UNIVERSITY OF JAMMU

M.Sc. REMOTE SENSING AND GIS

Admission Brochure

MASTER OF SCIENCE IN REMOTE SENSING AND GIS

SESSION 2009-2011

M.Sc. REMOTE SENSING AND GIS
University of Jammu
Jammu 180 006

Applications for admission of M.Sc. Remote Sensing and GIS in the University of Jammu, Jammu for the academic session 2009-2010 are invited for the candidates who have passed/appeared in Bachelor Degree in Science/Agriculture/Forestry/Engineering from any recognized Indian University with not less than 50 % marks. The schedule of admission process is as follows:

Date of Notification		:	26th May, 2009
Date of Issuing of Application Forms		:	2nd June, 2009
Date of close of Issuing of Forms	By Post	:	18th June, 2009
	By Hand	:	22th June, 2009
Last date for Receiving of Application forms		:	22th June, 2009
Date of Entrance Test		:	29th June, 2009
Entrance Test result,			
Counseling and viva voce,		:	To be notified later
Notification of selected candidates		:	-do-

The information brochure shall be available from the office of Remote Sensing and GIS / Department of Geology, University of Jammu, Jammu. The cost of brochure/application form is Rs. 500/- which shall be sent in the form of Bank Draft favouring, **Course Coordinator, M.Sc. Remote Sensing and GIS,** University of Jammu, Jammu and send to the below mention address. Outstation candidates can send their request for forms with bank draft and self addressed envelope duly fixed with stamp of Rs. 50/-. The admit card for entrance test is to be collected personally or authorized person from course coordinator.

Dr. A. S. Jasrotia
Associate Professor &
Course Coordinator,
M.Sc. Remote Sensing & GIS
Department of Geology,
University of Jammu,
Jammu- 180 006
Tel. No. 0191-2435166
Fax. No.0191-2452987, 2459383
e-mail: asjasrotia@yahoo.co.uk

CONTENTS

Prof. Varun Sahni
Vice Chancellor

MESSAGE

I am pleased to learn that Master of Science in the Remote Sensing and GIS is bringing out the Information Brochure-cum-Prospectus for admission to the second batch of two years Post Graduate Course in **Remote Sensing and GIS**.

I am happy to know that this post graduate course is multidisciplinary in nature and will give the opportunity to the students to gain knowledge in this emerging technology and its application in different field like hydrogeology, natural Hazards, mineral and oil exploration, bio-diversity, soil and agriculture, earthquake engineering, disaster management, environmental studies, telecom, tourism, defence, transport and navigation system.

The University of Jammu is one of the few Universities in North India to have Master Level Course in Remote Sensing and GIS. I am sure that Remote Sensing and GIS will provide rigorous academic training, technical skills and competence in data and information acquisition, extraction, management and analysis, spatial and statistical modelling, mapping and visualization to the students who are aspiring to take the admission from the academic session 2009-2010.

I send my greeting and good wishes on this occasion.

Prof. Varun Sahni

Prof. B.P. Singh Sehgal
Dean Academic Affairs

MESSAGE

It gives me immense pleasure to know that Remote Sensing and GIS course is bringing out the Information Brochure-cum-Prospectus for admission to Second batch of two years Post Graduate Course in Remote Sensing and GIS to the students for the academic session 2009-2010. I extend a very warm welcome to the talented, dynamic and bright students who are aspiring to pursue this course. It will provide all necessary information to the students regarding this course including job opportunities in government and private sectors. This Master's Level program will help the learners to understand advanced techniques in Remote Sensing and GIS and develop knowledge and ideas in relevant areas of its application. The Master level course is multidisciplinary in nature and will give the opportunity to the students to gain knowledge in the area of emerging technology having great scope in the job market. The University of Jammu is one of the few Universities in Northern India to have Master Level Course in Remote Sensing and GIS.

I convey my best wishes to the course coordinator, faculty member and the students who are entering the University to pursue the Master Level Course in Remote Sensing and GIS.

Prof. B.P. Singh Sehgal

Prof. Ramji Tiwari
Dean
Faculty of Sciences

MESSAGE

It is matter of great pleasure to know that Remote Sensing and GIS course bringing out the Information Brochure-cum-Prospectus for admission to the students for the academic session 2009-2010. I extend a very warm welcome to the talented, bright, young and dynamic students who wish to join the second batch of two years Post Graduate Course in Remote Sensing and GIS. The application of Remote Sensing and GIS in different fields like agriculture, forest, environment, urban, landuse, soil, geology, terrain, water resources, digital elevation model, disaster management, defence sector, telecom and transport and its job opportunity in State Government, Central Government, Academic Institution, Overseas, Private sector and self employment.

I take this opportunity to congratulate the students, course coordinator and the faculty who are always in search of professional excellance. I am quite confident that the course coordinator, faculty member and the students would be able to meet the challenge ahead with utmost zeal, fervour and enthusiasm.

I extend my best wishes on this occasion

Prof. Ramji Tiwari

Dr. A. S. Jasrotia
Associate Professor &
Course Coordinator,
M.Sc. Remote Sensing & GIS

MESSAGE

The Master of Science in Remote Sensing and GIS course, University of Jammu has successfully completed one year. The Remote Sensing and GIS is a relatively young Scientific discipline and is an area of emerging technology which has witnessed phenomenal growth over the last two or three decades and has dramatically enhanced human capability for exploration of resources, mapping and monitoring on local and global scale. The Remote Sensing and GIS technique is of great significance in different fields like assessment of geological Hazards, mineral and oil exploration, hydrogeology, watershed management, earthquake engineering, telecom, tourism, defence, transport and navigation system, landuse analysis, modelling urban environment, crop monitoring, disaster management, environmental studies, bio-diversity etc. This course will provide the foundation for awakening the student's understanding of Remote Sensing and GIS as well as strengthening their software knowledge and problem solving skills. Students will be introduced to advanced topics, such as GIS database building, geocoding, image analysis, Global Positioning Systems, spatial analysis, and surface analysis. Hands-on lab assignments and project work will be carried out with latest image processing and GIS software.

Last year, University of Jammu started a new vision to open the M.Sc. Remote Sensing and GIS course. This Master Level programme will help to master advanced techniques in Remote Sensing and GIS, strengthen problem solving skills in Remote Sensing and GIS and develop knowledge and ideas in relevant areas of application. The Master Level Course in Remote Sensing and GIS is multidisciplinary in nature and will give the opportunity to the students to gain knowledge in this emerging area having great scope in the job market. The Jammu University is only University in Northern India to have Master Level Course in Remote Sensing and GIS.

I heartily welcome the students of the second batch of Master Level Course in Remote Sensing and GIS for the academic session 2009-2010.

Dr. A.S.Jasrotia

ABOUT THE UNIVERSITY

The University of Jammu, situated on the bank of river tawi was established in 1969 at an altitude of 320 m above sea level and located in the city of temples. The University of Jammu is India's first ISO 9001:2000 certified University and accredited as a Four Star University by the National Assessment & Accreditation Council of India (NAAC). It is on the verge of discovering exciting intellectual frontiers in the 21st century. The University of Jammu is one of the few Universities in northern India to have Master Degree Course in Remote Sensing and GIS.

The University of Jammu provides instructions in over forty branches of learning and makes provision for research and the advancement and dissemination of scientific knowledge. The University stands for spiritual and material elements in life, thirst for knowledge and virtue under the backdrop of holy peaks of Trikuta Hills.

The University of Jammu has recently conferred the Degree of Doctor of Letters, Honoris Causa on Dr. Manmohan Singh, the Hon,ble Prime Minister, at a Special Convocation at the General Zorawar Singh Auditorium on 15th July, 2007. It is rare honour to the University of Jammu to honour the Hon ble Prime Minister, Dr. Manmohan Singh, who is the epitome of integrity, intellect and inspiration in public life.

The General Zorawar Singh Auditorium is a unique piece of architecture, it consist of the state of Art Auditorium with Heritage Museum, Art Gallery, Photo Gallery and Exhibition-Hall and showcases the rich cultural heritage and diversity of our state.

The Central Library is hub of the academic activity through out the year. The library is four story building centrally located and is constructed on modular plan. It is equipped with more than four lakh books on different subjects. It is also equipped with modern facilities photo copiers, LCD projectors, INFLIBNET, CD-ROM database and interconnected computer terminal. In addition to this, University acquired EDUSAT faculty from Consortium Education Communication (CEC), International Resources Cell (IRC) in collaboration with British council.

The University of Jammu has acquired 2 Mbps lease line from ERNET India, an Autonomous Scientific Society of Department of Information Technology, Govt. of India and 10 Mbps fiber optics Lease line from Reliance. The said facility is being provided to all the departments of the University through University Internet established on fiber backbone. In addition to this, whole campus is on roaming wireless (JUwi-fi) Internet facility covering all the teaching, administrative, auditorium and hostels of the University with Hot Spots.

ABOUT M.Sc. REMOTE SENSING AND GIS

INTRODUCTION

Remote Sensing and GIS is a relatively young scientific discipline and is an area of emerging technology which has witnessed phenomenal growth over last three decades. In the recent past, there has been tremendous development in the field of Remote Sensing data collection, analysis and utilization. The science of Remote Sensing is no more an art of Map making from satellite image. It is fee form of information technology where raw digital data is converted to information which in turn aid to the knowledge base for sound decision making. Image processing facilities which were earlier restricted to selected major research establishments have now become widely available with the advent of microcomputer and low cost image processing equipments. The digital data handling led to the development of GIS (Geographical Information System) followed by another innovation of GPS (Global Positing System). Remote Sensing coupled with GIS and GPS techniques has dramatically enhanced human capability for resources exploration, mapping and monitoring on local and global scale. The course is not only going to provide job opportunity for the young students but shall also open an avenue of effective and viable interaction with national establishments related to various aspects of remote sensing. The course aims at developing multidimensional programmes of teaching and research in the field of Remote Sensing and GIS as this is the first University in north India to impart such degree course.

The application of Remote Sensing techniques, Geographical Information System(GIS) and Global Positioning System(GPS) in various activities including resources evaluation, environmental monitoring and Landuse/Landcover mapping etc, have grown considerably during the last three decades and Remote Sensing data products are being increasingly used for plan information at all levels. An essentials pre-requisite to partaking in these opportunities is the building of various indigenous capacities for the development and utilization of space science and technology. This has led to a spurt in the demand for qualified manpower.

JUSTIFICATION

Given the wider applications of the Remote Sensing and GIS and the scarcity of human resource with the knowledge of this technology, it is appropriate to offer this course to the students so that their employability is enhanced. The fact that job opportunities for people having knowledge of Remote Sensing are available in organizations like Space Application Centre (SAC) Ahmedabad, National Remote Sensing Agency (NRSA) Hyderabad, Indian Space Research Organization (ISRO) Bangalore, Indian Institute of Remote Sensing (IIRS), Dehradun, Parliamentary House New Delhi, Oil natural Gas corporation Ltd (ONGC), Agricultural Research Institute (IARI) New Delhi, Indian Council of Agricultural Research (ICAR), Ministry of Agriculture (GOI), Academic Institutions, Regional Remote Sensing Centers (RRSC) and Remote Sensing Centers (RSC) in various states of India. Besides, huge employment opportunities are available in private sector and overseas which further highlights the importance of the course. The demand for Remote Sensing and GIS is increasing day by day in Government and Private sector. Remote Sensing and GIS professional can start his/her career as Project Manger, Sr. System Executive, System analyst, GIS Engineer, Image analyst, GIS Programmer etc.

The course at Master Level is of immense value to Researchers/ Administrators/ Defence Forces for tracking information from inaccessible area due to difficult geographical terrain in the state of J&K. The state has lot of area where seeking information through human resources becomes almost impracticable in view of insurgency, climate and geographical constraints. In view of this, it is a useful course for exposing, sensitizing and preparing the educated youth for seeking information, wherever required with expertise & competence.

GROWTH OF REMOTE SENSING AND GIS

The growth of remote Sensing and GIS in industry saw its inception around two decades ago. A broad chronology of the movement of this emerging science field may be visualized in four phases. At all phases the movement remained development in academia as well as industry anyone following the other.

The first is introduction and application of GIS in few researches in multiple academic disciplines/professional courses as Forestry (green cover estimation), Geology (mineral maps), Agriculture (crop disease estimation), Civil engineering, etc.

The second stage is the utilization of Remote Sensing and GIS techniques in various projects on disaster management, urban planning, etc. of which digital spatial database development was a part.

The third stage, roughly six years old, is the one when Indian ITES/BPO industry came up on strong footing. This was together with the growth of country's IT industry.

The fourth phase, the contemporary phase, as we call it, is the one when companies entered in the business of customization and development.

REMOTE SENSING AND GIS LAB

The Remote Sensing and GIS lab. has been established with all the basic facilities required for Remote sensing and GIS work. The Remote Sensing and GIS lab. to provide hands-on-training to its postgraduate students in Digital Image processing, GIS, GPS, Satellite Navigation and Image Interpretation. This lab. is equipped with server, workstation and Pentium IV computers with Gobal Positioning System (GPS), A0 Scanner, Mirror Stereoscopes. The department has installed various latest software for GIS and Digital Images processing such as Arc GIS, ERDAS Imagine ERDAS Virtual GIS, ERDAS IMS, ILWIS 3.3 ROCK WORKS 2006 etc. The department also conducts certificates programs in RS& GIS through EDUSAT which has been transmitted through hub at IIRS, DOS Dehradun. The department is also engaged in various R&D projects funded from ISRO, DST, NRSC such as *Evaluation of Groundwater potential zones using Remote Sensing and GIS Techniques in the Hill Terrain of Devak and Rui Watershed, Jammu District, J&K State* funded by the Deptt. of Space, Govt. of India, Bangalore. *Establishing the Natural Resources Digital Database District Centre at Jammu and Creation of an integrated database for Development Planning* funded by Ministry of Science and Technology, Department of Science and Technology, Govt. of India. *Groundwater Prospect Mapping Work of Rajiv Gandhi Drinking Water Mission (RGNDWM) Phase III of J&K State"* coordinated by National Remote Sensing Agency, Hyderabad funded by Ministry of Rural Development.

The NRDMS, a multi-disciplinary programme of the Department of Science and Technology, Govt. of India aims at technological and institutional capacity building of the Line Departments in Spatial Technology-Remote Sensing and GIS operationalise the Decentralized Planning for economic development. The NRDMS DST District centre Lab. has been generated maps in GIS environment on various aspects such as natural resources, socio-economic and various infrastructure facilities available at the village level in Jammu district. Such maps will go a long way in facilitating the concerned departments to undertake the micro-level planning in a more effective manner to ensure balanced development of various blocks of the district. The spatial technology being promoted under this project has wider application in areas such as infrastructure planning.

The layout of University of Jammu has been also prepared in the GIS environment. In addition to that a lot of Research and Development (R&D) activities are going on in different Remote Sensing and GIS areas. The various maps of Jammu District have been prepared with the help of satellite image, toposheets and ground truth information. Information created under this helped various line departments of Jammu District for effective presentation of data like socio-economic, horticulture and agriculture data, etc. at village level, block level, constituency level or tehsil level. The aims of NRDMS DST centre to train various line departments to access and update this data through GIS software.

OBJECTIVE OF THE COURSE:

- To understand the principles, applications, trends, and pertinent issues of geographical information systems and sciences, including remote sensing (RS), Photogrammetry, cartography, and global positioning systems (GPS)
- To provide learning and teaching experiences with real world problems.
- To develop technical skills and competence in data and information acquisition, extraction, management and analysis; spatial and statistical modelling; mapping and visualization.
- To increase awareness of GIS and modelling tools for improving competition and business potential
- To describe how geographical information is used, managed, and marketed globally
- To gain an understanding of how to manipulate and apply vector and raster spatial data, particularly with regard to local/state/national issues, emphasizing lands in and near it.
- To develop applications of environmental remote sensing and GIS which can directly enhance service delivery on land use management, ground water management/prospects, agriculture, forestry, food and water security, disaster management, etc.

APPLICATION IN REMOTE SENSING AND GIS:

Applications	Features
Agriculture	Mixed-crop discrimination and inventory Large area crop inventory Crop stress detection monitoring
Forest	Types and species discrimination Forest stock mapping Biomass estimation
Environment	Environmental Impact Assessment (EIA) Monitoring silting
Urban	Town and city mapping Facility mapping
Landuse	Landuse/Landcover mapping Change detection
Soil	Soil mapping Erosion prone mapping
Geology	Geological mapping Geomorphological mapping Tectonic map of India Watershed management
Terrain	Cadastral mapping
Water Resources	Surface water monitoring Ground water targeting Command area management
Digital elevation Models	Contours Slope/Aspect Visualization perspective
Disaster	Flood damage assessment Flood relief measures
Defence Sector	Survivillance, operations, intelligence, and resource planning, with the provision for on-demand access to mission critical information, Terrain evaluation
Telecom	Communication networks and planning
Transport	Navigation system

JOB OPPORTUNITIES IN THE FIELD OF REMOTE SENSING AND GIS

1) State Government: Every state has a Space Application Center in which Remote Sensing and GIS postgraduate as well as Ph.D. holder can apply for the post of Scientist, Jr. Scientist, Project Coordinator, Project Scientist, Scientific/Technical Assistant, GIS Programmer, Research Scholar, etc.

2) Central Government: Central government organizations/agencies such as Space Application Center (SAC), Ahmedabad, National remote Sensing Agency (NRSA), Hyderabad, North East Space Application center (NESAC), Shillong, Regional Remote Sensing Application Center (RRSAC), Kharagpur, Dehradun, Jodhpur, Nagpur and Bangalore, ISRO Bangalore, ADRIN, Hyderabad all are under Department of Space, Govt. of India which advertise for the post of Scientist, Research Associate and Sr. Research Fellow etc. Indian Agriculture Research Institute (IARI), New Delhi, Indian council of Agriculture Research (ICAR), Ministry of Agriculture, Govt. of India advertises for the post of Scientist and Research Scholar.

3) Academic Institutes: Candidate having M.Sc. degree in Remote Sensing and GIS can apply for the post of lecturer. Few academic institutes have a centre for Remote Sensing and GIS and take candidate for the post of scientific officer, Research Scientist and Research Scholar etc.

4) Overseas: There is scope for Professional/higher education in Remote Sensing/GIS in countries like USA, Canada, Netherlands, Switzerland, China, Malaysia, France, Germany, Australia and there is a demand for Remote Sensing professional in various field. There are number of Remote Sensing professionals doing jobs as well as business in foreign countries.

5) Private Sector: The demand for Remote Sensing and GIS professional is increasing day by day in private sector . Remote Sensing and GIS professional can start his/her career as Project Manager, Sr. System executives, System Analyst, GIS Engineer, Image Analyst, GIS Programmer, etc.

6) Self Employment: As an entrepreneur, after obtaining the professional degree a candidate can start their own enterprise.

ORGANIZATION

The Master Level Course in Remote Sensing and GIS is running under the supervision of Course coordinator Dr. A.S. Jasrotia. The Academic supervision of the Master Level Course in Remote Sensing & GIS under Dean Faculty of Sciences. The faculties of the department of sciences are involved in teaching different course content as prescribed in various papers of Remote Sensing and GIS course. Visiting faculty /experts having specialization in Remote Sensing and GIS from different Institutions/Universities are invited from premier Institutions like Indian Institute of Remote Sensing (IIRS) Dehradun, Indian Institute Technology (IIT) Roorkee, Indian Institute Technology (IIT) Bombay, Birla Institute of Technology (BIT) Ranchi, Department of Geography, Panjab University Chandigarh and Jawaharlal Nehru University (JNU) New Delhi.

COURSE:

It is a two years course leading to the degree of M.Sc. in Remote Sensing and GIS. The course is based on four semesters having 96 credits. The course is equivalent to other M.Sc. courses. This course has been formulated according to the guidelines which is taught in different Indian University/ Institution such as Jiwaji University, Gwalior (M.P); Maharshi Dayanand Saraswati University, Ajmer (Rajasthan); Mahatma Gandhi Chitrakoot Gramodaya Vishwavidayalaya Chitrakoot, Satna (M.P), University of Pune (Maharashtra), Indian Institute of Remote sensing (IIRS) Dehradun and Birla Institute of Technology (BIT) Ranchi. The proposed course content has been prepared keeping in view the course content taught in above said Universities and their scope in job market.

ELIGIBILITY:

The minimum qualification required for admission to the course shall be a Bachelor Degree in Science / Engineering/Agriculture and Forestry from any recognized Indian University. Admission through Entrance Test (50% of seats reserved for the J&K Permanent Residents). The Statutes governing Master's degree Programme in the Faculty of Sciences will be applicable to Master degree programme in Remote Sensing and GIS.

ADMISSION:

The maximum number of students proposed to be admitted annually for said course is ten (10). Admission to the course shall be based on merit and the selection of the candidate shall be made on the basis of their performance in a written Entrance Test plus academic second. It is technical course and is more or less self financing basis. So all seats will be filled on payment basis @ Rs. 1.50 lakh per student.

ENTRANCE TEST:

The test shall be conducted at University of Jammu at a date and time as notified. The syllabus of the written test for admission to Master Level Course in Remote Sensing & GIS consists of General Knowledge and Current Affairs, English, Comprehension, Numerical ability and Data Sufficiency. The syllabus along with a Model Question Paper for the examination is given in Annexure-II.

FEE STRUCTURE:

Those students enrolled for the Master Level Course in Remote Sensing shall have to pay course fee of Rs 1.50 lakh in addition to the fee prescribed by the University for Master Degree Programme in Sciences.

COURSE CONTENT AND OTHER DETAILS :

i) The duration of course for the Master degree in Remote Sensing and GIS is divided into Four semesters covering two academic sessions. The first academic session will comprise of first and second semesters and the second academic session of third and fourth semesters. Each semester normally comprises of 90 working days.

ii) The minimum attendance required by a candidate will be as per University rules.

iii) Each of Ist, IInd and IIIrd Semester are consist of four theory courses and two laboratory courses.Fourth semester shall have two theory courses, one laboratory course and a Project Work. Further, First and Third semesters shall have Remote Sensing Field Work (GPS Survey) and Remote Sensing Field Work (Ground Truth) respectively.

iv) Each theory examination shall be of three hours duration whereas each practical examination shall be of four hours. Each theory and laboratory course shall consist of 100 marks. For theory papers 80 marks shall be for University examination and 20 marks for internal assessment, while for practicals 50% marks shall be for University Examination and 50% marks for Internal Assessment. Besides this, the Remote Sensing field work of respective First and Third semesters shall consist of 30 marks included in the practicals. The evaluation of Remote Sensing Field Work shall be done internally and the marks awarded included in the practicals shall be sent to the University by the Head/Course Coordinator. The Project Work of IVth semester shall be of 300 marks out of which 250 marks shall be for project report, and 50 marks for the viva-voce. The evaluation of the Project Report will be done by the External and Internal (Supervisor) examiners including the Viva-voce before a committee consisting of Head/Course Coordinator and external as well as internal examiners. The marks of the Project Work shall be sent to the university by the Head/Course Coordinator.

A candidate shall be DECLEARED passed at each semester Examination if he/she obtains:

a. At least 36% marks in the aggregate of the paper prescribed for the examination.

b. At lease 36% marks in the practical.

v) Internal Assessment:-

a) ***Theory***

Three tests of 10 marks each for each theory course shall be held on the dates and time specified in the Academic calendar and/or by the Head/ Course Coordinator. The sum total of the marks secured in two tests excluding the test in which the student secures the lowest marks shall be counted for the award out of 20 marks for the internal assessment in the course.

b) ***Laboratory***

Internal assessment of 25 marks in each laboratory course work will be done on the basis Of regularity and proper maintenance of records, test and viva-voce.

Remote Sensing Field Work:-

Remote sensing Field work / training is an integral part of this Course. As such, the students of M.Sc. Ist and IIIrd Semester are required to undergo for Field Work (2-3 weeks duration) separately in each academic session to acquire comprehensive and detailed field training in various aspects, such as GPS survey, field checking, ground truth studies and visit to various national Remote Sensing laboratories. At the end of the above field work, each student will be required to submit a field report covering all aspects for evaluation. The evaluation based on field work report, and viva - voce shall be done by the Teacher In-Charge of the Field Work and /or Course Coordinator.

Project Work:-

The subject/topic of the Project Work, related to the problems of Remote Sensing and GIS will be allotted to each student in the beginning of the M.Sc. IVth Semester. The students, in consultation with their respective supervisors, may give their choice of preference of problem /topic / area. However, the decision of the Head/Course Coordinator shall be final. Each student will be required to work independently on the problem assigned including literature consultation, data collection, fieldwork and/or training, laboratory investigations, report writing etc., under the guidance of his/her supervisor. The students will have to submit to the department three typed (bound) copies of his/her work, in the form of Project Report. After the evaluation, a copy of which will be returned to the concerned supervisor and the student separately.

COURSE STRUCTURE:

Course	Title of the Course	Maximum Marks University Exam.	Internal Assessment	Total
Ist Semester				
RSGT - 101	Fundamentals of Information Technology and GIS	80	20	100
RSGT - 102	Fundamentals of Remote Sensing and Image interpretation	80	20	100
RSGT - 103	Aerial Photography and Photogrammetry	80	20	100
RSGT - 104	Cartography and Global Positioning System	80	20	100
RSGL - 105	Information technology, RS and Image interpretation	50	50	100
RSGL - 106	Photogrammetry, Cartography and GPS	50	50	100
Field work:	*GPS Survey, Remote sensing Field Work with field verification*			
			Total	**600**
IInd Semester				
RSGT 201	Applied Statistics and Programming Concept	80	20	100
RSGT 202	Digital Image Processing (DIP)	80	20	100
RSGT 203	Geographical Information System (GIS)	80	20	100
RSGT 204	Thermal and Microwave Remote Sensing	80	20	100
RSGL 205	Statistics, programming and Digital Image Processing	50	50	100
RSGL 206	Microwave Remote Sensing and GIS	50	50	100
			Total	**600**
IIIrd Semester				
RSGT 301	Remote Sensing in Geosciences	80	20	100
RSGT 302	Remote Sensing in Water resources	80	20	100
RSGT 303	Remote Sensing in Agriculture Soil and Land Evaluation studies	80	20	100
RSGT 304	Remote Sensing in Forestry	80	20	100
RSGL 305	Remote Sensing in Geosciences, And Water Resources	50	50	100
RSGL 306	Remote sensing Agriculture Soil and Land Evaluation and Forestry	50	50	100
Field Work:	*Different type of Field Work for ground truth verification*			
			Total	**600**
IVth Semester				
RSGT 401	Remote Sensing in Human Settlement Analysis	80	20	100
RSGT 402	Remote Sensing in Environmental Science	80	20	100
RSGL 403	Remote Sensing in Human Settlement and Environmental Science	50	50	100
	Project Work Project Report 250 Viva Voce 50	300	-	300
			Total	**600**
			Grand Total	**2400**

FACILITIES:

HOSTEL:

The University of Jammu has three boy's hostels and three girl's hostels to meet the needs of students who seek hostel accommodation. Depending upon the availability of hostel seats, limited number of candidates shall be accommodated in the hostel according to the merit which shall be determined by the University.

LIBRARY:

University has Central Library having over 3 lakh titles and over 300 serial subscriptions. In the central Library EDUSAT facility through Consortium for Education Communication (CEC) is one of the node of UGC sponsored information display by hub at IIRS Dehradun and Library Network (NFLIBNET) programme also. Beside that the Remote Sensing and GIS Library has rich collection of books and journals which can provide a window to look into the course details and its applications.

Academic Calendar for the session 2009-10

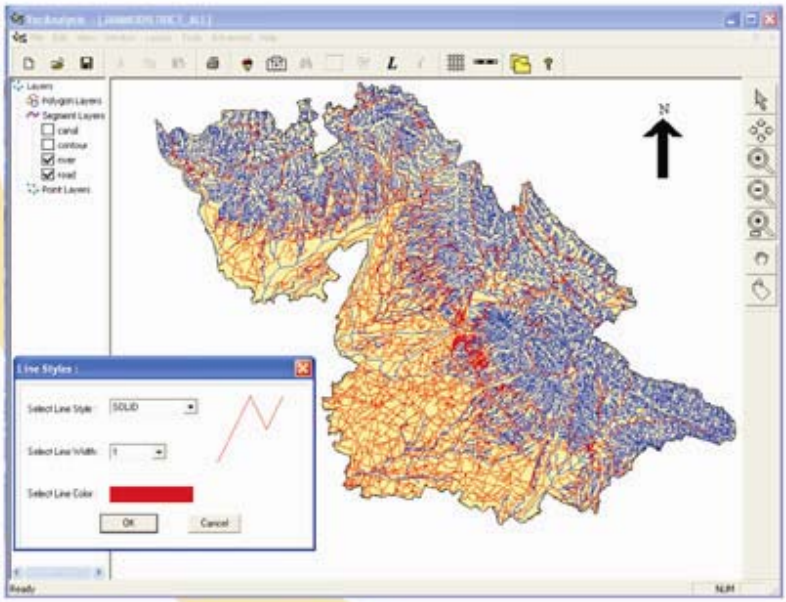
The University reopens after Summer Break	August 3rd, 2009
Commencement of Admission process (assuming that the results of B.A. / B.Com. III Year are declared by the 2nd week of July.	August 3rd, 2009
Termination of semester examinations II, IV & VI.	Latest by 20th August, 2009
Commencement of Teaching of I, III & V Semester Courses.	Immediately after the termination of II, IV & VI Semester Examinations (Not later by 20th August, 2009.
Admission Process (Including Transfers and Appellate Cases)	4th September, 2009.
Assessment tests /Assignments (Ist Internal)	Latest by 30the October, 2009.
Diwali Break	October 15th – 19th , 2009.
2nd Internal Assessment Tests / Assignments	Latest by 27th November, 2009.
Submission of Internal Assessment Record of I, III & V Semesters to the Controller of Examinations	Latest By 18th December, 2009
Termination of Teaching of I, III & V semester Courses	December 18th, 2009
Winter Vacations (Preparatory Holidays for students)	21st December, 2009 to 2nd January, 2010
Termination of I, III & V Semester Examinations.	Latest by January, 2010
Commencement of Teaching of II, IV & VI Semester Courses	Immediately after the termination of I, III & V Semester Examinations (Not later then 29th Jan., 2010)
Assessment Test / Assignment(Ist Internal)	Latest by 30th March, 2010
Holi Break	March 2010 (one week) starting two days before Holi
Assessment tests / Assignment (2nd Internal)	Latest by 30th April, 2010
Termination of Teaching of II, IV & VI semester.	Latest by 28th May, 2010
Submission of Internal assessment Record of II, IV & V1 semesters to the Controller of Examinations.	Latest by 4th June, 2010
Summer Vacations	14th June to 30th July, 2010
Commencement of Exams. of II, IV & VI semester	15th July, 2009 onwards


Post Graduation in
Remote Sensing and GIS

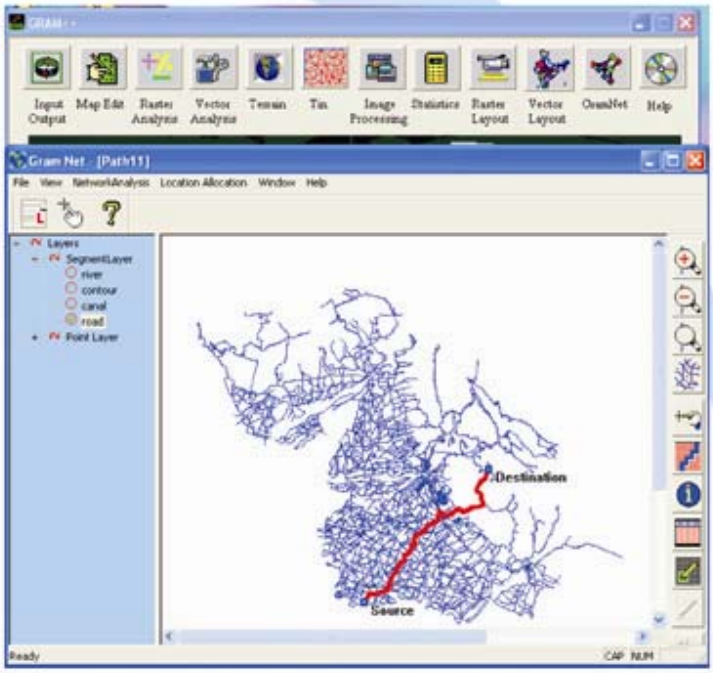
Eight Week EDUSAT Distance Learning Programme on Remote Sensing, GIS GPS and its application was conducted at Central Library University of Jammu

Satellite acquiring the information of the earth surface

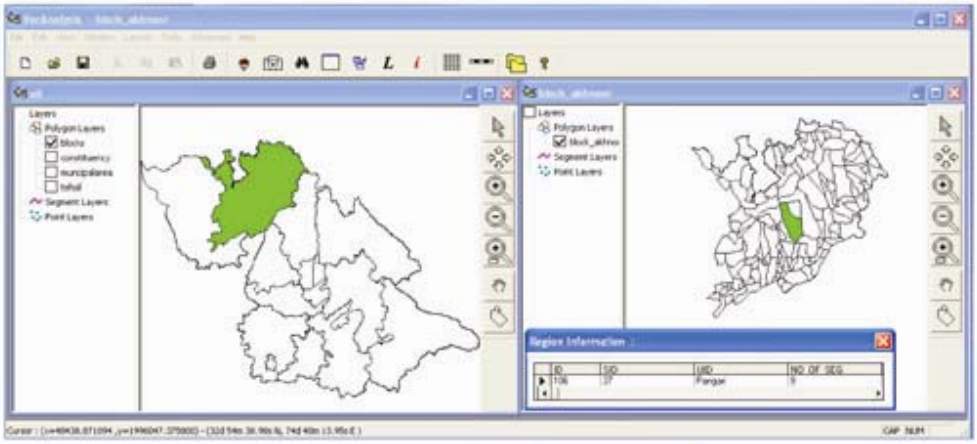
Remote Sensing data and GIS software have been used to carry out the work in the Various R&D Projects



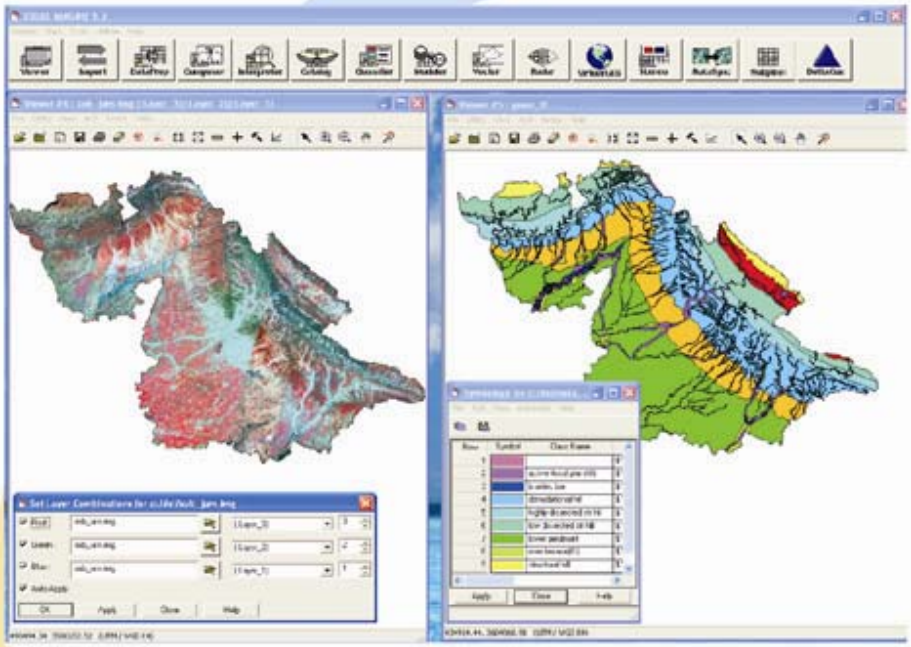
Drainage and Road map of Jammu District in Vector analysis (GRAM++ software)



Finding shortest route through Gram Net (GRAM++ software)

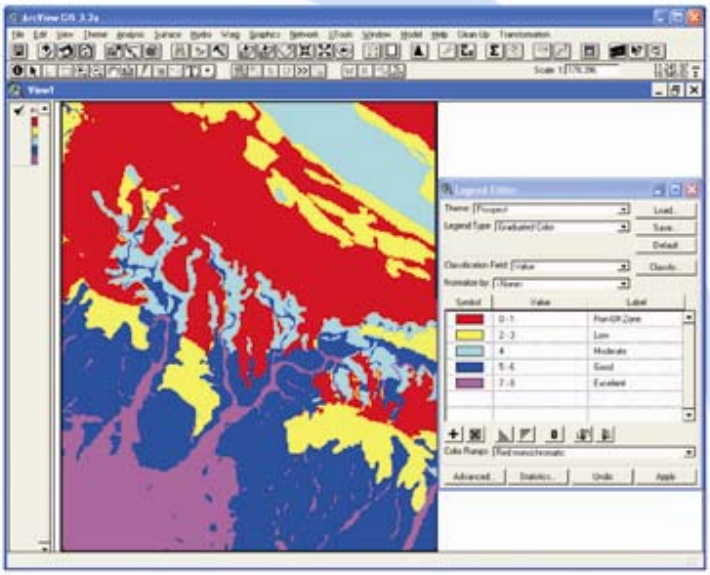


Exploring village wise information through Vector analysis (GRAM++ software)

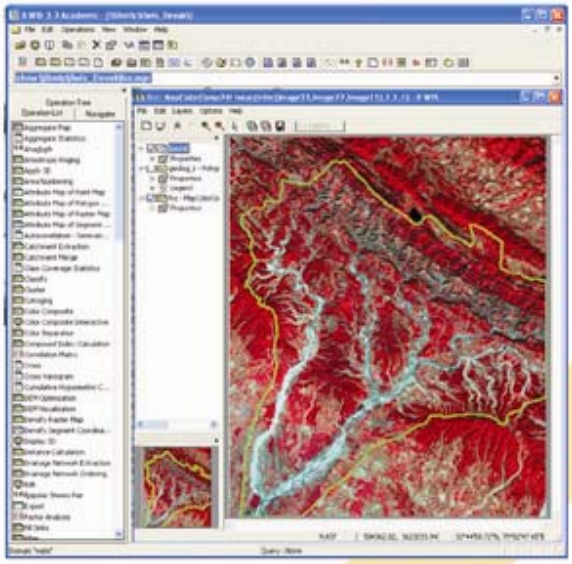


Geomorphology map through Satellite data IRS-P6 (LISS-IV)MS using ERDAS 9.3 Imagine processing software

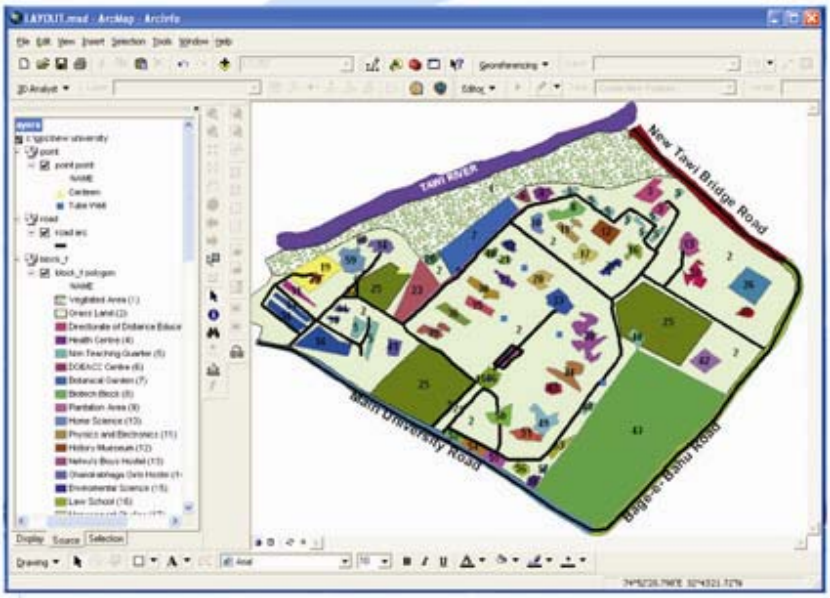
Constituency map of Jammu district prepared in ARC GIS 9.3 software



Groundwater prospect map prepared in the ARC VIEW software



Capturing Devak-Rui watershed from satellite imagery in ILWIS 3.3 software



GPS based layout map of University of Jammu composed in ARC GIS 9.3 software

Plotting location map of seismic data over Jammu Municipal area in MapInfo software

ANNEXURE - I

Candidates who have qualified B.Sc. in previous year/s must submit affidavit as per specimen given in Annexure….. duly attested by Magistrate/Oath Commissioner/Notary.

AFFIDAVIT

I ……..... Son/Daughter of ……..…….…. .....Resident of …… Hereby solemnly declare that I have passed my qualifying examination, in the year …….. from the University of …… I further declare that I have neither been admitted to any course/programme of study of this University/any other University nor have passed any post graduate examination as a private candidate, after passing my graduation examination in the previous year. The above statement made by me is true to the best of my knowledge and belief and if the event of this having been proved otherwise, my admission shall stand automatically cancelled besides any other action that may be taken against me under law.

DEPONENT

Annexure-II

SYLLABUS

1.	General Knowledge and Current Affairs	25 %
2.	English Comprehension	25 %
3.	Numerical ability	25 %
4.	Data Sufficiency	25 %

SAMPLE QUESTIONS

GENERAL KNOWLEDGE AND CURRENT AFFAIRS

(1) Which of the following is not a wind instrument?
(A) Flute (B) Nadaswaram
(C) Rabab (D) Shehnai

(2) Geophysics deals with
(A) history of the earth. (B) physics of the earth.
(C) Searching the causes of physical calamity on the (D) all of the above.

(3) Dollar is not the currency of
(A) Belgium (B) Hongkong
(C) Bermuda (D) Liberia

(4) "Modvat" is
(A) a book (B) the tax imposed upon final products
(C) a satellite (D) a tribal group

ENGLISH

Directions for questions 5-7 :

In each of the following questions, a word is given followed by four other words marked as A, B, C and D, one of which is nearest in meaning with the given word. Your task is to choose that word and indicate that on the answer sheet. If you do not find any correct answer then indicate "E" as your- answer.

(5) INSIPID
(A) Ominous (B) Chink
(C) Prosy (D) Avocation

(6) CONTRITION
(A) Indemnity (B) Compunction
(C) Resusciation (D) Garniture

(7) SAGACIOUS
(A) Multigenerous (B) Shackle
(C) Secession (D) Exude

Direction from questions 8 and 9 :

This is an underlined portion in each sentence. Your task is to find out the correct answer from the given alternatives

8. He was born with a silver spoon in his mouth.
   (A) born in a rich family (B) born in a family which deals with silver
   (C) born as a talented child (D) None of the above

9. I hope you will hear the palm in the context.
   (A) fail (B) win
   (C) perplexed (D) get lost

Direction for questions 10-11 :

Each of the following questions consists of a sentence where some portion is underlined. There are four alternative for the underlined portion marked as A,B, C, and D. Your task is to find out which of these alternatives is the most correct and effective for the portion underlined. If you feel that the original sentence is the best, indicate "E" on the answer sheet.

(10). A big advantage of this set up is the speed which we can now operate.
   (A) now we can operate the speed.
   (B) speed with which we can now operate.
   (C) speed could now be operated.
   (D) operation is now possible through controlling the speed.

(11) I was referred to as the witness, but that is a misnomer.
   (A) I was the witness
   (B) As witness I was referred
   (C) I was referred to the witness
   (D) My reference was there as witness

COMPREHENSION

Directions for questions 12 to 15 :

Read the following passage carefully and answer the related questions. Four alternative answers are given for each Question (marked as A, B, C, D). Your task is to find out the correct one and indicate that On the answer sheet. If you do not find out any correct answer then indicate "E" as your answer.

PASSAGE

It was an English language class. The teacher came in abit late, his umbrella dripping. He put the brolly aside and wiped his glasses. "It is raining cats and dogs, sir;" said a boy looking out of the window, "cats and dogs 1", snorted the teacher. "It is raining cows and buffaloes," Cows and buffaloes are certainly heavier. But they do not make weightier phrase. In fact, their phrasal use means nothing, For cow and buffalo do-not stand for what cat and dog do.

Brewer's Dictionary explains the phrase briefly but clearly. It is rooted in the mythology of Northern Europe. The cat, it was believed, had a great influence on weather, And the dog signified wind. Witches, it was supposed, could ride upon the storm. They took the form of cats at such times. In Harz district the stormy north-west wind is called the eat's nose.

The dog, like the wolf, was an attendant of Odin, the storm god of Norsemen. Old German pictures show the wind with the head of a dog or a wolf. When we say dog days, however, we mean days of great heat. The Romans, believed that rising with the sun, Sirius, or the dog star, added to its heat (July 3 to August 11),

While Ulysses was on his way home after the trojan war. Aeolus. the god of winds, gave him a bag. (t had all the country winds tied up in it. This was meant to make his a smooth sailing to Ithaca. But his man opened the bag. Out flew the winds and blew his ship off course. This was one of the big mishaps that delayed the hero's return,

In Urdu we have a cat phrase, "bhigi billi batana", It is about rain, but has nothing to do with cats and dogs. The story behind it is that one monsoon night a man expected rain and decided to sleep, not in the open but in a room. His servant lay down on a mat near the door. Around midnight the man asked the servant to see if the sky was clear. . Without going out, the lazy chap said that it was cloudy yet.

"But it is not raining", said the master. Again, without going out, the servant said that it was drizzling.

"How can you say that?, asked the master, The servant said a cat had just come in. He had touched her back and found it wet. The phrase thus means to make excuses or put off a person.

To come back to cats and dogs, more than in England, the phrase is now used in India. Some people wrongly substitute bigger beasts for the original animals. But humour sometimes gives the stale phrase a new sheen. Heard this before? "It's raining cats and dogs outside",

"Yes, I know, I just stepped into a poodle".

Questions:

12. Cat's wind indicates
    (A) the stormy north-west wind (B) the form of witches
    (C) heavy snow fait . (D) the wind with the head of a dog or a wolf.

13. Dog's day means
    (A) heavy rain fall (B) great hea
    (C) bad weather (D) stormy weather

14. "It is raining cows and buffaloes" by saying this the teacher
    (A) corrected the phrase "cats and dogs"
    (B) indicated that it was raining so heavily that even cows and buffaloes became wet
    (C) meant that cows and buffaloes are symbols of rain and storm
    (D) tried to emphasize that it was raining more heavily than what is indicated by cats and dogs

15. "bhigi billi batana'" the Urdu phrase means
    (A) that it is drizzling (B) that it is raining suddenly
    (C) that it is raining as expected (D) to make excuse

NUMERICAL ABILITY

Directions:

Each of the following questions has four or five alternative answers. For each of these questions , select the best of the answers choices given.

16. Successive discounts of 10%, 12% and 15% amount to a single discount of
    (A) 35.28% (B) 37%
    (C) 36.68% (D) none of these

Directions for questions 17-18:

Each of the following questions consists of two quantities denoted by (i) and (ii). Your task is to indicate

(A) If (i) and (ii) are equal
or (B) If (i) is greater than (ii)
or (C) If (ii) is greater than (i)
or (D) If it cannot be decided and further information is required.

17. (i) 27/5 (ii) 25/85

18. (i) Area of a circle with diameter 6 cm (ii) Area of a rectangle with length 5 cm. and breadth 6cm.

DATA SUFFICIENCY

Directions :
Each of the following questions is followed by two statements labelled by (a) and (b). Use the data/information given in (a) and (b) to decide whether the data are sufficient to answer the question. Record your answer as:

(A) if only 'a' is required (B) if only 'b' is required
(C) either 'a' or 'b' will do (D) both 'a' and 'b' are required (E) more information needed

19. Is Ram younger than Shyam ?

(a) 15 years ago Shyam was 20 years old. (b) after 10 years Ram will be 30 years old.

20. Was day before yesterday cloudy?

(a) there was no rain for last 7 days.
(b) after three continuous cloudy days, rain started only yesterday

21. Is 'x' larger than 'y' ? ('x' and 'y' are integers)

(a) (x 15) is larger than (y + 7) (b) $(x+1)^2 - (y+2)^2$ is positive

Directions for questions 22 and 23 :

In each of the following sentences a word is printed in capital letter your task is to find out a word from among the four alternatives marked as A,B, C, D given below which has similar meaning to the word printed

22. That person was present as the organisation's special EMISSARY to the meeting.
(A) Guest (B) Attraction
(C) Messenger (D) Performer (E) None

23. President ENTREATED the guest to stay out till the discussion continued.

(A) Pleaded (B) Advised (C) Charged (D) Insisted

Direction for questions 24 and 25 :
The following questions contain a problem followed by two statements marked as (i) and (ii). Your task is to find out whether the statements are sufficient to solve the problem . Indicate you answer as :

(A) if you can get the answer on the basis of (i) alone but not from (ii) alone
(B) if you can get the answer on the basis of (ii) alone but not from (i) alone
(C) if you can get the answer from (i) and (ii) together , but neither statement by itself suffices
(D) if statements (i) alone and statement (ii) alone suffices
(E) if you can not get the answer from statements (i) and (ii) some extra information required

24. Is $p > q$?
(I) $p + 3q = 80$ (ii) $p/2q = 9$

25. What is A+B+C ?
(I) $A + B = 4$ (ii) $B + C = 3$

Centre's digitised map plan: Jammu heads list

Comprehensive maps being prepared using remote sensing satellite imaging, GIS and local data

Vice Chancellor, University of Jammu (JU), Prof Amitabh Mattoo releasing the admission brochure of MSc remote sensing and GIS in a function held at University on Thursday.
Excelsior/Rakesh

Admission brochure of M Sc Remote Sensing released

Excelsior Correspondent

JAMMU, May 29. Vice Chancellor, University of Jammu (JU), Prof Amitabh Mattoo today released the admission brochure of "MSc course in Remote Sensing and GIS—for the forthcoming session, in a function held at the university.

Speaking on the occasion, Prof Mattoo said, "With this formal launching of MSc course in Remote Sensing and GIS, JU has attained the distinction of being one among the few universities in the country running this course".

He said that this multi-disciplinary course will give an opportunity to the students to gain knowledge in this emerging technology and its application in different fields, besides rigorous academic training and competence in data and information acquisition".

Also speaking, Dr Amit Singh Jasrotia, course coordinator, informed that the advertisement for this two-year full time M Sc degree were invited and said, "There is immense job potential in this field, as the demand of remote sensing and GIS is increasing day by day".

He added that initially the course will be open only to 10 students, while 50 per cent of the seats have been kept reserved for the permanent residence of the State.

JU launches...

are available in organizations like Space Application Centre (SAC) Ahmedabad, National Remote Sensing Agency (NRSA) Hyderabad, Indian Space Research Organization (ISRO) Bangalore, Indian Institute of Remote Sensing (IIRS), Dehradun, Academic Institutions, Regional Remote Sensing Centres and Remote Sensing Centres in various states of India. Beside, huge employment opportunities are available in private sector and overseas which further highlights the importance of the course. The demand of Remote Sensing and GIS is increasing day by day in Government and Private sector. Remote Sensing and GIS professional can start his/her career as Project Manger, Sr. System Executive, System analyst, GIS Engineer, Image analyst, GIS Programmer etc. He said that the course shall be made open to Ten students at the initial stage in view of technical nature Fifty per cent of seats shall be reserved for the J&K Permanent Residents, he said. Dr Jasrotia said that selection of the candidate shall be made on the basis of their performance in a written Entrance Test, Academic Record, Counseling and Viva Voce.

& KASHMIR

Jammu varsity offers M.Sc in GIS

HT Correspondent
Jammu, February 17

THE JAMMU University would start M.Sc in Remote Sensing and Geographical Information System (GIS) course from the current academic session.

The University is only one in north India to have Master's level course in remote sensing and GIS.

This programme shall help to master advanced techniques in remote sensing and GIS, strengthen problem-solving skills in remote sensing and GIS and develop knowledge and ideas in relevant areas of application.

A.S. Jasrotia, Course Coordinator, said he course will provide the foundation for awakening the student's understanding of remote sensing and GIS as well as strengthening their software knowledge.

Remote sensing and GIS - A new initiative by JU

JAMMU, FEB 17

The University of Jammu has started a new course to open the M.Sc. Remote Sensing and Geographical Information System (GIS) course which has been offered from the current academic session 2006-10.

The University of Jammu is the only University in northern India to have Master's level course in Remote Sensing and GIS.

This Master's Level programme shall help to acquire advanced techniques in remote sensing and GIS, strengthen problem solving skills in Remote Sensing and GIS and develop know-how for and ideas in relevant areas of application. The master's level course in Remote Sensing and GIS is multidisciplinary in nature and will give the opportunity to the students to gain knowledge in this emerging area having great scope in the job market.

Remote Sensing and GIS "is a relatively young Scientific discipline and is an area of emerging technology which has witnessed phenomenal growth over the last two or three decades and has dramatically enhanced human capabilities for exploration of resources, mapping and monitoring on local and global scale.

The remote sensing and GIS technique is of great importance in different fields like assessment of geological hazards, minerals and oil exploration, hydrogeology, watershed management, earthquake engineering, tourism, tourism, defence, transport and navigation routes, land-use analysis, modelling urban environment, crop monitoring, disaster management, environmental studies, Bio-diversity.

According to the Dr. AS Jasrotia, Course Coordinator M Sc Remote Sensing and GIS, this course will provide the foundation for awakening the student's understanding of Remote sensing and GIS as well as strengthening their software knowledge and problem solving skills. "Students will be exposed to advanced topics, such as GIS database building, geo-coding, image analysis, Global Positioning Systems, spatial analysis, and surface analysis," Dr Jasrotia said.

About the job opportunities for the students having knowledge of Remote Sensing, Dr Jasrotia said "Job opportunities for students having knowledge of Remote Sensing are available in organizations like Space Application Centre (SAC) Ahmedabad, National Remote Sensing Agency (NRSA) Hyderabad, Indian Space Research Organization (ISRO) Bangalore etc.

In Jammu and Kashmir state, the course at Master level shall be of immense value to Researchers / Administrators/Users for taking information from inaccessible area due to difficult topographic terrain in Jammu and Kashmir State.

JAMMU AND

JU introduces M.Sc in Remote Sensing

HT Correspondent
Jammu, May 29

GEOLOGY DEPARTMENT of Jammu University has introduced a new Master's course in Remote Sensing and GIS.

Vice-Chancellor of Jammu University Professor Amitabh Mattoo released the admission brochure of the course today which is scheduled to start from this session.

Releasing the admission brochure, Mattoo said that he was pleased to know that the said PG course was multidisciplinary in nature and offered good career options. "I am sure the new course will equip the students with the requisite technical skills to pursue a career in the subject," he said.

Students having passed a Bachelor's degree in Science or engineering from a recognised Indian university with more than 50 per cent marks were eligible for admission. Initially, there would be ten seats, with half of the seats reserved for permanent residents of J&K. Those who participated in the Edusat distance learning programme on remote sensing, GIS and GPS were given certificates.

Digitised maps to find out groundwater in Jammu

Researchers to look for groundwater zones

EXPRESS NEWS SERVICE
JAMMU, APRIL 9

As part of the project to establish Natural Resources Digital Database (NRDD) Centre in Jammu district and create an integrated database for development planning, the researchers will explore the potential of the ground water zones in Jammu. Besides, documenting sanity, water-logging, soil erosion and potential areas of rain-water harvesting in the next one year, the researchers will look ground water zones in the city.

This was revealed by Dr A S Jasrotia, principal investigator of the project during a review meeting of the project held here today. The meeting was held under the chairmanship of Chief Planning Officer Jammu, Satvir Kaur.

In his presentation, Dr Jasrotia, who is from Jammu University's Geology department, touched upon the work done in Jammu as part of the project during the last one year and highlighted the works to be undertaken during the next one year. He said that the multi-disciplinary

Socio-economic maps will allow administration to have an overview of development works

two-year project, funded by Department of Science and Technology and sponsored by the Centre, aims at technological and institutional capacity building of the line departments in using remote sensing and Geographical Information Systems (GIS) to operationalise the decentralised planning for economic development in the district.

The outcome of the project will be of immense use for the concerned departments here to know the disparity in the development planning right up to the village level.

In the last one year, they have prepared the digitised maps, primarily concerning the socio-economics of the district, which will allow the officials to avail information at just click of the mouse like the number of households, population, road connectivity, tourist spots, health institutions, water supply, educational institutions and so on, Dr Jasrotia said. He said that the socio-economic maps will allow the district administration to have an overview of the development works in various parts of the district.

"We will work for creating digitised maps so on that will also provide information about the natural resources in a particular locality of the district." The maps will give information like the potential of the ground water in a particular area, the type of soil, salinity in the soil, vegetation cover, extent of forest cover, water logging, potential areas for rain water harvesting and so on, he added.

"Later such data will be clubbed together with the socio-economic data and made available to all the concerned departments for a much more efficient and coordinated economic development of the district," Dr Jasrotia said.

The meeting was also attended by officials from different departments who have have also been involved in the project so that by the time the maps are ready, they learn to use the same to the best of their advantage.

VC Jammu University Prof Amitabh Mattoo release a brochure on Remote sensing and geographical information systems system released by the department of Geology on Thursday.
—KT photo/Syed Shah

Remote Sensing and GIS new initiative by JU

STAFF NEWS SERVICE

JAMMU: Jammu University (JU) is the only university in Northern India which started a new vision to open the M.Sc. Remote Sensing and Geographical Information System (GIS) course. The course has been started from the current academic session 2008-10.

The master's level course in Remote Sensing and GIS is multidisciplinary in nature and will give the opportunity to the students to gain knowledge in this emerging area having great scope in the job market.

The remote sensing and GIS technique is of great significance in different fields like assessment of geological hazards, mineral and oil exploration, hydrogeology, watershed management, earthquake engineering, telecom, tourism, defence, transport and navigation systems, landuse analysis, modelling urban environment, crop monitoring, disaster management, environmental studies and Bio-diversity. According to Dr. A.S Jasrotia, Course Coordinator M. Sc Remote Sensing and GIS, this course will provide the foundation for awakening the student's understanding of Remote Sensing and GIS as well as strengthening their software knowledge and problem solving skills. "Students will be introduced to advanced topics, such as GIS database building, geo-coding, image analysis, Global Positioning Systems, spatial analysis and surface analysis," Dr Jasrotia said. About the job opportunities for the students having knowledge of Remote Sensing, Dr Jasrotia said "The job opportunities for students having knowledge of Remote Sensing are available in organisations like Space Application Centre (SAC) Ahmedabad, National Remote Sensing Agency (NRSA) Hyderabad, Indian Space Research Organisation (ISRO) Bangalore, Indian Institute of Remote Sensing (IIRS), Dehradun, Parliamentary House New Delhi, Oil and Natural Gas Commission (ONGC), Agricultural Research Institute (IARI) New Delhi, Indian Council of Agricultural Research (ICAR), Ministry of Agriculture GOI, Academic institutions, Regional Remote Sensing Centres and Remote Sensing Centres in various states of India besides huge employment opportunities available in private sector and overseas.

Dr Jasrotia further informed that the demand of Remote Sensing and GIS is increasing day by day in Govt. and Private sector. "Remote Sensing and GIS professional can start career as project Manger, Sr. System, Executive System analyst, GIS Engineer, Image analyst, GIS Programmer," he said. In Jammu and Kashmir state, the course at Master level shall be of immense value to Researchers / Administrators/Forces for taking information from inaccessible areas due to difficult GI course for aspiring ... and geographical conditions. In view of this, it will be a one full course for exposing, monitoring and preparing the educated youth for seeking information, where required with expertise and competence.

अब नहीं छानेगी पहेली बड़े शहरों की खाक

रिमोट सेंसिंग कोर्स शुरू

- सभी एक सीटें पेमेंट के आधार पर भरी जाएंगी
- आवेदन करने की अंतिम तिथि 25 जून
- कोर्स करने वाला उत्तर भारत का पहला विषय

Remote Sensing and GIS: A new initiative by University of Jammu

Shadow Correspondent

JAMMU, FEB 17: The University of Jammu has started a new vision to open the M.Sc Remote Sensing and GIS, Geographical Information System (GIS) course which has been started from the current academic session 2008-10.

The University of Jammu is the only University in northern India to have Master's level course in Remote Sensing and GIS.

This Master's Level programme ... and GIS is multidisciplinary in nature and will give the opportunity to the students to gain knowledge in this emerging area having great scope in the job market.

Remote Sensing and GIS technique is of great significance in different fields like assessment of geological hazards, mineral and oil exploration, hydrogeology, watershed management, earthquake engineering, telecom, tourism, defence, transport and navigation systems, landuse analysis, modelling urban environment, crop monitoring, disaster management, environmental studies, Bio-Diversity.

According to the Dr. AS Jasrotia, Course Coordinator M. Sc Remote Sensing and GIS, this course will provide the foundation for awakening the student's understanding of Remote Sensing and GIS as well as strengthening their software knowledge and problem solving skills. "Students will be introduced to advanced topics, such as GIS database building, geo-coding, image analysis, Global Positioning Systems, spatial analysis and surface analysis," Dr Jasrotia said.

About the job opportunities for the students having knowledge of Remote Sensing, Dr Jasrotia said "The job opportunities for students having knowledge of Remote Sensing are available in organisations like Space Application Centre (SAC) Ahmedabad, National Remote Sensing Agency (NRSA) Hyderabad, Indian Space Research Organisation (ISRO) Bangalore, Indian Institute of Remote Sensing (IIRS), Dehradun, Parliamentary House New Delhi, Oil and Natural Gas Commission (ONGC), Agricultural Research Institute (IARI) New Delhi, Indian Council of Agricultural Research (ICAR), Ministry of Agriculture GOI, Academic institutions, Regional Remote Sensing Centres and Remote Sensing Centres in various states of India besides huge employment opportunities available in private sector and overseas.

Dr Jasrotia further informed that the demand of Remote Sensing and GIS is increasing day by day in Govt. and Private sector. "Remote Sensing and GIS professional can start career as project Manger, Sr. System, Executive System analyst, GIS Engineer, Image analyst, GIS Programmer," he said. In Jammu and Kashmir state, the course at Master level shall be of immense value to Researchers / Administrators/Forces for taking information from inaccessible areas due to difficult GI course for aspiring ... and geographical conditions. In view of this, it will be a one full course for exposing, monitoring and preparing the educated youth for seeking information, where required with expertise and competence.

JU first Varsity in Northern India to introduce M. Sc Remote Sensing, GIS

EARLY INDIA REPORT

JAMMU, FEB. 19: The University of Jammu has become the first University in Northern India to start Master's level course in Remote Sensing and GIS.

The University has started a new vision to open the M. Sc Remote Sensing and Geographical Information System (GIS) course which has been started from the current academic session 2008-10.

The master's level course in Remote Sensing and GIS is multidisciplinary in nature and will give the opportunity to the students to gain knowledge in this emerging area having great scope in the job market.

The remote sensing and GIS technique is of great significance in different fields like assessment of geological hazards, mineral and oil exploration, hydrogeology, watershed management, earthquake engineering, telecom, tourism, defence, transport and navigation systems, landuse analysis, modelling urban environment, crop monitoring, disaster management, environmental studies, Bio-diversity.

According to Dr. AS Jasrotia, Course Coordinator M. Sc Remote Sensing and GIS, this course will provide the foundation for awakening the student's understanding of Remote Sensing and GIS as well as strengthening their software knowledge and problem solving skills. "Students will be introduced to advanced topics, such as GIS database building, geo-coding, image analysis, Global Positioning Systems, spatial analysis and surface analysis," Dr Jasrotia said.

About the job opportunities for the students having knowledge of Remote Sensing, Dr Jasrotia said "The job opportunities for students having knowledge of Remote Sensing are available in organisations like Space Application Centre (SAC) Ahmedabad, National Remote Sensing Agency (NRSA) Hyderabad, Indian Space Research Organisation (ISRO) Bangalore, Indian Institute of Remote Sensing (IIRS), Dehradun, Parliamentary House New Delhi, Oil Natural Gas Commission (ONGC), Agricultural Research Institute (IARI) New Delhi, Indian Council of Agricultural Research (ICAR), Ministry of Agriculture GOI, Academic institutions, Regional Remote Sensing Centres and Remote Sensing Centres in various states of India besides huge employment opportunities available in private sector and overseas.

Dr Jasrotia further informed that the demand of Remote Sensing and GIS is increasing day by day in Government and Private sector. "Remote Sensing and GIS professional can start career as project Manger, Sr. System, Executive System analyst, GIS Engineer, Image analyst, GIS Programmer," he said. In Jammu and Kashmir state, the course at Master level shall be of immense value to Researchers / Administrators/Forces for taking information from inaccessible areas due to difficult GI course for aspiring ... and geographical conditions. In view of this, it will be a one full course for exposing, monitoring and preparing the educated youth for seeking information, where required with expertise and competence.

Remote Sensing and GIS A New initiative by University of Jammu

JAMMU, FEB. 17: The University of Jammu has started a new vision to open the M.Sc Remote Sensing and GIS Geographical Information System (GIS) course which has been started from the current academic session 2008-10.

The University of Jammu is the only University in northern India to have Master's level course in Remote Sensing and GIS.

This Master's Level programme ... and GIS is multidisciplinary in nature and will give the opportunity to the students to gain knowledge in this emerging area having great scope in the job market.

Remote Sensing and GIS technique is of great significance in different fields like assessment of geological hazards, mineral and oil exploration, hydrogeology, watershed management, earthquake engineering, telecom, tourism, defence, transport and navigation systems, landuse analysis, modelling urban environment, crop monitoring, disaster management, environmental studies, Bio-diversity. According to the Dr. AS Jasrotia, Course Coordinator M. Sc Remote Sensing and GIS, this course will provide the foundation for awakening the student's understanding of Remote Sensing and GIS as well as strengthening their software knowledge and problem solving skills. "Students will be introduced to advanced topics, such as GIS database building, geo-coding, image analysis, Global Positioning Systems, spatial analysis and surface analysis," Dr Jasrotia said.

About the job opportunities for the students having knowledge of Remote Sensing, Dr Jasrotia said "The job opportunities for students having knowledge of Remote Sensing are available in organisations like Space Application Centre (SAC) Ahmedabad, National Remote Sensing Agency (NRSA) Hyderabad, Indian Space Research Organisation (ISRO) Bangalore, Indian Institute of Remote Sensing (IIRS), Dehradun, Parliamentary House New Delhi, Oil Natural Gas Commission (ONGC), Agricultural Research Institute (IARI) New Delhi, Indian Council of Agricultural Research (ICAR), Ministry of Agriculture GOI, Academic institutions, Regional Remote Sensing Centres and Remote Sensing Centres in various states of India besides huge employment opportunities available in private sector and overseas.

Dr Jasrotia further informed that the demand of Remote Sensing and GIS is increasing day by day in Government and Private sector. "Remote Sensing and GIS professional can start career as project Manger, Sr. System, Executive System analyst, GIS Engineer, Image analyst, GIS Programmer," he said. In Jammu and Kashmir state, the course at Master level shall be of immense value to Researchers / Administrators/Forces for taking information from inaccessible areas due to difficult GI course for aspiring ... and geographical conditions. In view of this, it will be a one full course for exposing, monitoring and preparing the educated youth for seeking information, where required with expertise and competence.

JU to start MSc. in Remote Sensing and GIS

EXPRESS NEWS SERVICE

JAMMU, FEBRUARY 17:

THE University of Jammu has started a new vision to open the M.Sc Remote Sensing and Geographical Information System (GIS) course which has been started from the current academic session.

The University of Jammu is the only University in northern India to have Master's level course in Remote Sensing and GIS. The master's level course in Remote Sensing and GIS is multidisciplinary in nature and will give an opportunity to the students to gain knowledge in this emerging area having great scope in the job market.

According to the Dr AS Jasrotia, Course Coordinator M. Sc Remote Sensing and GIS, this course will provide the foundation for awakening the student's understanding of Remote sensing and GIS as well as strengthening their software knowledge and problem solving skills. "Students will be introduced to advanced topics, such as GIS database building, geo-coding, image analysis, Global Positioning Systems, spatial analysis, and surface analysis," Dr Jasrotia said.

About the job opportunities for the students having knowledge of remote sensing, Dr Jasrotia said "the job opportunities for students having knowledge of remote sensing are available in organisations like Space Application Centre (SAC), Ahmedabad, National Remote Sensing Agency (NRSA), Hyderabad, Indian Space Research Organisation (ISRO), Bangalore, Indian Institute of Remote Sensing (IIRS), Dehradun, Parliamentary House, New Delhi, Oil Natural Gas Commission (ONGC), Agricultural Research Institute (IARI), New Delhi, Indian Council of Agricultural Research (ICAR), Ministry of Agriculture GOI, Academic Institutions, Regional Remote Sensing Centres and Remote Sensing Centres in various states of India besides huge employment opportunities available in private sector and overseas.

Dr Jasrotia further informed that the demand of Remote Sensing and GIS is increasing day by day in government and private sector.

"Remote Sensing and GIS professional can start career as project Manager, Senior System, Executive System analyst, GIS Engineer, Image analyst, GIS Programmer," he said. In Jammu and Kashmir state, the course at master level shall be of immense value to researchers/administrators/forces for taking information from inaccessible areas due to difficult geographic terrains in Jammu and Kashmir State.

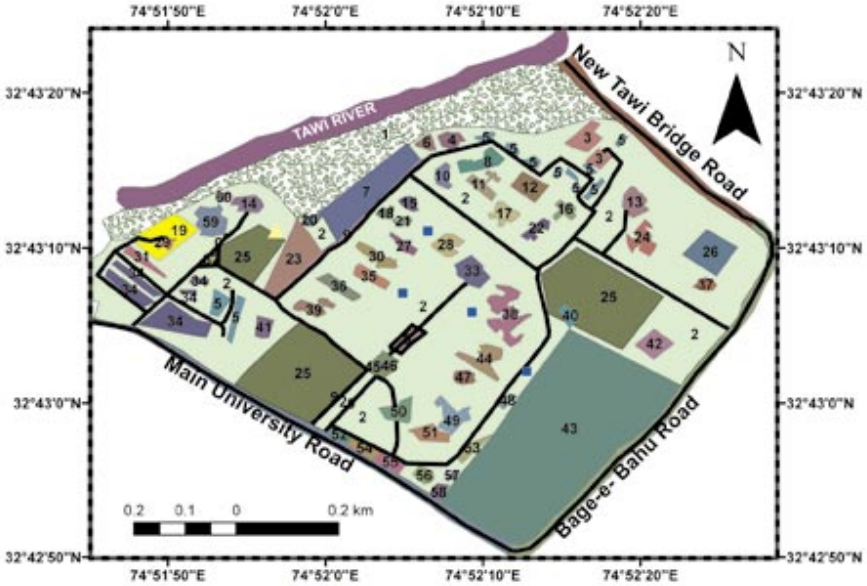
This master's level programme shall help to master advanced techniques in remote sensing and GIS, strengthen problem solving skills in Remote Sensing and GIS and develop knowledge and skills in relevant areas of application.

neering, disaster management, environmental studies, telecom, tourism, defence, transport and navigation system. Prof. Mattoo sajd that the University of Jammu is India's first ISO certified University and is one of the universities in north India to have Master's level Course in Remote Sensing and GIS. "I am sure that new course will provide rigorous academic training, technical skills and competence in data and information acquisition, extraction, management and analysis, spatial and statistical modelling, mapping and visualization to the students who are aspiring to take the admission from the academic session 2008-2009," he said.

Dr. Avtar Singh Jasrotia, Course Coordinator, M.Sc Remote Sensing and GIS, speaking on the occasion said that a lead of this kind was not possible without the vision and interest of Prof. Amitabh Mattoo, esteemed Vice Chancellor of Jammu University, who saw the immense potential and utility of this programme in the coming times.

He said that Prof. Mattoo has been kind enough to provide guidance, support and his experience in the field of international academics for opening this course in Jammu University. Dr. Jasrotia said that the applications are invited for admission to the Two year full time Master's Degree of Science in Remote Sensing and GIS in the Dept. of Geology, University of Jammu, commencing July/ August2008. The eligibility of the course is students having passed a Bachelor's Degree in Science/Engineering from any recognized Indian University including Agriculture and Forestry with not less than 50% of the aggregate marks. A candidate who has appeared in the final year of the Qualifying Examination in April/May, 2008 is also eligible to apply and can take the test provisionally, he further informed. Dr. Jasrotia said that job oppertunities for people having knowledge of Remote Sensing (Contd. on P7)

GPS BASED LAYOUT OF UNIVERSITY OF JAMMU



Legend

road arc

Tube Well

Canteen

Department Name

Vegitated Area (1)
Grass Land (2)
Directorate of Distance Education (3)
Health Centre (4)
Non Teaching Quarter (5)
DOEACC Centre (6)
Botanical Garden (7)
Biotech Block (8)
Plantation Area (9)
Home Science (10)
Physics and Electronics (11)
History Mueseum (12)
Nehru's Boys Hostel (13)
Chandrabhaga Girls Hostel (14)
Enviromental Science (15)
Law School (16)
Management Studies (17)
Gas Plant (18)
VC Lawn (19)
Cafeteria (20)
University Science & Instrumentation Centre (21)
Education & Sociology (22)
Cactus Garden (23)
Viveka Nand Boy's Hostel (24)
Play Ground (25)
General Zoravar Singh Auditorium Complex (26)
Chemistry (27)
Computer Science (28)
Vice Chancellor's Lodge (29)
Botany and Zoology(30)
Teaching Quarter (31)
Super Bazar (32)
Dhanwantri Library and Library Sciences (33)
Teaching Quarter (34)
Geology and Geograohy (35)
Mathmatics and Statistics (36)
Academic Staff College (37)
Languages Block (38)
Departmaent of Law (39)
Directorate of Physical Education (40)
Guest House (41)
Gymnasium (42)
Army Area (43)
Social Sciences Block (44)
Fountain (45)
Golamber (46)
Brigadier Rajender Singh Auditorium (47)
Works Department (48)
Dept. of Psychology & Provost Hostels (49)
Administration Block (50)
Examination Block (51)
Security Office (52)
Post Office (53)
Garage (54)
Parking (55)
Information and publicity centre (56)
Examination Hall (57)
J&KBank (58)
Priya Darshani Girls Hostel (59)
Sarojini Naidu Girls Hostel (60)

Dr. A. S. Jasrotia
Course Coordinator,
M.Sc. Remote Sensing & GIS
Department of Geology,
University of Jammu, Jammu- 180 006
Tel. No. 0191-2435166, 94191-33793 (M)
Fax. No.0191-2452987, 2459383
e-mail: asjasrotia@yahoo.co.uk
Website: www.jammuuniversity.in

Price Rs. 500/-

Printed at : Sethi Art Printers # 094191 92048, 094192 24304