



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/Fac-12/2021/ 295  
Dated: 12/01/2021

To

The Controller of Examinations  
GJUS&T, Hisar.

**Sub: Approval of scheme of examinations and syllabi of B.Sc. (Geography) – (5<sup>th</sup> & 6<sup>th</sup> semesters) being run in the affiliated degree Colleges w.e.f. the batch of academic session 2018-19 onwards.**

Sir,

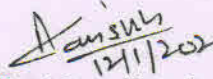
I am directed to inform you that the Vice-Chancellor, on the recommendations of Dean, Faculty of Physical Sciences & Technology on 06.01.2021 and Ad hoc UGBOS&R in Geography vide resolution no. 1, in its meeting held on 28.12.2020, is pleased to approve the scheme of examinations and syllabi of B.Sc. (Geography) – (5<sup>th</sup> & 6<sup>th</sup> semesters) being run in the affiliated degree Colleges w.e.f. the batch of academic session 2018-19 onwards, 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

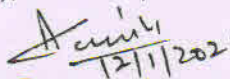
DA: As above

  
Assistant Registrar (Academic)  
for Registrar

Endst. No. Acad./AC-III/Fac.- 12/2021/ 296-312 Dated: 12/1/2021

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

1. ✓ Dean, Faculty of Physical Sciences & Technology, GJUS&T, Hisar, alongwith scheme of examinations and syllabi of B.Sc. (Geography) – (5<sup>th</sup> & 6<sup>th</sup> semesters) being run in the affiliated degree Colleges w.e.f. the batch of academic session 2018-19 onwards. He is requested to arrange to upload the scheme of examinations & syllabi of above said programme on the website of the University.
2. Director/Principals, Concerned affiliated degree Colleges, Hisar alongwith scheme of examinations and syllabi of B.Sc. (Geography) – (5<sup>th</sup> & 6<sup>th</sup> semesters) being run in the affiliated degree Colleges w.e.f. the batch of academic session 2018-19 onwards.
3. Secretary to Vice-Chancellor (for kind information of the Vice-Chancellor), GJUS&T, Hisar.
4. Supdt. O/o Registrar (for kind information of the Registrar), GJUS&T, Hisar.

  
Assistant Registrar (Academic)  
for Registrar

CGL 501

Core Course I

Economic Geography

Credits: 02 Hrs (2 Hrs / week)

Marks for Major Test (External):80

Marks for Internal Exam: 20

Time: 3 Hours

*Paper setter is required to set nine questions in all. Question no. 1 is compulsory and is based on the entire syllabus consisting of eight short answer type questions each of two marks. The remaining eight questions are to be set uniformly having two questions from each unit. The students is required to attempt five questions in all selecting one question from each unit and Question No. 1 is compulsory.*

#### Unit-1

1. Definition, Approaches and Fundamental Concepts of Economic Geography; Patterns of Development.
2. Locational Theories— Agriculture (Von Thunen) and Industrial (Weber).

#### Unit-II

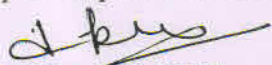
3. Primary Activities – Intensive Subsistence Farming, Commercial Grain Farming: Wheat & Rice, Plantation : Tea, Cotton. Commercial Dairy Farming.
4. Mining: iron ore, coal and petroleum, Renewable energy resources: Solar & wind energy.


#### Unit-III

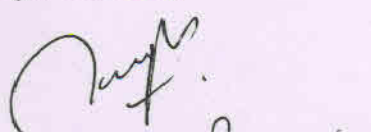
5. Secondary Activities – Cotton Textile Industry and Iron & Steel Industry
6. Major Industrial Regions of World.

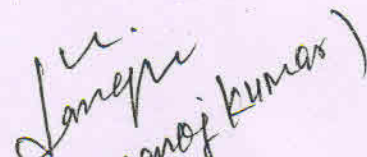
#### Unit-IV

7. Tertiary and Quaternary Activities – Modes of Transportation (Road, Rail, Air and water).
8. Patterns of International Trade, Information and Communication Technology Industry, Export-import in IT sector & major countries.

  
(HARSH LEKHA)

  
(J.B. Dahiya)

  
(Dr. A.S. Parmar)

  
(Dr. Manoj Kumar)

## Reading List

1. Alexander J. W., 1963: Economic Geography, Prentice-Hall Inc., Englewood Cliffs, New Jersey.
2. Bagchi-Sen S. and Smith H. L., 2006: Economic Geography: Past, Present and Future, Taylor and Francis.
3. Coe N. M., Kelly P. F. and Yeung H. W., 2007: Economic Geography: A Contemporary Introduction, Wiley-Blackwell.
4. Combes P., Mayer T. and Thisse J. F., 2008: Economic Geography: The Integration of Regions and Nations, Princeton University Press.
5. Durand L., 1961: Economic Geography, Crowell.
6. Hodder B. W. and Lee R., 1974: Economic Geography, Taylor and Francis.
7. Wheeler J. O., 1998: Economic Geography, Wiley.
8. Willington D. E., 2008: Economic Geography, Husband Press.

J. W. Alexander

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CGL - 502

Core Course II

Fundamental of Geographical Information Systems (Theory)

Credits: 02 Hrs (2 Hrs / week)

Marks for Major Test (External): 80

Marks for Internal Exam: 20

Time: 3 Hours

*Paper setter is required to set nine questions in all. Question no. 1 is compulsory and is based on the entire syllabus consisting of eight short answer type questions each of two marks. The remaining eight questions are to be set uniformly having two questions from each unit. The students is required to attempt five questions in all selecting one question from each unit and Question No. 1 is compulsory.*

**Unit-1**

1. Geographical Information System (GIS): Definition and Components.
2. Hardware and software requirement for GIS

**Unit-II**

3. GIS Data types and their sources.
4. Data Structure: vector and raster.

**Unit-III**

5. GIS Data Analysis: Input; Geo-Referencing; Editing and Output.
6. Data Base Management System, Basic of Global positioning system.

**Unit-IV**

7. Spherical coordinate system properties and UTM projection.
8. Integration of Remote Sensing Data into GIS and its application in Land Use/ Land Cover Mapping and Urban Sprawl.

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(Dr. A. S. Paswan)

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Reading List:

1. Bhatta, B. (2010) Analysis of Urban Growth and Sprawl from Remote Sensing, Springer, Berlin Heidelberg, 41
2. Burrough, P.A., and McDonnell, R.A. (2000) Principles of Geographical Information System-Spatial Information System and Geo-statistics. Oxford University Press
3. Chauniyal, D.D. (2010) SudurSamvedanevamBhogolikSuchanaPranali, ShardaPustak Bhawan, Allahabad
4. Heywoods, I., Cornelius, S and Carver, S. (2006) An Introduction to Geographical Information system. Prentice Hall.
5. Jha, M.M. and Singh, R.B. (2008) Land Use: Reflection on Spatial Informatics Agriculture and Development, New Delhi: Concept.
6. Nag, P. (2008) Introduction to GIS, Concept India, New Delhi.
7. Sarkar, A. (2015) Practical geography: A systematic approach. Orient Black Swan Private Ltd., New Delhi
8. Singh, R.B. and Murai, S. (1998) Space Informatics for Sustainable Development, Oxford and IBH, New Delhi.

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CGP 508

Practical – V; Geography Lab – V  
(Credits: 02, 60 Hours (4 hrs. per week))

Maximum Marks: 50

Time: 4 Hours

Note: Distribution of Marks is as under;

Exercise -	30
Record File -	10
Viva – voce -	10

1. For giving marks under Lab. Record each college will maintain practical assessment record by using the following procedure:-  
Each student has to perform a minimum number of exercises/experiments prescribed in the syllabus. After the completion of a practical the teacher concerned will check the note book and conduct the Viva – voce of each student to find out how much concepts related to the theoretical and experimental part of the experiment he/ she has understood. According to his/her performance marks will be recorded on their practical note-book. These marks will constitute the lab Record.
2. To compute the final marks for lab. Record, a separate register will be maintained. Each student will be assigned separate page on this register. On this page the marks obtained by the student in different practicals will be entered. This record will be signed by the concerned teacher.
3. The laboratory Record register will be presented to the external practical examiners for Lab. Record marks. These external examiners may verify the record randomly.

**Practical Record:**

A project file consisting of following exercises on using any GIS Software.

1. Georeferencing
2. Creation of Geo-data base and shape file: Point, Line and Polygon.
3. Adding attribute data and statistical calculation.
4. Displaying Geo-data on map view by different methods.
5. Preparing lay out and printing of theme map.
6. Downloading of satellite image from Bhuvan.
7. Creating Subset
8. Making colour composite: true and false.
9. Unsupervised Image classification
10. Supervised Image Classification.

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CDR A. S. Parmar

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Mr. Jangra

ReadingList:

- Bhatta, B. (2010) Analysis of Urban Growth and Sprawl from Remote Sensing, Springer, Berlin Heidelberg. 41
- Burrough, P. A., and McDonnell, R. A. (2000) Principles of Geographical Information System- Spatial Information System and Geo-statistics. Oxford University Press
- Chauniyal, D. D. (2010) Sudur Samvedanevam Bhogolik Suchana Pranali, Sharda Pustak Bhawan, Allahabad
- Heywoods, I., Corneliuss, Sand Carver, S. (2006) An Introduction to Geographical Information System. Prentice Hall.
- Jha, M. M. and Singh, R. B. (2008) Land Use: Reflection on Spatial Informatics Agriculture and Development, New Delhi: Concept.
- Nag, P. (2008) Introduction to GIS, Concept India, New Delhi.
- Sarkar, A. (2015) Practical geography: A systematic approach. Orient Black Swan Private Ltd., New Delhi
- Singh, R. B. and Murai, S. (1998) Space Informatics for Sustainable Development, Oxford and IBH, New Delhi.

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CGL 601

Core Course III

Geographical Thought

Credits: 02 Hrs (2 Hrs / week)

Marks for Major Test (External): 80

Marks for Internal Exam: 20

Time: 3 Hours

*Paper setter is required to set nine questions in all. Question no. 1 is compulsory and is based on the entire syllabus consisting of eight short answer type questions each of two marks. The remaining eight questions are to be set uniformly having two questions from each unit. The students is required to attempt five questions in all selecting one question from each unit and Question No. 1 is compulsory.*

Unit - I

1. Classification of knowledge, Nature of Geography and its place among sciences
2. Nature of Geographic knowledge during ancient (Greek and Roman) and medieval (Arab) periods

UNIT-II

3. Foundation of Modern Geography-contributions of Varenius, Kant, Humboldt and Ritter.
4. Concepts and dualism in Geography: Environmental Determinism vs Possibilism, Physical vs Human Geography


UNIT-III

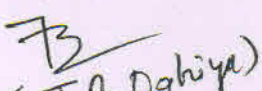
5. Quantitative Revolution-Emergence of theoretical geography
6. Behavioural and Humanistic Perspectives in Geography

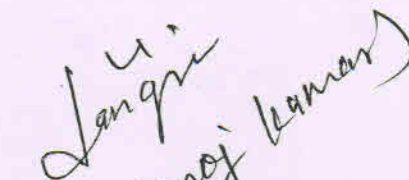
UNIT-IV

7. Social Relevance in Geography- Welfare, Radical and Feminist Perspectives
8. Postmodernism and Geography.

  
(HARSH LEKHA)

  
(Dr. A.S. Parmar)

  
(J.B. Dahiya)

  
(Mr. Manoj Kumar)



**Suggested Readings:**

1. Dickinson, R E (1969), The Makers of Modern Geography, London.
2. Dikshit, RD (1997), Geographical Thought- A Contextual History of Ideas, Prentice Hall of India, New Delhi.
3. Harvey David (1989), Explanation in Geography, Edward Arnold, London.
4. Hartshorne, R (1959), Perspectives on the Nature of Geography, Rand MacNelly, Chicago.
5. James PE and Martin J Geoffrey (1972) All possible Worlds, John Wiley and Sons, New York.
6. Johnston, RJ (1983) Geography and Geographers, Edward Heinemann, London
7. Peet, Richard (1998) Modern Geographical Thought, Oxford, Blackwell Publishers.

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CGL 602

Core Course IV

Field and Statistical Methods in Geography

Credits: 02 Hrs (2 Hrs / week)

Marks for Major Test (External): 80

Marks for Internal Exam: 20

Time: 3 Hours

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**Unit - I**

1. Field Work in Geographical Studies – Role, Value and Ethics of Field-Work.
2. Defining field work and identifying the Case Study – Physical / Human / Environmental.

**Unit - II**

3. Types and sources of data, Interview schedule and Questionnaire, Sampling types.
4. Designing the Field Report – Aims and Objectives, Methodology, Analysis, Interpretation and Writing the Report.

**Unit - III**

5. Measure of central tendency - Mean, Median & Mode.
6. Measure of Dispersion – mean deviation, standard deviation & coefficient of variation.

**Unit - IV**

7. Measure of inequality – location quotient & Lorenz curve
8. Bivariate analysis - scatter diagram and correlation analysis.

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(Dr. A.S. Paswan)

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## Reading List

1. Creswell J., 1994: Research Design: Qualitative and Quantitative Approaches Sage Publications.
2. Dikshit, R. D. 2003. The Art and Science of Geography: Integrated Readings. Prentice-Hall of India, New Delhi.
3. Evans M., 1988: "Participant Observation: The Researcher as Research Tool" in Qualitative Methods in Human Geography, eds. J. Eyles and D. Smith, Polity.
4. Mukherjee, Neela 2002. Participatory Learning and Action: with 100 Field Methods. Concept Pubs. Co., New Delhi
5. Robinson A., 1998: "Thinking Straight and Writing That Way", in Writing Empirical Research Reports: A Basic Guide for Students of the Social and Behavioural Sciences, eds. by F. Pryczak and R. Bruce Pryczak, Publishing: Los Angeles.
6. Stoddard R. H., 1982: Field Techniques and Research Methods in Geography, Kendall/Hunt.
7. Aslam Mahmood: Statistical Methods in Geographical Studies, Rajesh Publications, New Delhi, 1993.
8. Saroj K. Paul: Statistics for Geoscientists : Techniques and Applications, Concept Publishing Company, New Delhi, 1998.
9. C. B. Gupta: An Introduction to Statistical Methods, Vikas Publishing House, Delhi, 1974.
10. S. Gregory, : Statistical Methods and the Geographers, Longman, London, 1964.
11. Rogerson. P.A. (2010), Statistical Methods for Geography, (A Student's Guide), 3rd Edition, Sage Publication, New Delhi

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CGP 608

Practical – VI; Geography Lab – VI

(Credits: 02, 60 Hours (4 hrs. per week))

Maximum Marks: 50

Time: 4 Hours

Note: Distribution of Marks is as under;

Exercise - 30

Record File - 10

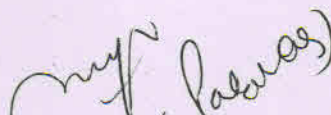
Viva – voce - 10

1. For giving marks under Lab. Record each college will maintain practical assessment record by using the following procedure:-  
Each student has to perform a minimum number of exercises/experiments prescribed in the syllabus. After the completion of a practical the teacher concerned will check the note book and conduct the Viva – voce of each student to find out how much concepts related to the theoretical and experimental part of the experiment he/ she has understood. According to his/her performance marks will be recorded on their practical note-book. These marks will constitute the lab Record.
2. To compute the final marks for lab. Record, a separate register will be maintained. Each student will be assigned separate page on this register. On this page the marks obtained by the student in different practicals will be entered. This record will be signed by the concerned teacher.
3. The laboratory Record register will be presented to the external practical examiners for Lab. Record marks. These external examiners may verify the record randomly.

**Practical Record:**

1. Each student will prepare an individual report based on primary and secondary data collected during field work.
2. The duration of the field work should not exceed 10 days.
3. The word count of the report should be about 8000 to 12,000 excluding figures, tables, photographs, maps, references and appendices.
4. One copy of the report on A 4 size paper should be submitted in soft binding.

  
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(Dr. S. Palanisamy)



## Reading List

1. Creswell J., 1994: Research Design: Qualitative and Quantitative Approaches Sage Publications.
2. Dikshit, R. D. 2003. The Art and Science of Geography: Integrated Readings. Prentice-Hall of India, New Delhi.
3. Evans M., 1988: "Participant Observation: The Researcher as Research Tool" in Qualitative Methods in Human Geography, eds. J. Eyles and D. Smith, Polity.
4. Mukherjee, Neela 2002. Participatory Learning and Action: with 100 Field Methods. Concept Pubs. Co., New Delhi
5. Robinson A., 1998: "Thinking Straight and Writing That Way", in Writing Empirical Research Reports: A Basic Guide for Students of the Social and Behavioural Sciences, eds. by F. Pryczak and R. Bruce Pryczak, Publishing: Los Angeles.
6. Stoddard R. H., 1982: Field Techniques and Research Methods in Geography, Kendall/Hunt.
7. Aslam. Mahmood: Statistical Methods in Geographical Studies, Rajesh Publications, New Delhi, 1993.
8. Saroj K. Paul: Statistics for Geoscientists : Techniques and Applications, Concept Publishing Company, New Delhi, 1998.
9. C. B. Gupta: An Introduction to Statistical Methods, Vikas Publishing House, Delhi, 1974.
10. S. Gregory, : Statistical Methods and the Geographers, Longman, London, 1964.
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