij, H. J. (1986): Human Geography, John Wiley & Sons, New York.
14. Vivelo, F. R. (1978): Cultural Anthropology, McGraw Hill, USA.
15. Peet R. and Thrift, N. (eds) (1989): New Models in Geography, Vol. I & II, Unwin Hyman.
16. Ahmed, A. (1999). Social Geography, Rawat Publication, New Delhi.
17. Massey, D, Alien, J, P, Jarre, P (eds) (1999): Human Geography Today, Cambridge Polity Press.
18. Fellman, J (1997): Landscape of Human Activities, Brown and Benchmatric Pub.
19. Coates, B.E., Johnston, R.J. Knox, (1977): Geography and Inequality, Oxford University Press


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MIC-2

**Session : 2023-24**

**Part A – Introduction**

| | | | |
|---|---|---|---|
| Subject | Geography | | |
| Semester | II | | |
| Name of the Course | Climatology and Oceanography | | |
| Course Code | 23-GEO-203 | | |
| Course Type : (CC/MCC/MDC/CCM/DSEC/VOC /DSE/PC/AEC/VAC) | DSC | | |
| Level of the course (As per Annexure-I) | 100-199 | | |
| Pre-requisite for the course (if any) | NA | | |
| Course Learning Outcomes (CLOs) : | After completing this course, the learner will be able to :<br>1. Enhancement of knowledge about atmospheric constituents and structure.<br>2. Development of scientific understanding about climatic elements and their characteristics.<br>3. Enrichment of knowledge about topographic features of oceanic floor and deposits.<br>4. Augmentation of knowledge about movement and circulation in oceanic water. | | |
| Credits | Theory | Practical | Total |
| | 3 | 1 | 4 |
| Contact Hours | 3 | 2 | 5 |
| Max. Marks : 100<br>Internal Assessment Marks : 20 + 10 = 30<br>End Term Exam Marks : 50 + 20 = 70 | Time : 03 Hours | | |

| Part B – Contents of the Course | | |
|---|---|---|
| **Instructions for Paper – Setter** | | |
| Question 1 is compulsory consisting of five sub parts spread over entire syllabus (two marks for each sub parts), to be answered in 15-20 words. There will be eight long questions, two from each unit. The candidate has to answer four long questions, at least one question from each unit. All questions carry equal marks. | | |
| **Unit** | **Topics** | **Contact Hours** |
| I | 1. Meaning, nature and scope of climatology<br>Composition and structure of atmosphere Solar Radiation : global heat budget<br>2. Temperature :distribution of temperature, Atmospheric pressure : distribution and pressure belts | 11 |
| II | 3. Monsoon: origin, types, theories. Jet-streams El-Nino and La-Nina , Humidity and Processes of evaporation, condensation and precipitation<br>4. Weather disturbances : tropical and extra-tropical cyclones and world climatic classification by Koppen | 12 |
| III | 5. Major topographic features of ocean basins, bottom relief of Atlantic, Pacific and Indian oceans.<br>6 Sources, classification and distribution of ocean deposits, corals-origin, types and conditions for development; theories of the origin of coral reefs (Subsidence and Standstill). | 12 |
| IV | 7. Origin, causes, types and effects of the ocean currents; currents of the Atlantic, Pacific and Indian oceans.<br>8. Oceanic temperature: distribution and causes of variation.<br>Composition of oceanic water and distribution of salinity. | 11 |
| V* | Instructions for external practical examiner: There will be three questions in all and candidate has to attempt two exercises.<br>Distribution of marks for evaluation<br>Exercise = 10 marks<br>File record = 5 marks<br>Viva-Voce = 5 marks | 30 |
| | | |

| | | |
|---|---|---|
| | Practical Record : A project file consisting of 8 exercises on the below mentioned themes :-<br><br>1. Composition of major religions of the world (1 exercise).<br><br>2. Methods of representing population distribution and density (2 exercises)<br><br>3. Flow diagram of migration streams of world population (1 exercise).<br><br>4. Plotting of isotims and isodapane (2 exercises).<br>Spatial and temporal growth of world population (2 exercises). | |

**Suggested Readings:**


1. Athrens, C. D. Meteorology Today: An Introduction to Weather, Climate and Environment, West PublishingCo., 1994
2. Barry, R. G. and Chorley, R. J. Atmosphere, Weather and Climate, Marth Ren, 2010.
3. Critchfield, H. J. General Climatology, Prentice Hall of India, New Delhi, 1987.
4. Collins, J.M. Climatology, Oxford, 2014.
5. Das, P.K. The Monsoons, National Book Trust, New Delhi, 1984.
6. Lal, D.S. Climatology, Chaitanya Publishing House, Allahabad, 1966.
7. Lutgens, F.K. and Tarbuck, E.J. The Atmosphere: An Introduction to Meteorology, Prentice Hall of India,New Delhi, 2010.
8. Miller, A.A. Climatology, Methuen and Co., London, 1979.
9. Oliver, J.E. and Hidore, J.J. Climatology: An Atmospheric Science, Pearson Education Inc. New Delhi, 2003.
10. Ram Sastry, AA, Weather and Weather Forecasting, Publication Division, New Delhi.
11. Trewartha G. T., An Introduction to Climate, McGraw Hill Company, New York, 1980.
12. Lal, D.S. 2007. Oceanography. Sharda Pustak Bhawan, Allahabad.
13. Patra K.C. 2010. Hydrology and Water Resource Engineering, Norsa Publishing House, New Delhi.
14. Siddhartha, K.1999. Oceanography-A Brief Introduction, Kisalaya Publications, New Delhi.
15. Singh. S. 2008. Oceanography. Prayag Pustak Bhawan, Allahabad
16. Sharma RC and Vatal M. 1993. Oceanography for Geographers, Chaitanya Publishing House, Allahabad


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| MDC-II | | | |
|---|---|---|---|
| **Session: 2023-24** | | | |
| **Part A – Introduction** | | | |
| Subject | Geography | | |
| Semester | II | | |
| Name of the Course | Principal of GIS Technology | | |
| Course Code | 23-GEO-204 | | |
| Course Type: (CC/MCC/MDC/CC-M/DSEC/VOC/DSE/PC/AEC/VAC) | MDC | | |
| Level of the course (As per Annexure-I | 100-199 | | |
| Pre-requisite for the course (if any) | N.A. | | |
| Course Learning Outcomes (CLO): | After completing this course, the learner will be able to:<br>1. Understand the basic concepts in GIS Technology with various method used in the collection of spatial and Non-spatial data<br>2. Enrich skills about recognize and measure real-world features with world latest technology<br>3. Understand various data method used in the GIS environment<br>4. Acquire knowledge about different type's application in the field of natural resources management for sustainability.<br>5* attain skills in solving various practical problem associated with application of GIS. | | |
| Credits | Theory | Tutorial | Total |
| | 3 | 0 | 3 |
| Contact Hours | 2 | 1 | 3 |

## Part B-Contents of the Course

**Instructions for Paper-Setter**

| Unit | Topics | Contact Hours |
|---|---|---|
| I | GIS: Definition and Historic Development; Components and Elements of GIS; Geographic objects: point, line and area; analog and digital maps; coordinate systems and map projections. | 7 |
| II | Data Types: Raster and Vector; Data formats: Spatial and non-spatial; Sources of data input; Generation of Geo-data bases; Data base management system; Spatial topology. | 7 |
| III | GIS and Spatial Analysis: Neighbourhood analysis; Proximity analysis and buffers; Overlays Analysis – raster and vector based overlay and their applications | 8 |
| IV | Fundamentals of Global Positioning System (GPS): Concept and Principles; GPS Segment: Space, Control and User; GPS devices: handle and differential GPS; GPS system: NAVSTAR, GALILIO and<br>GAGAN. Applications of GPS | 8 |
| | | |

**Suggested Evaluation Methods**

| | |
|---|---|
| **Internal Assessment: 25**<br>➢ **Theory**<br>• Class Participation: **07 Marks**<br>• Seminar/presentation/assignment/quiz/class test etc.: **08 Marks**<br>• Mid-Term Exam: **10 Marks** | **End-Term Examination:**<br><br>**50 Marks** |

**Recommended Books/e-resources/LMS:**


1. Kang-tsung Chang (2007), 'Introduction to Geographic Information Systems' Tata MCGraw Hill, New Delhi.
2. C.P.Lo and Albert K.W. Yeung (2006) "Concepts and Techniques of Geographic information Systems" Prentice Hall of India, New Delhi
3. Burrough, Peter A. and Rachael McDonnell, (1998), 'Principles of Geographical Information Systems' Oxford University press, New York.
4. Magwire, D.J. Goodchild, M.F. and Rhind, D.M., (2005), 'Geographical Information Systems: Principles and Applications', Longman Group, U.K.
5. Burrough, P.A., 1986, Geographical Information System for land Resources System, Oxford Univ. Press, UK.
6. Fotheringham, S.; Rogerson, P. (ed.), 1994. Spatial analysis and GIS. Taylor and Francis, London, UK.
7. Laurini, Robert and Dierk Thompson, 1992, Fundamentals of Spatial Information Systems, Academics Press, ISBN 0-12-438380-7.
8. Maguire,D.J.; Goodchild, M.F.; Rhind,D.W. 1991.Geographical information System, Longman, London,UK
9. Siddiqui, M.A.; 2006, Introduction to Geographical Information System, Sharda Pustak Bhavan, Allahabad.
10. Siddiqui, M.A.; 2011, Concepts and Techniques of Geoinformatics, Sharda Pustak Bhavan, Allahabad.


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| SEC-II | | | |
|---|---|---|---|
| **Session : 2023-24** | | | |
| **Part A – Introduction** | | | |
| Subject | Geography | | |
| Semester | II | | |
| Name of the Course | Concepts of Disaster Management | | |
| Course Code | 23-SEC-205G | | |
| Course Type : (CC/MCC/MDC/CCM/DSEC/VOC /DSE/PC/AEC/VAC) | SEC | | |
| Level of the course (As per Annexure-I) | 200-299 | | |
| Pre-requisite for the course (if any) | NA | | |
| Course Learning Outcomes (CLOs) : | After completing this course, the learner will be able to :<br>1. Understand the meaning of hazard and disaster and approaches and classification.<br>2. Acquire knowledge about various fundamental concepts of hazard and disaster including technological interventions in the field.<br>3. Develop an awareness regarding management of common hydrological disasters occurring in and around.<br>. | | |
| Credits | Theory | Tutorials | Total |
| | 3 | 0 | 3 |
| Contact Hours | 2 | 1 | 3 |
| Max. Marks : 75<br>Internal Assessment Marks : 25<br>End Term Exam Marks : 50 | Time : 03 Hours | | |

Internal Assessment : **25**

**Suggested Evaluation Methods**

- **Theory**
  - Class Participation : **07 Marks**
  - Seminar / presentation / assignment / quiz / class test etc. : **08 Marks**
  - Mid-Term Exam : **10 Marks**

- **Practicum**
  - Class Participation : **NIL**
  - Seminar / Demonstration / Viva-Voce/Lab records etc. : **NIL**
  - Mid-Term Exam : **NIL**

Chairperson
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**AEC2**

**English**

**Maximum Marks: 50**
**Internal Assessment: 15**
**External Assessment: 35**
**Time Allowed: 1 Hour**

**(Total Credits: 2)**

**Objectives** To enable the students to learn various types of the reading skills

To improve the understating of the students beyond the text

**Outcomes** The students will be able to read the text from different perspectives. The students will able to visualize scenes and characters, creating connections to personal experiences, evaluating language and literary methods, and asking questions about the text are all examples of creative reading techniques. It may also entail investigating various interpretations and views, as well as taking into account the social, historical, and cultural context in which the text is created.

**Unit-I**

Introduction to Critical Reading; Basic Types of Critical Reading

**Unit – II**

Literary Text Reading:

Short stories: Oscar Wilde's Happy Prince

Poem: Rabindranath Tagore's Where The Mind is Without Fear

**Unit – III**

Non-Fiction Reading:

Francis Bacon's 'Of Studies'

Charles Lamb's 'The Poor Relations'

**Unit – IV**

Documentary Reading:

Social documentary

**Suggested Readings:**


Bacon, Francis. "Of studies." 1601. Quotidiana. Ed. Patrick Madden. 18 Jan 2007. 20 Jul 2023 <http://essays.quotidiana.org/bacon/studies/>.

Bacon, Francis. Of Seeming Wise; and, of Studies. Ampersand Press for W. Irving Way, 1930.

Koda, Keika. Insights into Second Language Reading: A Cross -Linguistic Approach. New York: Cambridge University.

Littleifair, Alison Barbara. Reading All Types of Writing:The Importance of Genre and Register for Reading Development. Virginia: Oxford University Press, 1991. Print.

Roy, Arundhati. 'Azadi: The Only Thing Kashmiri Wants'. Edited by Roy, Arundhati etal. Kashmir: The Kashmir for Freedom. E-Book ISBN: 9781844678266. Web.

< http://prfjk.org/wp-content/uploads/2018/06/Tariq-Ali-Hilal-Bhatt-Arundhati-Roy-Kashmir-The-Case-for-Freedom-2011.pdf>

Tagore, Rabindranath. Where the Mind Is without Fear: Rabindranath Tagore: An Exhibition on Tagore and Theater, on the Occasion of the 14th Bharat Rang Mahotsav, 2012. National School of Drama, 2012.

Wilde, Oscar, et al. The Happy Prince. Oxford University Press, 2008.

https://blog.janicefrancisco.com/en/reading-creativity

https://blog.lillypad.ai/types-of-reading-skills/

https://bloomsoup.com/creative-reading/

https://eprints.umm.ac.id/35712/3/jiptummpp-gdl-junaidin20-47994-3-chapter-i.pdf

https://eric.ed.gov/?id=ED020090

https://unifyhighschool.org/types-of-reading-skills/

https://www.englishbix.com/4-types-of-reading-skills/

https://www.jstor.org/stable/40038453

https://www.planetspark.in/blogs/types-of-reading-skills