UTILIZATION CERTIFICATE

It is certified that the amount of Rs 40,65,000/- (Rupees Fourty Lakh sixty five thousand)

Out of the total grant of Rs 50,25,000/- (Rupees Fifty Lakh Twentyfive thousand only)

Sanctioned to Department of Architecture, Birla Institute of Technology, Mesra

by the University Grants Commission vide its letter No F.3-27/2007 (SAP-II)

dated 26th February 2007 towards DRS – 1 under UGC Programme of Special Assistance
(SAP) scheme has been utilized for the purpose for which it was sanctioned and in accordance with the terms and conditions as laid down by the Commission.

If as a result of check or audit objection some irregularities are noticed at a later stage, action will be taken to refund, adjust or regularize the objected amount.

Signature

Registrar with Seal

Registrar

Pith Institute of Tourse of

Mara; Rauch

Signature

Coordinator of SAP

Signature

Finance Officer with Seal Mym

Ay.

Signature, Charted Accountant

with Seal and Registration No. 432532

Prior to the audit of Statutory Auditors

Note: The University will submit an audited statement of accounts, duly audited by the Statutory Auditors of the University as soon as the accounts of the University are audited.

University BIRLA INSTITUTE OF TECHNOLOGY, MESRA

sanction Letter No. & Date F,3-27/2007 (SAP-II DATED 26th FEBRUARY2007

Consolidated Statement of Expenditure incurred during 2006-07 to 2011-12 in the Department of ARCHITECTURE University under Special Assistance Programme

Remarks										Bal. 18694						(Rs. 96/- to be	refunded
Total	Experience	Incurred	Rs.		38,06,306						2,58,598					40,64,904	
			Year 2012-	13	7,42,782				6,84,000 (58,782						7,42,782	
· ·			Year 2011 -	12 <	IIN				IIN		IIN					Ē	
Actual Expenditure incurred			Year 2010-	11 (Nil			-			IIN					Ē	
ctual Expend			Year 2009 -	10 <	Nil						IIN					Ē	
Ř			Year 2007 Year 2008 Year 2010 Year 2011 Year 2012	» 60	30,63,524	1,66,556	1,42,968	11,44,000	16,10,000		Nii					30,63,524	
			Year 2007-	· * 80	Ë						2,58,598	2,58,598				₹ 2,58,598	
Grant released by	the UGC so far Rs.				38,25,000						2,40,000					40,65,000	
Total grant	approved by the	UGC Rs.			38,25,000						12,00,000					50,25,000	
Item(s) of Expenditure					A. Non - Recurring	1. MS Windows2008	2. UPS	3. AUTODESK Educational Solutions	4. Computers	5. Computer Table (Furniture)	B. Recurring	1. Miscellaneous for project work	2	3	4	тотаг	

Certificate

- 1. Certified that the grant has been utilized for the purpose for which it was sactioned and in accordance with the term & conditions attached to the grant.
- 2. If as a result of check or audit objection, some irregularity is noticed at a later stage, action will be taken to refund, adjust or regularize the objected amount.

Programme Co-ordinator

TO SUMMANOON OF THE PARTY OF TH

UTILIZATION CERTIFICATE

It is certified that the amount of Rs <u>40,64,904/- (Rupees Fourty Lakh sixty four thousand nine hundred and four only)</u> out of the total grant of <u>Rs 40,65,000/- (Rupees Fourty Lakh Sixty five thousand only)</u> Received by <u>Department of Architecture</u>, <u>Birla Institute of Technology</u>, <u>Mesra</u> by the University Grants Commission vide its letter No <u>F.3-27/2007 (SAP-II)</u> dated <u>26th February 2007</u> towards <u>DRS - 1</u> under <u>UGC Programme of Special Assistance (SAP)</u> scheme has been utilized for the purpose for which it was sanctioned and in accordance with the terms and conditions as laid down by the Commission. An amount of Rs. 96/- (Rupees Ninety six only) which has not been utilised will be refunded as per directive.

If as a result of check or audit objection some irregularities are noticed at a later stage, action will be taken to refund, adjust or regularize the objected amount.

Signature

Registrar with Seal

Signature

Finance Officer with Seal

Signature

Coordinator of SAP

Signature, Charted Accountant with Seal and Registration No.

Prior to the audit of Statutory Auditors

Note: The University will submit an audited statement of accounts, duly audited by the Statutory Auditors of the University as soon as the accounts of the University are audited.



Dean of Research, Innovation, Entrepreneurship (DRIE) Entrepreneurship (DRIE) Entrepreneurship (DRIE) Entrepreneurship (DRIE) Entrepreneurship (DRIE) Birla Institute of Technology Birla Institute of Technology Mesra, Ranchi-835215

University BIRLA INSTITUTE OF TECHNOLOGY, MESRA

Sanction Letter No. & Date F.3-27/2007 (SAP-II DATED 26TH FEBRUARY 2007

Consolidated Statement of Expenditure incurred during 2006-07 to 2011-12 in the Department of ARCHITECTURE University under Special Assistance Programme.

Rs.96/- to be refunded	40,64,904/-						40,65,000/-	50,25,000/-	TOTAL
									4.
									·ω
									2.
<u>.</u> .			- v			2,58,598		ect work	1. Miscellaneous for project work
	2,58,598	Z	Z	Z	Z	2,58,598	2,40,000	12,00,000	B. Recurring
		58,782						:ure)	5 Computer table (Furniture)
		6,84,000			16,10,000				4. Computers
					11,44,000			al Solutions	3. AUTODESK Educational Solutions
					1,42,968				2. UPS
	38,06,306	7,42,782	Z	Z	30,63,524 1,66,566	Z Z	38,25,000	38,25,000	A. Non-Recurring 1. MS Windows 2008
		(2007-08) (2008-09) (2009-10) 2010-11) (2011-12))) 2010-1	(2009-1	(2008-09)	(2007-08)			
-1	Rs.	Year	Year	Year	Year	Year	RS	RS	denotes the second of the seco
Remarks	Total Experience Incurred		urred	liture inc	Actual Expenditure incurred		Grant released by the UGC so far	Total grant approved by the UGC	Item(s)of Expenditure

ertificate

- 1. Certified that the grant has been utilized for the purpose for which it was sanctioned and in accordance with the terms & conditions attached to the grant.
- 2. If as a result of check or audit objection, some irregularity is noticed at a later stage, action will be taken to refund, adjust or regularize the objected amount.

Programme Co-ordinator

Finance Officer

Registrar

Final Progress Report

of

'DEPARTMENTAL RESEARCH SUPPORT' (DRS-I)

under

'Special Assistance Programme' (SAP)
University Grant Commission

Awarded to

Department of Architecture,
Birla Institute of Technology,
Mesra, Ranchi

2007-2012

NAME OF THE DEPARTMENT COORDINATOR AND DY. COORDINATOR FOR DRS I

Coordinator

Name:

*Dr. Ajay Khare (2007- August 2009)

Dr. Manjari Chakraborty (2009-2012)

i) Designation:

Professor & Head,

Department of Architecture,

BIT, Mesra

Dy. Coordinator

Name:

Dr. N. R. Mandal

i) Designation:

Professor

Department of Architecture,

BIT, Mesra

List of members of the Advisory Committee constituted by the Institute as per guidelines

1. Dr. A. Chakraborty, Vice Chancellor, BIT Mesra

Chairperson

2. Head, Architecture Department, BIT, Mesra

Coordinator &

Member Secretary

3. Dr. N. R. Mandal, Professor, Architecture, BIT, Mesra

Member

4. Dr. Debajyoti Biswas, Asso. Professor Architecture, BIT, RAK Member

5. Prof. J. H. Ansari, Ex Director, SPA, N. Delhi.

Member

School of Planning and Architecture, IP Estate, N.Delhi

(UGC Nominee)

6. Prof. S. M. Akhtar, Dean, Faculty of Architecture

Member

Jamia Millia Islamia, New Delhi.

(UGC Nominee)

^{*}resigned from BIT in August 2009

BUDGETARY DETAILS ABOUT THE RESEARCH SUPPORT

UGC- 'Departmental Research Support' (DRS-I) under 'Special Assistance Programme' (SAP) Sanctioned Rs. 50.25 lacs for 5 years (from 01.04.2007 to 31.03. 2012)

The Sanctioned Amount till date through UGC Grant Architecture SAP 03/07 (A/C 1016)

(1)	
a) Non Recurring	Rs. 18,25,000.00
b) Recurring	Rs. 12,00,000.00
Total	Rs. 30,25,000.00
(2)	
Allocation & Amount Approval	Rs. 20,00,000.00
Total Sanctioned Amount	Rs. 50,25,000.00

^{*} For (1) vide letter no. F.3-27/2007(SAP-II) dated 26/02/2007

The Amount received till date

(1)	
a) Non Recurring	Rs. 18,25,000.00
b) Recurring	Rs. 2,40,000.00
Total	Rs. 20,65,000.00
(2)	
Approval cum sanction	Rs. 20,00,000.00
Total Amount Received	Rs. 40,65,000.00

^{*} For (2) vide letter no. F.4-I/2006 (BSR) dated 09/08/2007

Activities as proposed and undertaken by Faculty and Masters level students of Dept of Architecture, BIT Mesra,

under the Developmental Research Support Scheme of the Special Assistance Programme of UGC (2009-2012)

Sl. No.	Commencement	Activity	Completion
1	April 2007	 Procuring Equipment Data Collection survey etc for City Development Plan of headquarters of different District of Jharkhand 	October 2007
2	October 2007	 Starting course on Planning (MUP) Data Collection, survey etc for Heritage Mapping and Rural Tourism development planning Data Collection, survey etc for studying rural infrastructure buildings of district Ranchi of Jharkhand 	April 2008
3	April 2008	 National / Regional seminar on Urban and Regional Planning, Heritage management and Conservation Analysis of data and preparation of preliminary inception report on the city development plans of the district headquarters studied. Compilation of collected data and survey inputs 	October 2008
4	October 2008	 Data Collection, survey etc for City Development Plan of headquarters of different districts of Jharkhand Data Collection, survey etc for Heritage Mapping and Rural Tourism of different districts of Jharkhand Data Collection, survey etc for studying rural infrastructure buildings of district Ramgarh of Jharkhand 	April 2009
		 Identification and planning for solid waste management system 	

		Completion of collected data and survey inputs	
6	October 2009	 Seminar Conference on Heritage- intensive Rural Tourism and Urban Planning Art and culture based Urban Planning for Ranchi City Data Collection, survey etc for City Development Plan 	April 2010
7	April 2010	 Comparative study of tribal urban settlement pattern vis-a-vis other settlement of India Final proposal of policy structure for City Development Plans of headquarters of Tribal populated districts 	October 2010
8	October 2010	 Data Collection, survey etc for Heritage Mapping and Rural Tourism of few districts Jharkhand Socio- Economically feasible neighborhood planning Planning for slum free city 	April 2011
9	April 2011	 Preparation of final heritage map for the envisaged district of Jharkhand and publication of report Transportation Plan for a mid- sized city in India/developing country Preparation of white paper on scope and potentiality of pro-poor rural tourism in Jharkhand 	October 2011
10	October 2011	 Integrated planning for heritage and religious tourism development Planning for future Industrial growth Research on Prototype Architectural Design for Rural Infrastructure Buildings Compilation of work 	March 2012

INTELLECTUAL PROPERTY DEVELOPMENT

Thrust Areas of research as identified:

- Urban & Regional Planning
- Heritage Management & Conservation
- Rural Infrastructure Buildings

RESEARCH PROJECT TAKEN UNDER URBAN & REGIONAL PLANNING

Sl. No.	Name of the project	Status
1	Urban Development Strategy for the newly constituted states with reference to Jharkhand	Completed
2	Impact of Urbanization on Tribal Settlements	Completed
3	Symbiotic Housing Development	Completed
4	Route optimization models for Transport Planning	Completed
5	PPP and Housing	Completed
6	Development of Growth Nodes around Ranchi	Completed
7	Solid Waste Management of Ranchi and Jamshedpur	Completed
8	Industrial development strategy for resource based state with reference to Jharkhand	Completed

BRIEF ABOUT FEW PROJECTS COMPLETED UNDER URBAN AND REGIONAL PLANNING:

Urban Development Strategy for Newly Constituted States with reference to Jharkhand:

A new state always looks forward to formulation of dynamic policy towards change. These new states are formed aiming to eradicate the bias in the sphere of economic distribution and capitalization of resources which plays a pivotal role in division of the mother state. With the formation of new state, the state capital along with other urban centres becomes the node for conurbation with tremendous inflow of population from its hinterland which tends to concentrate because perceived economic incentives. As has been seen globally, the growth of cities and towns

expands opportunity for all citizens and gains of restructuring the same including provision of proper urban infrastructural, economic and managerial developments penetrate faster into regional sector.

The nascent state of Jharkhand, the study area, was created as the 28th state of the Indian Union with effect from 15th November 2000. The state has one of the lowest urbanization rates in India and the present urbanization trends of the state shows localized concentration in few identified resource rich areas which leads to the conclusion that resource benefaction has a direct linkage with urbanization pattern of the state. Infact, it has also been observed that after the formation of new state, tremendous urban in-migration is taking place and the urban areas are expanding unplanned beyond its designed limits.

This research deals with formulation of urban development strategy which should seek to improve overall developmental scenario of the state, integrating the role of various actors including the urban centers thereby creating a platform for better augmentation of the state resources and shaping up economically viable communities. Infact in this research, identification of prime movers of the urbanization process of the state through application of correlation and regression has led us to the recognition of the sectors, strengthening which will enable a holistic development of the state with a focus on urban areas.

Impact of Urbanisation on the Settlement Pattern of Tribal Dominated Areas, Case Study: Jharkhand:

Since the independence of India, Industrialization process had diverse effect and impact on the tribal settlement and population across the country. Urbanization is accepted as one of the prime driving force throughout the world today and thus it is quite natural that it would affect the life of the tribal people directly or indirectly. Thus in India in general and Jharkhand in particular, which is having sizable percentage of tribal population, also experience the similar phenomenon.

The state of Jharkhand, the study area, was created as the 28th state of the Indian Union on 15th November 2000, (after a long struggle by the people of this region), with an objective to improve the life of the people of this region, who have been deprived of the facilities and infrastructure required for growth and development. With the formation of the new state, tremendous urban inmigration is taking place from the hinterland of the state as well as the bordering states, thus the

urban areas; mostly the larger ones are expanding in unplanned and haphazard manner beyond its designed limits. Moreover the urbanization has directly penetrated in the rural areas, which are not equipped with the infrastructure to take care of this sudden change, thereby leading to a chaotic situation. The state is having a sizable percentage of urban population, (though at present on a lower side) almost at par with the entire country, along with high percentage of tribal population and rich mineral resources. Therefore it is essential to formulate a dynamic policy to accept and guide the change.

Through "Pearson Correlation" and other statistical tools, it has been proved that the general perception of urbanization as non-tribal phenomena needs revaluation. In fact it has been further proved that the tribal people possess inherent better urbanism quality. The rural settlements of .01 to 30% tribal share are found to be having highest potential to be adopted as urban areas with augmenting some of the residual facilities. This research endeavor deals with analyzing the effects of urbanization on different aspects of tribal life and formulation of urban development strategy for improved overall development of the state. Integrating the tribal population would create a platform for better utilization of the state resources and shaping up economically viable and sustainable communities in the traditional social fabric. The prime indicators thus identified are the "high sex ratio" and "female participation in the work force" as well as "high total work force" which should be retained. On the other hand lack of infrastructure like "Road", "Education" and "Health" facilities in these tribal areas need to be improved to provide a better living environment for the people of the state. Thus a comprehensive development guideline is to be adopted for the urbanization. Further this dissertation will also help other states of sizable tribal component to formulate development strategies considering the constraints and potentials of the respective states.

Symbiotic Housing Development:

The concept of symbiotic housing is very relevant in today's context.

Since, towns and cities are becoming completely a concrete jungle at a very fast rate, construction industry is one of the major factor responsible for the deteriorating environmental conditions.

The problem is not concerned with any particular group of people but it is a matter of concern for all of us. Technocrats, Scientists, Agriculturists, Journalists, Town planners, economists, Sociologists, Ecologists, etc. everyone is concerned with the problem of degradation of

environment in one-way or the other. It is their responsibility to contribute in their respective fields to restore and complement nature.

Symbiotic housing is an effort towards this direction. In present scenario, the most important and major problem is the problem of our existence.

This research investigates about those design elements in existing housing colonies which are important for symbiotic housing. This also explains under what conditions, the theory of symbiotic housing can be implemented in existing housing localities and for this what kind of architectural approaches are required.

In this research, attempt has been made to find the essence of Symbiotic relationship between the human and environment in the existing housing localities of Patna, causes of degradation of environment, changed human behaviour and factors affecting the living conditions of the people in Patna.

This research mainly investigates

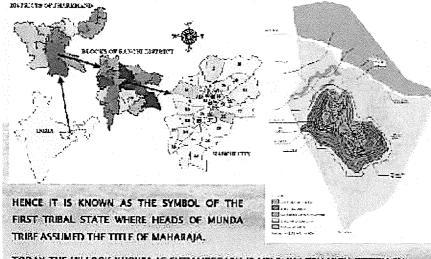
- i) Those factors which are affected with human related activities in housing sector.
- ii) Those parameters in residential colonies which largely differentiate one from another in its architectural character even being in the same town.
- iii) And those parameters which when improved can provide a basis for the implementation of the theory of symbiotic housing.

RESEARCH PROJECT TAKEN UNDER HERITAGE MANAGEMENT & CONSERVATION

Sl. No.	Name of the project	Status
1	The Indian Temple: Production, Place and Patronage	completed for Udaipur & Bhopal
2	Study of Heritage Sites near Ranchi	Completed
3	Conservation of Cultural Heritage (Master Plan) of Sutiambe, Jharkhand	Completed
4	Tourism as an Agent of Urban Development in Historic Areas of Bihar	Ongoing
6.	Ranchi hill / Pahari Mandir Redevelopment	Completed

BRIEF ABOUT FEW PROJECTS COMPLETED UNDER HERITAGE MANAGEMENT AND CONSERVATION:

Sutiambegarh at Pithoria, Ranchi



TODAY THE HILLOCK KNOWN AS SUTIAMBEGARH IS HELD IN VERY HIGH ESTEEN BY VISITORS AND THERE ARE MANY SPOTS ON THE HILLOCK WHICH ARE BELIEVED TO BE ASSOCIATED WITH THE LIFE AND TIMES OF MAHARAJA MADRA MUNDA.

HISTORICAL ASPECT:

SUTIAMBEGARII IN THE DISTRICT OF RANCHI, KNOWN TO BE THE PLACE WHERE MAHARAJA MADRA MUNDA FSTARIJSHIFT HIS CAPITAL. THIS REGION IS KNOWN AS THE PROMISED LAND FOR MUNDA TRIBE WHO WERE NOMADS THE THE THEY SETTLED IN THE AREAS AROUND SUTIAMBE.



IMPORTANT AREAS AROUND HILLOCK

WITHIN AN AREA OF SIX SQUARE KILOMETERS MANY SPOTS AND SYMBOLS ASSOCIATED WITH THETRIBAL STATE ARE SCATTERED.





- COMPAAT PULA STHAL
- · GARHWARI,
- · RANI PUKHAR,
- SUKYA MANDA,
- NAG-NAGIN PUJA STITIAL AND
- INJORIA POKHAR





ARE THE MAIN SITES. THERE ARE SARNA AND SARHUL PUM PLACES ALSO BESIDES MASTUM 577441. HENCE IT CAN BE SAID TO BE AN INTEGRATED COMPLEX REQUIRING HOUSTIC. CONSERVATION.

THE SITE

THE HILLOCK AND THE AREAS ADJUINING IT BEARS A DESERTED LOOK, HAVING SEMBLANCE WITH ANY OTHER FREE STANDING HILLOCKS, MANY OF WHICH ARE FOUND SCATTERED ALONG THE PLAINS OF THE AREA. INFACT, ITS TREMENDOUS HISTORIC AND ASSOCIATIVE VALUE AND ITS RELIGIOUS INFLUENCE AND POTENTIAL ARE NOT PERCEPTIBLE FROM ITS APPEARANCE TO A COMMONER.

VISUAL ANALYSIS



FIGUS RELIGIOSA BEHIND THE SUTIANHE HILL



THE PLATED CANOPY OF THE FICUS AND DAPPLED SHADOW ON THE BASE PLAIN WITH GROUND COVER AND LANTANA STRUCKS ACTS AS A VISUAL PAUSE POINT WHILL MOVING TOWARDS THE RAJ DARBAK RIT LACKS DEFINITION OF SPACE WHILE THE RUGGED ROCK MASSES JUTS OUT OF THE VERTICAL MASS.

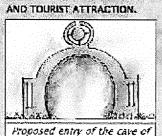




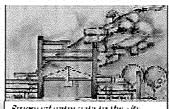
STEPS LEADING TO THE RAI DARUAR THE SERPENTINE STEPS WITH DAPPLED SHADOW OF KUSUM AND LANTANA. EDGES LACKING DEFINITION AND GROUND COVER WITH LANTANA, PLUMFRIA ALBA AND KHSUM.

THE PROPOSALS

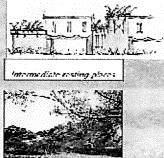
IDENTIFICATION AND
DEVELOPMENT OF THISTEEN
SACRED SPOTS ON THE HILLOCK
ALONG WITH THE CAVE OF
MAHARAJA MADRA MUNUA AND
SHIVA WORSHIP AREA.
CONSTRUCTION OF THE
ENTRANCE GATE, RAILING,
PLAZAS FOR IDENTIFICATION



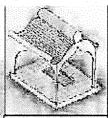
Proposed entry of the cave of Maharaja Madra Munda



Proposed entry gate to the site from the road



Site for the Interpretation Centre countification



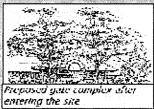
Proposed canopy over ship sibal

PROVIDING SITTING
AND RESTING SHEDS
AND VIEWING DECKS AS
A PART OF THE ENTIRE
COMPREHENSIVE
LANDSCAPE
DEVELOPMENT PLAN

FOR THE HILLOCK AND

IMMEDIATE ENVIRONS.

CONSTRUCTION OF A MUSEUM CUM INTERPRETATION CENTRE. HOUSING DIORAMAS AND MODELS EXPLAINING THE DISTORY AND IMPORTANCE OF THE SITE THROUGH AUDIO-VISUAL PRESENTATION.





Ranchi hill / Pahari Mandir Redevelopment and beautification

PAHARI MANDIR

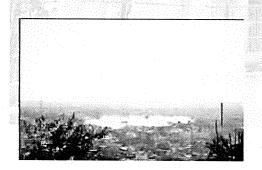
The temple of Lord Shankara (Lord Shiva) alias Pahari Mandir is situated on the top of the Ranchi Hill, 7 km away from Ranchi Railway Station at Ratu Road. It is situated at an altitude of 2140 feet from the sea level. The hill is about 300 ft high. At the bottom of the hill is Ranchi Lake, excavated by Colonel Onsely in 1842. Though the temple is as old as many other Shiva temples in the district, its antiquity is yet to be dated.

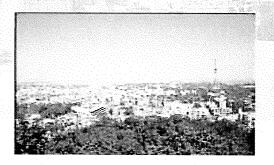




The Ranchi Hill, situated in the heart of Ranchi, was formerly known as "Fansi Tungri", meant the hill for hanging prisoners. It is the place where freedom fighters were hanged to death. To remember the importance of this hill in the freedom movement, tricolour flag is unfurled on the Independence Day and Republic day.

Pahari Mandir, perched on top of the hill, is one of the holy destinations for Hindus in Ranchi. The real name of this beautiful old mandir is 'Richi Buru'. A bird's view of the whole Ranchi city is possible from the temple premises and the view is really an enchanting eye pleasing experience.





PAHARI BABA KA MANDIR-

To reach the temple at the top of the mountain requires tapping up of more than 300 steps. The Temple is surrouded by terrace all ground, with a gathering hall below it, which gives an eye-pleasing view of the city. It is a 5.8 X 6.2 square like structure, which has the Shiva Ling in the centre, surrounded by columns in an octagonal shape, where the devottees come and offer JAL (dhara) to the temple diety.







SHERAWALI MATA KA MANDIR AND HANUMAN MANDIR-

The Sherawali mandir is on a level clower than the main temple. This temple is a 2.1m x 2.9m structure, surronded by columns running throughout the 1m circumambulatory space. This temple is covered by a dome roof.

The Hanuman Mandir is at the entrance of the temple near which the Panditji resides..



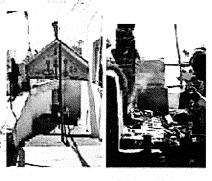




PAHAN BABA KA MANDIR-

To reach the temple, one has to go down some steps to reach the ancient "Gufa", which has the Naag devta in it. It is covered by a terrace where the devottees come to get the Prasad.

To conclude, Pahari Mandir can be developed and used as a major tourist attraction apart from the natural beuty of the falls and green valleys.



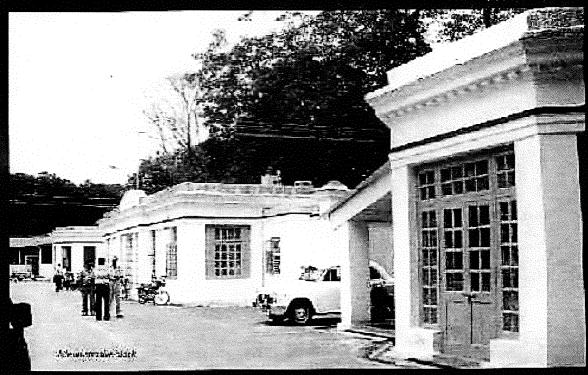
List of documentation done under neglected inheritance and published in ABACUS:

(Department had been publishing an internationally refereed Bi-Annual journal named **ABACUS** (A Bi-annual Journal of Architecture, Conservation and Urban Studies), since August 2006.)

- Sutiambegarh at Pithoria, Ranchi
- Itkhori, Chatra, Jharkhand
- Central Institute of Psychiatry, Ranchi
- Birsa Munda Jail Complex, Ranchi
- Documentation of Historic Urban Settlement, Ahilyabai Ghat Varanasi,
- Rajmahal a case study
- Megaliths of Jharkhand
- Hilltop Heritage

THE CENTRAL INSTITUTE OF PSYCHIATRY, RANCHI

RACTINA KHARE



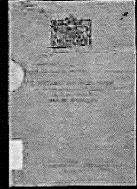


If I about 17th contagy, abnormal behavior was believed to board fagainst Cord, with times history of paydylarry had with event if thes major stages that have given in particular times that stage was when mentally ill were challed in jails & asytums and were considered at outcaste from society. The second-large was the power of psychiatral year the head as outcaste from only of psychiatric aborders and this dual stage for other cover location for course of the second large the content of the cover location of the cover location the interpretation of course the salts the content of the cover location of the co

Fernile Word

An unustalissi alijum ka konggaramathassinay (2016)

The estacts mean of the data hospitals during eight earth contagy in the Indian subcontinent reflected the netwhered the data data European pasteris in the contagy in the Indian subcontinent reflected the netwhered the data and one of the head in this was European atoms. Heapital, this a flower means of administration today and catalog of two pertinents of Psychiatry. The linits established this recepts on 17th May 1918, this disease capacity of 174 pertinents of make analyzafement at Covernment of European mental pasteries only and was under the clinic control and ownerspenses at Covernment of European mental pasteries only and was under the clinic covernly and owners are greater at European the Covernment of European the Linit the Board. The past 1922 is a so notable for the first that III at Indians was stilled to the University of Lundon for the Diploma in styling local Medicine Psychology.



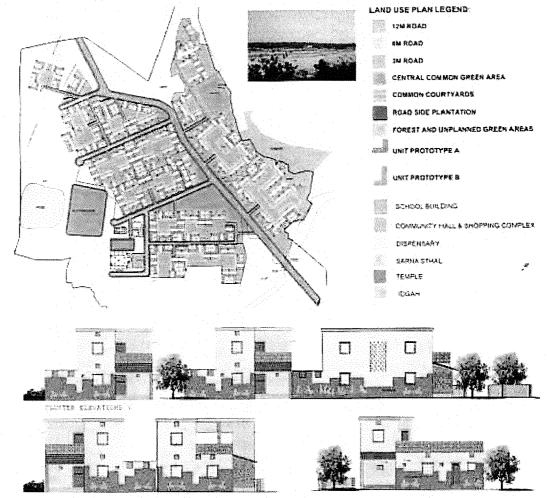
REHABILITATION AND RESETTLEMENT COLONY AT UREJ. BERKAGAON. HAZARIBAGH. JHARKHAND

CHENT: GVK POWER LTD.

AR. SAN DEEP KR. JHA AXIS ARCHITECTS AND PLANNERS, BANCHI



THE SITE IS IN BARKAGAON AREA OF HAZARIBAGH DISTRICT IN THE MINERAL RICH STATE OF JHARKHAND IN INDIA, GVK GROUP HAS BEEN ALLOTTED COAL MINES IN THIS AREA. THIS LEAD TO DISPLACEMENT OF THREE VILLAGES OF A POPULATION OF AROUND 170 FAMILIES. AN AREA OF 16 9 HECTARES WAS DEMARCATED TO PLAN A REHABILITATION AND RESETTLEMENT COLONY FOR THE DISPLACED FAMILIES BEYOND THE MINING AREA IN THE SAME LOCALITY. A BASIC CLUSTER OF 6-8 HOUSES WHICH THEN AGAIN FORMS A CLUSTER WITH 2-3 BASIC CLUSTERS AND THE OPEN SPACES IN BOTH THESE CLUSTERS SERVE FOR MULTIPURPOSE ACTIVITIES OF THE INHABITANTS. THERE IS A CENTRAL SPINE ROAD WHICH DEVIDES UREJ FROM ANGO AND DEOGHAR AND OTHER BRANCH ROADS FURTHER DIVIDE VILLAGES INTO SMALLER VILLAGES AS PER REQUIREMENT OF 170 DWELLING UNITS.

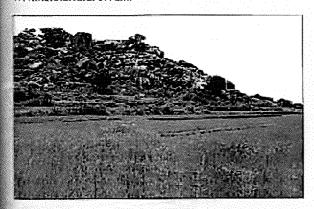


Hilltop Heritage

Time and again we need to get back to arolling for the soul, remanded, reasourance, rejuvenet on and reorismation. And that reliage is satisfacted, and the reliage is satisfacted. Satisfacted is a satisfacted in the reliage is satisfacted in the reliage is satisfacted in the reliage is satisfacted.

mand around the undutating elevations of a still-somewhat pristing Ranchi, threat illiops stand follows pinnectes of promine toe. They bear specialties of the kind that lends a place its identity. Though none of those places are filled up with any huge places of Architecture, these surely speak of Architecture of a different kind – the Architecture of laughtly. Under the anatching hand of our aggressive difficult, it is needed to recognize, comprehender of conserve these ard skindarplaces.

A Primardial Altar of Faith



The **Suttembe Hill** is a notific spot some mites from Ranchi. With every step higher, the glimpses of the world becomes wider Just like the higher our mind. The broader our sout. An ocean of emerald green greets your fall great around a year. At ocean of emerald green greets your fall great eroan ayear. Was stretches of you fiful packly sway in the wind and pagent under the sun, the horizon is a bite-greet stroke of watercolour simmering through distort haze. Man has not yet intrinded this immercially land with his unwarranted signatures. At the top, this enabled of pasce A distinguished in a kaleidoscopic chiaroscurp through the heaves of a few Champa these the ground strewn with fatter libraris. The air heavy with their sweet smell. A few stones of quoor phace

stand around as pendering sentincts and a gusty biaeze passes in "Lokering flow through the space. At one certer, there are a few small princes of served atoms smeared with vermillion and a handful of golden white fragrant flowers heaves allupleable. A great temple made by flature. The soul simply gots serving here.

To shas been a sacred place of the great ancient My size the through ages. To bet seligion is a philosophy of simplicity. They must Nature and try to remain as pure. The vory concept of green development and eco-trier uty civilization has been a daily way of the tribas since time immemorial.

Recommendation: We should visit this more like suitated piligrims and less like stomping tourists. Its pristine-chains about the preserved and only combinate prohited-until infrastructure be built at quite a distance. We And stortine would be the East architecture of this specific trace.



ABACUS Vol 5 Ng. 2 Mansaan 1010

MEGALITHS OF JHARKHAND: A NEW INSIGHT

SUBHASHIS DAS



Subhashis Due is a freelance Megalith explorer, researcher, poet, musician and author. He has authored novels, poem collections as well as books and journal papers on megaliths.

He has identified and studied over 80 primitive megalith in India and especially in Iharkhand state.

Email: subdas, heb@gmail.com; Website: megalithsofiharkhand.eripud.com



image 1: Megalith site at Punktee Burwodih and Equinox Survine through the Menhirs (Image by: Author)

1.0 ABOUT MEGALITHS

The term "megalith" has been coined by the convergence of two Greek words "mega" meaning big and "lithos" denoting stones. About 4000 years ago, ancient people embarked on the creation of the most enigmatic stone monuments on earth with diverse styles. To scholars, archaeologists and anthropologists, these are known today as megaliths. These monuments are comprised of varied stone structures and have been given names as varied as *Dolmens, Menhirs, Cists, Cairns* and *Stone circles* etc according to their layout / structural design. These stone monuments were mostly the temples of the prehistoric populace raised in the glory of the now obsolete concept of the 'Great Mother', and not mere burials or memorials, of the dead as understood today.

Megaliths according to many scholars are not merely burials or memorials of the deceased but shrines for the living'. They are the first temples built by the earliest humanity². Research has shown that megaliths were also used in astronomy as observatories of the solar bodies and were also complex calendars of the primitive astronomers.

Stonehenge and Callanish are two of the many megaliths built for astronomical purposes to view the Solstice and the Equinox sunrises. The people were even aware of the 18.5 year movement of the moon. Scientists of the Southern Methodist University in Texas, USA have found that even the Nabta megaliths of Egypt; the oldest in the world, created about 6000 years ago was a major stellar observatory.

RAIMAHAL - A CASE STUDY

Rajmahal is situated on NH-80, 38 kms west of Sahibganj in the state of Jharkhand. Geographically on one side of Rajmahal flows the River Ganges and on the other side stands the mighty Rajmahal hills. Rajmahal's past had been embedded with glory and now the region is lying in oblivion.

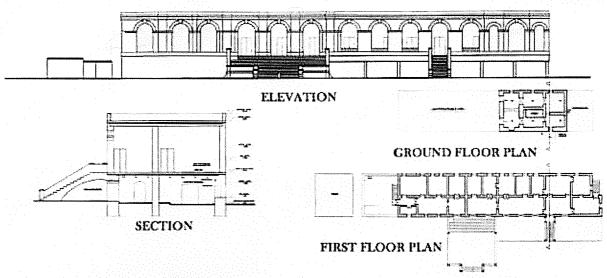
Rajmahal is replete with Mughal era monuments, as it was once the capital of Mughal eastern outpost. It stretches almost 10 kms in length along the western bank of river Ganga on the north eastern corner of the present day state of Jharkhand.

The early record of this place is scanty and perhaps lost in the mist of history. Because of its strategic location, many kingdoms in the past yied to control from Rajmahal the eastern province comprising Bihar, Bengal, Assam and Orissa.

Rajmahal became the main centre of trade and commerce apart from the power centre. The old structures of Rajmahal are significant not only because of their history but also because of their architectural value which is deteriorating due manmade and natural reasons. Although there are several properties belonging to the Mughal / Britsh era that are in precarious condition and need conservation but we had choosen four properties that needs immediate attention to restore them to its past glory. They are:

HOLIL

It an important structure due its distinct architectural value as it is constructed in two phases. The ground floor in first phase belongs to Mughal era consisting of old arched halls and rooms in moderate preservation. The ruins of the building known as Hammam or Bath can be seen on immediate west of this building it is in fully dilapidated condition.



The first floor was constructed later on by the British Company to house its Rail offices. To the east of Holil is an old and large well it is said when the second son of Shahjahan, Shah Suja was defeated, the ladies of his Janana threw into the well, whatever Jewellery they had. Later On Railway Company used it for pumping water.

RESEARCH PROJECTS TAKEN UNDER RURAL INFRASTRUCTURE BUILDINGS

Sl. No.	Name of the project	Status
1	Prototype Architectural Design and Design Guidelines of Special Schools for Autistic Pupil	Completed
2.	Participatory Delivery of Built Spaces for Social Infrastructure	Completed

BRIEF ABOUT FEW PROJECTS COMPLETED UNDER RURAL INFRASTRUCTURE BUILDING:

Participatory Delivery of Built Spaces for Social Infrastructure

Access to physical & social infrastructure is required for social development and is not obtained easily by either public action or private action alone. Over the years, policies in India regarding provision of social infrastructure have undergone many changes. In this process, government agencies are undergoing a change of role: from 'provider' to that of 'facilitator'. Role of the community & other stakeholders, in turn, have expanded significantly. This work explores the nature of participatory processes involved and in particular, the efficacy of community participation in developing community assets. It focuses on built-spaces related to school building infrastructure for elementary education in India.

The research work analyses the impact of the adopted participatory processes on design layouts of elementary schools constructed under government programmes in 13 states [these 13 states are presently 16 states due to bifurcation of 3], geographical distribution in a region [state of Jharkhand] compared to other types of social infrastructure as an indicator of comparative achievements in access and comparative achievement of quality of the assets in different contexts, viz., urbanization levels or existence of a strong opposition of 'Naxalism' to regular developmental efforts.

The analyses and discussions presented are useful to regional development planners, policy makers, architects, social workers and researchers in social studies & allied disciplines.



UNIVERSITY GRANTS COMMISSION BAHADUR SHAH ZAFAR MARG NEW DELHI – 110 002

No. F.3-27/2007(SAP-II)

February, 2007

To

The Registrar, Birla Institute of Technology, Ranchi Ranchi - 835 215

D & FEB 2007

Sub.: University Grants Commission Assistance to the Department of Architecture, Birla Institute of Technology, Ranchi at the level of DRS-I for 5 years 1.4.2007 to 31.3.2012 under the Special Assistant Programme (SAP).

- 1. This has reference to the departmental profile and proposal submitted by the Department of Architecture, as per revised guidelines of SAP Programme for consideration to support under Special Assistance Programme (SAP) of the UGC.
- 2. The UGC programme of Special Assistance (SAP) is intended through constant efforts to raise the quality of teaching/research in different disciplines in humanities, Social science and Sciences, Engineering and Technology The essence and primary aim of the scheme is combination of teaching and research to encourage group research efforts in pursuit of excellence.
- 3. The proposal of the Department of Architecture, was examined by the Review Committee on 7-2-2007. After a very careful and critical in-depth Examination of the academic achievements of the department, as given in the departmental profile, the department at the level of DRS-I
- 4. On the basis of the recommendations of the Assessment / Review Committee, I am directed to convey approval of the Commission to provide financial assistance to Department of Architecture, for a duration of 5 years under Special Assistance Programme (SAP) with the following thrust areas for research and teaching

Thrust Area Identified

- 1. Architectural and Urban Heritage Mapping
- 2. Urban and Regional Planning
- 3. Rural Infrastructure

As recommended by the Review Committee, the Co-ordinator of the Programme for the present phase of the Programme will be as indicated below:

Dr. Ajay Khare, Coordinator

Dr. N.R. Mandal, Deputy Coordinator

The Co-ordinator may continue till the end of the present duration of the programme as per revised guidelines.

The financial assistance approved for implementing the present phase at the level of DRS-I for a duration of **5 years f**rom 1st April, 2007 are as indicated below:

Non – Recurring Recurring	(Rupees in lakhs) 18.25 12.00
Total	30.25

Details of the item-wise grant approved above are given in the Annexure-I.

- It may be noted that if the University is unable to implement the approved scheme within six months from the date of issue of this letter, the approval shall be considered as having lapsed.
- 6. The Commission will also provide additional grant for the following purposes.
 - i) Maintenance, modernization, upgradation, accessories spare etc. for equipments procured under the programme @ 5% of total equipment cost per annum from the date of exipry of warranty period till the end of the term. Thereafter, it has to be met by the University/Institute.
 - ii) Expenditure incurred or any amount deducted from the sanctioned amount by the University for any other purposes other than the items approved for implementing the programme will not be acceptable to the Commission.
 - Overhead Charges as 10% of the total allocation (Non recurring + Recurring) approved under SAP subject to a maximum of Rs. 2.00 lakhs or actual expenditure-whichever is less to meet the expenditure towards water, electricity and Telephone, FAX, e-mail (Only equipment cost of these items. Recurring cost of these items will have to be met by the department/university) for the entire period of 5 years or less as the case may be.
 - The payment of additional grant for Overhead Charges will depend on the availability of funds under the SAP in the year of demand.
 - 7. To avoid inbreeding in SAP supported departments regarding recruitment of teachers and intake of students, the Commission has decided that the appointment on the faculty position in the departments financially assisted under Special Assistance Programme of the University Grants Commission be made from among the applications who have obtained their last academic qualification (M.A./M.Sc./M.Phil/Ph.D) from the university other than the one for which the appointment is being made. It has also been decided that the preference be given to the students from other states on at least 20% of the prescribed number of seats for admission in Graduate and Post Graduate courses in the departments under Special Assistance Programme.
 - 8. The Additional financial inputs for Summer Institute, Attachment of students, International Collaboration etc. may be extended by the Commission on receipt of specific proposal from the University / Department and subject to availability of funds under the programme.
 - 9. As stipulated in the revised guideline for SAP/COSIST Integrated Programme all sanctions under Special Assistance Programme (SAP) henceforth are subject to the conditions that departments under this programme would have to be given autonomy by the University / Institute for academic, financial and administrative matters relating two the Special Assistance Programme (SAP) within TWO YEARS of the sanction under SAP.
 - 10. It is desired that the departments having SAP and COSIST or both Programme should immediately introduce the examination reform measure and funding for SAP and COSIST would be linked with the implementation of the minimum programme of examination reforms in these departments.

It may also be ensured that the physical facilities created under the Special Assistance Programme SAP/COSIST may be opened, to be used by the other faculty members of the departments and other users within the University and from other University /Agency.

- 12. Other general terms and conditions of the above grant are enclosed.
- 13. The University/ Institute may follow the norms for appointment of Programme Co-ordinator and Deputy Co-ordinator (no Joint Co-ordinator or Co-ordinator) and also constitute an Advisory Committee as per the guidelines of the Commission (Annexure-Programme. The constitution of the Advisory Committee tonsure effective implementation and monitoring of the SAP. The UGC nominees in the Committee will be as indicated below. The department may contact the UGC nominees for their acceptance and intimate the Commission.

Prof. Ansari, Ex-Director, School of Planning and Architecture, I.P. Estate New Delhi Prof. S.M. Akhtar, Dean, Faculty of Architecture, Jamia Milia Islamia, New Delhi

- The active participation of the UGC nominees in each meeting of the Advisory Committee is essential. The composition and terms & reference of the Advisory Committee will be as given in the UGC Guidelines.
- For optimizing the effective and usefulness of the programme the Commission will send an expert committee or organise group monitoring / review after two years of support given to the department for mid-term evaluation of the progress of work done by the department. The department will send accordingly a consolidated progress report in the prescribed form.
- 5. The University/Institute/Department is requested to take immediate steps to submit the following information/documents for necessary action:
 - i) Acceptance of the terms and conditions of the grants duly signed by the Registrar of the University/Institute.
 - Name of the competent University Officer with full address in favour of the Demand Draft is to be sent by the UGC.
 - iii) Bank and Account number with address.
 - Detailed statement of year-wise actual expenditure incurred against the grants allocated, sanctioned during the last phase may be submitted in the PROFORMA A & B enclosed in the Annexure -II, duly audited and certified by the Competent authority, in order to finalise the accounts of the earlier phase.
 - v) Name of the Department Co-ordinator and Dy. Co-ordinator indicating (I) present designation (ii) specialised areas(s) of research and (iii) date of superannuation.
 - vi) List of members of the Advisory Committee constituted by the university/ institute as per guidelines.
 - Year-wise academic programme and action proposed to be undertaken by the department during the period of 5 years to implement the programme.
 - An undertaking from the University/institute to take over the recurring liabilities of the items including staff approved under the programme other than Project Fellow i.e JRFs/RAs after a period of 5 years of the programme.
 - ix) Action taken on the academic recommendations made by the Review/Visiting Committee may be intimated in due course.

- The annual report of the work done during the year (as per effective date of the programme) should be submitted by the Programme Co-ordinator highlighting the academic achievements in research and teaching and indicating separately the progress in procuring of equipment/construction of building (only addition, alteration and renovation, if sanctioned under the programme) and the list of papers published in referred journal during the year positively reported by the end of every year.
- xi) The steps taken by the university/ institute to implement the decision of the Commission as indicated at Para-10 and 11 above.
- The University/Institute shall take all possible measures to ensure effective implementation of policies of Government of India relating to SC/ST students and teachers in regard to the UGC programme. In case of non-teaching staff, the policies of the Central Government in respect of Central Universities and of the State Government in respect of State Universities shall be implemented.
- 17. The first instalment of admissible grant is bing sanctioned separately. In the meantime, the University may submit the following information requested for at para 15 (I, ii, iii & iv) by return of post.
- The second and subsequent instalment of grant for any approved items will be considered and sanctioned only on receipt of the Utilization Certificate for the earlier installment in the prescribed form signed by the Registrar/Finance Officer as the case may be.
- 19. It may be noted that if orders for purchase of equipment are not placed with in six months from the date of receipt of the grant by the university, the approval shall be considered as having lapsed.

Yours faithfully,

(P.Prakash)
JOINT SECRETARY

Encl.: As above

Copy forwarded alongwith the copies of Annexure I for information and necessary action to :

Dr. Ajay Khare, Co-ordinator, Department of Architecture. Birla Institute of Technology, Ranchi, Ranchi - 835 215, (Please visit UGC's website (www.ugc.ac.in) to see the guidelines.)

Copy for information to:

- 1. The P.S. to Vice Chancellor, Birla Institute of Technology, Ranchi, Ranchi 835 215,
- 2. The Head, Department of Architecture, Birla Institute of Technology, Ranchi, Ranchi 835 215,
- 3. The Secretary to the State Government of Jharkhand Department of Education, Ranchi
- 4. Guard File.

(A.N. Sharma) UNDER SECRETARY



Annexure - I

Financial assistance approved for implementation of the Special Assistance Programme in the DPS for the duration of 5 year (1-4-2007 to 31-3-2012).

S.No.	Item	Amount Approved
1 N	ON - RECURRING	(Rs. in Lakhs)
A	Equipment	(For 5 years)
	i Autodesk 3 D civil suite	
	ii Auto desk 3D Map	8.25
В	Building	10.00
	i	
	,	
2. RF	CCURRING (Rs in lakh nor on)	18.25
	i Continue (III): (Ito. III takit -per annum)	
	i Contingency/Working expenses	2.00
	and the light of t	2.00
	i Travels/Field facilities/Field trips for faculty members only (all within Indian only) ② Rs. D.20	1.00
i	The transfer of the transfer o	
	Seminars (for organization) on thrust area a Dan 20	
v	ming the Services of Jechnical/Industrial /Connectorial	1.00
	The strong country of the properties of the strong country of the	2.00
vii	Advisory Committee meetings (TA/DA for UGC nominee in the Committee) Rs.0.40	2.00
viii	Books and Journal @ Rs. 0.40	
lx	Project Fellow ()	2.00
	Sub Total	12.00
	GRAND - TOTAL	30.25

(A.N. Sharma) Under Secretary



UNIVERSITY GRANTS COMMISSION BAHADURSHAH ZAFAR MARG NEW DELHI – 110002.

No.F.3-27/2007(SAP-II)

February, 2007

The Under Secretary FD-III Section University Grants Commission Bahadur Shah Zafar Marg New Delhi- 110 002.

26 FEB WUI

Subject:- UGC Assistance to the Department of Architecture, Birla Institute of Technology, Ranchi, Ranchi - 835 215, at the level of DRS-I under Special Assistance Programme Release of grant-in-aid to the Registrar, Birla Institute of Technology, Ranchi, Ranchi - 835 215, during the financial year 2006-2007 under Plan.

Sir.

In continuation of this office approval letter of even no. dated x-2-07, I am directed to convey the sanction of the Commission for payment of Rs.2,40,000/- (Rupees Two lakhs forty thousand only) to the Registrar, Birla Institute of Technology, Ranchi, Ranchi - 835 215, for the Plan expenditure to be incurred during year 2006-2007 as per the details given below:-

Recurring Grant

S.No	Item	Allocation	Grant being release now
		(p.a.)	Ü
	Contingency /working expenses	40,000/- [40,000/-
2	Chemicals/Consumables/Glassware	40,000/-	40,000/-
3	Travel/Field facilities/Field	20,000/-	20,000/-
4	Visiting Fellows		20,000
5	Seminar	20,000/-	20,000/-
6	Hiring the services	40,000/-	40,000/-
7	. Advisory Committee meeting	40,000/-	40,000/-
8.	Books and Journals	40,000/-	40,000/-
	Total	2,40,000/-	2,40,000/-

- 2. The sanctioned amount is debitable to the major **Head 5.2.1** and is valid for payment during the **financial year 2006-2007** only.
- 3. The amount of the grant shall be drawn by the Under Secretary (Drawing and Disbursing Officer), University Grants Commission on the Grants-in-aid bill and shall be disbursed to and credited to the Department of Architecture, (Registrar) Birla Institute of Technology, Ranchi, Ranchi 835 215, by him/her through Cheque/Demand Draft/Mail Transfer.
- 4. The Grant is subject to the Adjustment on the basis of Utilization Certificate in the prescribed proforma submitted by the University / Colleges / Institution.
- 5. The University/College/Institute shall maintain proper accounts of the expenditure out the Grants which shall be utilized only on approved items of expenditure.
- 6. The Utilization Certificate to the effect that the Grant has been utilized for the purpose for which it has been sanctioned shall be furnished to the University Grants Commission as early as possible after the close of the current financial year.

- 7. The assets acquired wholly or substantially out of University Grants Commission's Grant shall not be disposed or encumbered or utilized for the purposes other than those for which the Grant was given, without proper sanction of the University Grants Commission and should, at any time the University ceased to function, such assets shall revert to the University Grants Commission.
- 8. A Register of Assets acquired wholly or substantially out of the Grants shall be maintained by the University /College/Institute in the prescribed form.
- 9. The grantee institution shall ensure the Utilization of grants-in-aid for which it is being sanction /paid. In case non-utilization/part utilization, the simple interest @ 6% per annum as amended from time to time on unutilized amount from the date of drawn to the date of refund as per provisions contained in General Financial Rules of Govt. of India will be charged.
- 10. The interest earned by the University/College/Institute on this grants in aid shall be treated as additional grant and may be shown in the U.C./Statement of Expenditure to be furnished by grantee institution.
- 11. The University/College /Institute shall follow strictly all the instructions issued by the Govt. of India from time to time with regard to reservation of posts for Scheduled Castes/ Scheduled Tribes/OBC/PH etc.
- 12. The University/College shall fully implement to Official Language Policy of Union Govt. and comply with the Official Language Act, 1963 and Official Languages (Use for Official Purposes of the Union) Rules, 1978 etc.
- 13. The sanction issues in exercise of the delegation of powers vide Commission Office Order No. 25/92 dated May 01, 1992.
- 14. This is the first instalment, no UC is required.
- 15. The funds to the extent are available under the Scheme.

Yours faithfully,

(A.N. Sharma) Under Secretary

Copy forwarded for information and necessary action to:

- 1. Registrar, Birla Institute of Technology, Ranchi, Ranchi 835 215, . He/She is requested to abide by these instructions/guidelines of sanction order.
- The proramme Coordinator, DRS-I, Department of Architecture, Birla Institute of Technology, Ranchi, Ranchi 835 215,
- 3. The Secretary to State Govt. of Jharkhand, Ranchi.
- 4. The Director General of Audit, Central Revenues, AGCR Building, I.P. Estate, New Delhi.
- 5. Government Auditor, Birla Institute of Technology, Ranchi, Ranchi
- 6. Guard File

((Mrs.) Pushpa Joshi) Section Officer

1