3.2.2-List of Grants for Govt Projects

S. No.	Name of the Scheme/Project/ Endowments/ Chairs	Name of the Principal Investigator/ Co Investigator (if applicable)	Name of the Funding agency	Page No
1	Analytics and Numerical problem on L-Series of quadratic Fields	Dr.Srinivas Rau	Science and Engineering Research Board (SERB)	3 - 4
2	Non-linear algebra and Lie algebroid approaches to quantum field theories	Dr. Shreecharan Tangirala	Science and Engineering Research Board (SERB)	5
3	Climate Change and persistence of Food and Nutrition Security: A case of vulnerable groups	Dr. Sushanta Kumar Mahapatra (Co Principal Investigator)	Indian Council for Social Sciences Research (ICSSR) grant-in-aid research	6-21
4	Quantum diffusion of the intersoliton distance in a Gross-Pitaevskii Breather	Dr. Sumita Datta	Science and Engineering Research Board (SERB)	22 - 23
5	Darboux transormations, exceptional orthogonal polynomials, and exactly solvable models	Dr. Sree Ranjani S	Science and Engineering Research Board (SERB)	24-27
6	Factors Affecting the Food wastage in Post Harvesting of fruits and Vegetables: A Comparative study along the Supply Chain across the State Telangana and West Bengal	Dr P.Sashikala & Dr Samyadip Chakraborty	ICSSR	28 - 30
7	Foreign Direct Investment and Innovative Performance of Local Firms: Evidence across Indian Manufacturing Industries	Dr. Sushanta Kumar Mahapatra (Co Principal Investigator)	Indian Council for Social Sciences Research (ICSSR) grant-in-aid research	31 - 51
8	Financial Sanction under Teachers Associateship for Research Excellence (TARE)	Dr. Anjana Matta	Science and Engineering Research Board (SERB)	52 - 53
9	Work order for additional content development and App development with android	Dr.Sachi Nandan Mohanty	Odisha Knowledge Corporation limited (OKCL)	54 - 56

S. Vijayalakshmi.
REGISTRAR
ICFAI FOUNDATION FOR HIGHER EDUCATION
(Deemed-to-be-University establishes under section 3 of UGC Act 1956.)

10	Topological Survey and Soil Investigation of the Site	Dr. Sarita Chanda & Murty & Manyam Architects and Engineers	DRDO	57 - 77
11	FEM Analysis of a Foundation Structure	Dr. M.L. Pavan Kishore & Murty & Manyam Architects and Engineers	DRDO	78 - 109
12	FEM Analysis of a Blast Furnace Structure	Dr. Chandrashekhar . A & Murty & Manyam Architects and Engineers	BDL	110- 128
13	Structural Analysis and design of Proposed High Rise Steel Structure using software's like Ansys or Nisa for Phase —3, Techno Park, Trivandrum, Kerala for KSITIL	Dr. Chandrashekhar . A & Murty & Manyam Architects and Engineers	Government of Kerala	129
14	A customizable LMS for proper utilization and adoption of Global Knowledge Pool: An adaptation of contingency theory of E-learning	Dr Sumangla Rathore	MHRD, RUSA 2.0	130 - 142

Note: E – Copies of Grant letters are appended below

ICFAI FOUNDATION FOR HIGHER EDUCATION HYDERABAD

REGISTRAR
ICFAI FOUNDATION FOR HIGHER EDUCATION
(Deemed-to-be-University establishes under section 3 of UGC Act 1956.)

Gmail

Sumita Datta <sumitad@gmail.com>

SERB-Notification

Dr. Nilotpal <nilotpal@serb.gov.in>
To: "info@serbonline.in"@imsva02.cdacnoida.in

Thu, Jun 15, 2017 at 3:50 PM

Science and Engineering Research Board
(Statutory Body Established Through an Act of Parliament : SERB Act 2008)
Department of Science and Technology, Government of India

SCIENCE & ENGINEERING RESEARCH BOARD (SERB)

(Statutory Body Established Through an Act of Parliament : SERB Act 2008)

Science and Engineering Research Board
5 & 5A, Lower Ground Floor
Vasant Square Mall
Sector-B, Pocket-5
Vasant Kunj
New Delhi - 110 070

Approval Letter

File Number: EMR/2016/005492

Dated: 15-Jun-2017

Subject: Project titled "Quantum diffusion of the intersoliton distance in a Gross-Pitaevskii Breather".

Dear Dr. SUMITA DATTA,

The project cited above has been approved by Science and Engineering Research Board (SERB) for funding. The following are the approved items for a period of 3 years. The final budget to be sanctioned would be based on quotations received, existing norms etc.

Manpower :
NIL
Equipment Details :
-> DELL-HPC CLUSTER
(up to Rs. 5 lakhs)
Consumables : Rs. 75000
Travel Cost : Rs. 150000
Contingencies : RS. 150000
Overhead : As per norms

Kindly follow the below steps only then you will be able to acknowledge the approval letter :

1. Go to www.serbonline.in through your credentials
2. Go to Menu --> Proposal submission --> View submitted proposals
3. Click on the link under Status column "Proposal Approved, Acknowledgment pending from PI"

ICFAI FOUNDATION FOR HIGHER EDUCATION HYDERABAD

S. Vijayalakshmi

REGISTRAR
ICFAI FOUNDATION FOR HIGHER EDUCATION
(Deemed-to-be-University establishes under section 3 of UGC Act 1956.)

You are now requested to upload the lowest quotation for equipment/s (including freight, insurance, customs charges etc., if any) and salary structure for the project staff (including HRA, Medical Benefits, if applicable etc.) at the earliest so as to enable us to issue the financial sanction. A certificate stating that any visit abroad for a period more than eight weeks would be undertaken after due permission from SERB, may also be submitted.

Kindly upload RTGS details of the implementing institute to facilitate transfer of the fund as per the template. Kindly quote the reference number in all future correspondence. The project's reference no. EMR/2016/005492 may also be mentioned in all research communications arising from the above project.

Yours sincerely,

(Dr. Nilotpal Ghosh)

MS

Email: nilotpal@serb.gov in

Ph: 911140000396

Dr. SUMITA DATTA

Physics

ICFAI Foundation For Higher Education , 156/157 Ifhe Campus,Â donthanapally,Shankarapalli Road, Hyderabad, Telangana-501203

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****

'SAVE PAPER - THINK BEFORE YOU PRINT!'
Please do not reply to this mail

FILE NO. EMR/2016/005002
SCIENCE & ENGINEERING RESEARCH BOARD(SERB)
(a statutory body of the Department of Science & Technology, government of India)
5 & 5A, Lower Ground Floor
Vasant Square Mall
Plot No. A, Community Centre
Sector-B, Pocket-5, Vasant Kunj
New Delhi-110070

Dated: 27-Sep-2017

ORDER

Subject: Financial Sanction of the research project titled "Darboux Transformations, Exceptional Orthogonal Polynomials and Exactly Solvable Models" under the guidance of Dr. Sree Ranjani S, Department of Physics, ICFAI Foundation for Higher Education , 156/157 ifhe campus,Â donthanapally,Shankarapalli road, Hyderabad, Telangana-501203 - Release of 1st grant.

Sanction of Science and Engineering Research Board (SERB) is hereby accorded to the above mentioned project at a total cost of Rs. 1991327/- (Rs. Nineteen Lakh Ninety One Thousand Three Hundred and Twenty Seven Only) with break-up of Rs. *243498*/- under Capital (Non-recurring) head and Rs.*1747829*/- under General (Recurring) head for a duration of 36 months. The items of expenditure for which the total allocation of Rs. 1991327/- has been approved are given below:
The following budget may be considered for ICFAI Foundation For Higher Education, 156/157 IFHE Campus,Â Donthanapally,Shankarapalli Road

S. No	Head	Total (in Rs.)
A	Non-recurring	
1	Equipment -> Mathematica Software -> Multi-functionPrinter -> Laptop	243498
A'	*Total (Non-Recurring)*	*243498*
B	Recurring Items	
1	Recurring - A : (Manpower, Consumables, Travel, Contingencies)	1566800
2	Recurring - B : (Overhead Charges)	181029
B'	*Total (Recurring)*	*1747829*
C	Total cost of the project (A' + B')	1991327

2. Sanction of the SERB is also accorded to the payment of
- Rs. 243498/- (Rupees Two Lakh Forty Three Thousand Four Hundred and Ninety Eight only) under 'Grants for creation of capital assets' and Rs. 350000/- (Rupees Three Lakh Fifty Thousand only) under 'Grants-in-aid General' to Director, ICFAI Foundation For Higher Education, 156/157 IFHE Campus,Â Donthanapally,Shankarapalli Road

being the first installment of the grant for the year 2017-2018 for implementation of the said research project.
3. The expenditure involved is debitable to Fund for Science & Engineering Research (FSER)
This release is being made under Extra Mural Research Funding (Individual Centric). (PAC Physical Sciences)

4. The Sanction has been issued to ICFAI Foundation For Higher Education, 156/157 IFHE Campus,Â Donthanapally,Shankarapalli Road with the approval of the competent authority under delegated powers on 20 September, 2017 and vide Diary No. SERB/F/6185/2017-2018 dated 26 September, 2017

5. Sanction of the grant is subject to the conditions as detailed in Terms & Conditions available at website (www.serb.gov.in).

6. Overhead expenses are meant for the host Institute towards the cost for providing infrastructural facilities and general administrative support etc. including benefits to the staff employed in the project.

7. While providing operational flexibility among various subheads under head Recurring-A, it should be ensured that not more than Rs. 1.5 lakh each should be spent for travel and contingency.

8. As per rule 211 of GFR, the accounts of project shall be open to inspection by sanctioning authority/audit whenever the institute is called upon to do so.

9. The sanctioned equipment would be procured as per GFR and its disposal of the same would be done with prior approval of SERB.

10. The release amount of Rs. 593498/- (Rupees Five Lakh Ninety Three Thousand Four Hundred and Ninety Eight only) will be drawn by the Under Secretary of the SERB and will be disbursed by means of RTGS transaction as per their Bank details given below:

Account Name	The ICFAI Foundation for Higher Education

Account Number	50212020001753
Bank Name & Branch	HDFC Bank Limited Banjara Hills Branch,Banjara Hills, 6-3-249/1/1/A, Bhaskar Plaza, Road No. 1, Banjara Hills, Hyderabad-500034, Telangana
IFSC/RTGS Code	HDFC0000521
Email id of A/C Holder	director.fst@ifheindia.org
Email id of PI	s.sreeranjani@gmail.com

11.The institute will furnish to the SERB, New Delhi, separate Utilization certificate(UCs) financial year wise to the SERB for Recurring (Grants-in-aid General) & Non-Recurring (Grants for creation of capital assets) and an audited statement of accounts pertaining to the grant immediately after the end of each financial year.

12. The institute will maintain separate audited accounts for the project. A part or whole of the grant must be kept in an interest earning bank account which is to be reported to SERB. The interest thus earned will be treated as credit to the institute to be adjusted towards further installment of the grant.

13. The project File no. EMR/2016/005002 may also be mentioned in all research communications arising from the above project with due acknowledgement of SERB.

14. The manpower sanctioned in the project, if any is co-terminus with the duration of the project and SERB will have no liability to meet the fellowship and salary of supporting staff if any, beyond the duration of the project

15. As this is the first grant being released for the project, no previous U/C is required.

16. The institute may refund any unspent balance to SERB by means of a Demand Draft favoring "FUND FOR SCIENCE AND ENGINEERING RESEARCH" payable at New Delhi.

17. The organization/institute/university should ensure that the technical support/financial assistance provided to them by the Science & Engineering Research Board, a statutory body of the Department of Science & Technology (DST), Government of India should invariably be highlighted/ acknowledged in their media releases as well as in bold letters in the opening paragraphs of their Annual Report.

18. In addition, the investigator/host institute must also acknowledge the support provided to them in all publications, patents and any other output emanating out of the project/program funded by the Science & Engineering Research Board, a statutory body of Department of Science & Technology (DST), Government of India.

(Dr. Nilotpal Ghosh)
MS
nilotpal@serb.gov.in

To,
Under Secretary
SERB, New Delhi
Copy forwarded for information and necessary action to: -

1.	The Principal Director of Audit, A.G.C.R.Building, IIIrd Floor I.P. Estate, Delhi-110002
2.	Sanction Folder, SERB , New Delhi.
3.	File Copy
4.	Dr. Sree Ranjani S Department of Physics ICFAI Foundation for Higher Education , 156/157 ifhe campus,Â donthanapally,Shankarapalli road, Hyderabad, Telangana-501203 Email: s.sreeranjani@gmail.com Mobile: 919949990031 (Start date of the project may be intimated by name to the undersigned. For guidance, terms & Conditions etc. Please visit www.serb.gov.in.)
5.	Director, ICFAI Foundation For Higher Education, 156/157 IFHE Campus,Â Donthanapally,Shankarapalli Road (Receipt of Grant may be intimated by name to the undersigned)

(Dr. Nilotpal Ghosh)
MS
nilotpal@serb.gov.in

Science and Engineering Research Board

(Statutory Body Established Through an Act of Parliament : SERB Act 2008)
Department of Science and Technology, Government of India

SCIENCE & ENGINEERING RESEARCH BOARD (SERB)

(Statutory Body Established Through an Act of Parliament : SERB Act 2008)

Science and Engineering Research Board
5 & 5A, Lower Ground Floor
Vasant Square Mall
Sector-B, Pocket-5
Vasant Kunj
New Delhi - 110 070

Approval Letter

File Number: EMR/2016/005002

Dated: 18-May-2017

Subject: Project titled "Darboux Transformations, Exceptional Orthogonal Polynomials and Exactly Solvable Models".

Dear Dr. Sree Ranjani S,

The project cited above has been approved by Science and Engineering Research Board (SERB) for funding. The following are the approved items for a period of 3 years. The final budget to be sanctioned would be based on quotations received, existing norms etc.

The committee recommended the following budget

Manpower :
-> Junior Research Fellow (JRF) - 1

Equipment Details :
-> Laptop - 1
-> Mathematica Software - 1
-> Multi-functionPrinter - 1
(upto Rs.2.5 Lakhs)
Consumables : Rs. 50000
Travel Cost : Rs. 150000
Contingencies : Rs. 150000
Overhead : As per norms

Kindly follow the below steps only then you will be able to acknowledge the approval letter :

1. Go to www.serbonline.in through your credentials

2. Go to Menu --> Proposal submission --> View submitted proposals

3. Click on the link under Status column "Proposal Approved, Acknowledgment pending from PI"'

You are now requested to upload the lowest quotation for equipment/s (including freight, insurance, customs charges etc., if any) and salary structure for the project staff (including HRA, Medical Benefits, if applicable etc.) at the earliest so as to enable us to issue the financial sanction. A certificate stating that any visit abroad for a period more than eight weeks would be undertaken after due permission from SERB, may also be submitted.

Kindly upload RTGS details of the implementing institute to facilitate transfer of the fund as per the template. Kindly quote the reference number in all future correspondence. The project's reference no. EMR/2016/005002 may also be mentioned in all research communications arising from the above project.

Yours sincerely,

(Dr. Nilotpal Ghosh)

MS

Email: nilotpal@serb.gov.in

Ph: 911140000396

Dr. Sree Ranjani S

Department Of Physics

ICFAI Foundation For Higher Education , 156/157 Ifhe Campus,Â donthanapally,Shankarapalli Road, Hyderabad, Telangana-501203

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Revathy Vishwanath
Assistant Director 1/c (RP)
☎ 26716690

Indian Council of Social Science Research
(Ministry of Human Resource Development)
Aruna Asaf Ali Marg, New Delhi – 110067
EPABX: 26741849-51 Fax: 91-11-26741836
rpr@icssr.org

F.No. 02/393/2016-17/RP

Dated: 30.03.2017

The Director
IBS Hyderabad
Donthanapally, Shankarapalli Road
Hyderabad- 501203
Telangana

Subject: Sanction of Minor Research Project entitled "Factors Affecting the Food Wastage in Post Harvesting of Fruits and Vegetables: A Comparative Study Along the Supply Chain Across the State Telangana and West Bengal to Dr. P Sashikala jointly with Dr. Samyadip Chakraborty".

Dear Sir,

The Indian Council of Social Science Research (ICSSR) considered the above research project submitted by Dr. P. Sashikala, Associate Professor and Dr. Samyadip Chakraborty, Department of Operations, IBS ICFAI Foundation for Higher Education, Donthanapally, Shankarapalli Road, Hyderabad- 501203 Telangana.

2. The Study, as proposed by the researcher/(s), is to be located at and financially administered by your institution as per the guidelines of this award.

3. The ICSSR has sanctioned a grant-in-aid of Rs. 2,00,000/- (Rupees two lakh only) for the above research project and the grant will be released as follows:

First installment:	Rs.	80,000/-
Second installment:	Rs.	80,000/-
Final installment:	Rs.	40,000/-
Total	**Rs.**	**2,00,000/-**

* The break-up budget approved by the ICSSR of Rs. 2.00 Lakh is enclosed.

Revathy V

Cont'd...2/-

4. The First installment of the approved grant-in-aid will be released after receiving the grant-in-aid bill duly filled in, stamped and signed by the Project Director as well as the affiliating organization. (GIB already received).

5. In case, the study involves survey research, the finalized schedules/ questionnaires (5 copies) designed to elicit information should be sent to the ICSSR as per the following schedule:

a) If the schedule /questionnaire for eliciting information is as per standard questionnaire, these will have to be sent to ICSSR immediately,

b) If the schedule /questionnaire for eliciting information are to be designed afresh keeping in view the requirements of the project, these will have to be sent to the ICSSR within a period of six months in any case.

6. The second installment would be released on receipt of the **6 monthly** progress report on the project to be submitted by the Project Director in the prescribed format (enclosed) and simple statement of expenditure duly certified by the affiliating institution.

7. The Final installment will be released only after the receipt of the following documents under rule 1.10(3) of the ICSSR Research Grants and acceptance by the ICSSR:

a) The final Report on the research project (in duplicate) in a publishable form.

b) A short summary of the project report in duplicate in 2,000-5,000 words.

c) Such data or information relating to the research project as may be asked for by the ICSSR for preservation in its Data Archives.

d) The audited statement of accounts for all expenditure incurred together with utilization certificate in GFR 19-A form for the entire amount of the sanctioned grant.

e) A statement of assets costing over Rs. 100/- and credit out of the project funds. Such assets are required to be donated to the affiliating organization after completion of the project.

8. The Director of the research project will be **Dr. P. Sashikala and Dr. Samyadip Chakraborty.** Who will be responsible for its completion within **12 Months** from the date of commencement of the project, which is **10th April 2017** as intimated by the scholar.

9. In case, the Project Director does not submit the periodic/final project report as per schedule with adequate justification, the scholar may be debarred from availing all future financial assistance from ICSSR.

Cont'd...3/-

10. All grants from ICSSR are subject to the general provision of GFR 2005 and in particular with reference to the provision contained in GFR 209, GFR 210, GFR 211 and GFR 212.

11. The Project Director will ensure that the expenditure incurred by them conforms to the approved budget heads. The grant-in-aid is subject to all the conditions laid down in the ICSSR Research Grants scheme (responsive), available in the ICSSR website **www.icssr.org**

12. The expenditure on this account is debitable to the Budget Head-B Programmes Research Grants-Plan **General**. (10) Grant-in-aid for research project (s).

13. As per MHRD instruction, the amount of grant sanctioned herein is to be utilized by the end of the project duration. Any amount of the grant remaining unspent shall be refunded to the ICSSR immediately after the expiry of the duration of the project. If the grantee fails to utilize the grant for the purpose for which the same has been sanctioned/or fails to submit the audited statement of expenditure within the stipulated period, the grantee will be required to refund the amount of the grant with interest thereon @ 10% per annum.

Yours faithfully,

(Revathy Vishwanath)
For Member Secretary

Encl: as above

Copy to:

1. Dr. P. Sashikala
   Associate Professor
   and Dr. Samyadip Chakraborty, Assistant Professor,
   Department of Operations,
   IBS ICFAI Foundation for Higher Education,
   Donthanapally, Shankarapalli Road,
   Hyderabad- 501203
   Telangana

2. Finance Branch, ICSSR, New Delhi

3. Record file

(Revathy Vishwanath)
For Member Secretary

Revathy Vishwanath
Assistant Director
RP Division Incharge
Tel #011-26716690
E-mail: rpicssr@gmail.com/rpr@icssr.org

Indian Council of Social Science Research
(Ministry of Human Resource Development)
JNU Institutional Area, Aruna Asaf Ali Marg
New Delhi – 110067
Website: www.icssr.org

SANCTION ORDER

F.No. 02/34/2017-18/RP /Major

Dated: 10-1-2018

The Registrar
Indian Institute of Technology,
Rupnagar-140001, Punjab

Subject: Sanction of Major Research Project entitled **"Foreign Direct Investment and Innovative Performance of Local Firms: Evidence across Indian Manufacturing Industries"** to Dr. Smruti Ranjan Behera

Dear Sir,

1. The Indian Council of Social Science Research (ICSSR) considered the above research project submitted by Dr. Smruti Ranjan Behera, Dept. of Humanities and Social Sciences, Indian Institute of Technology, Rupnagar-140001, Punjab. Co-Project Directors of the study are: Nil.

2. The study, as proposed by the researcher, is to be located at and financially administered by your institution as per the guidelines of this award.

3. The ICSSR has sanctioned a grant-in-aid of Rs.7,00,000/- (Rupees Seven lakhs only) for the above research project and the grant will be released as follows:

First instalment	:Rs.1,75,000/-
Second instalment	:Rs.1,75,000/-
Third instalment	:Rs.1,75,000/-
Fourth Instalment	:Rs.1,40,000/-
Publication cost*	:Rs. 35,000/-
Total	:Rs.7,00,000/-
Overhead charges @ 7.5% over and above	: Rs. 52,500/-**

* ICSSR would publish it subject to recommendation by the expert and relevant Committees for the purpose, from the overall budget, so to be retained by the ICSSR .
**will be released on successful completion of project after evaluation.

(The break-up budget approved by the ICSSR of Rs.7, 00,000/- is enclosed.)

4. The First installment of the approved grant-in-aid will be released after receiving the grant-in-aid bill duly filled in, stamped and signed by the Project Director as well as the affiliating organization. (GIB already received).

Annexure 1

ICSSR Funding Research Proposal

Foreign Direct Investment and Innovative Performance of Local Firms: Evidence across Indian Manufacturing Industries

Project Director

Dr. Smruti Ranjan Behera

Assistant Professor in Economics

Department of Humanities and Social Sciences

Indian Institute of Technology Ropar

Nangal Road, Rupnagar-140001, Punjab, India

Tel: +91- 1881-242259, Cell: 91-8427593229

Email address: smrutibehera2003@gmail.com/smruti.ranjan@iitrpr.ac.in

Co-Project Director

Dr. Sushanta Kumar Mahapatra

Professor of Economics

Department of Management, Amrita University, Vishwa Vidyapeetham

AIMS Ponekkara Post, Kochi-682 041, Kerala, India

Office: Tel: +91-484- 285 7942/285 7943 (Extn: 7950),

Fax: +91-484-2857941/4007941

Mobile: +91-95398 39026

Email address: sushanta.mahapatra@gmail.com, sushanta_mahapatra@asb.kochi.amrita.edu

Abstract

The evaluation of inward FDI impact on host countries domestic firms' productivity and innovation has yielded an ongoing debate since last three decades. The propose study attempts to investigate the impact of inward FDI on innovative performance of local firms' across Indian manufacturing industries. In order to measure the innovative performance of Indian industries, we use patent application and product innovation counts methods. Furthermore, to measure the innovative performance at firm level over the period 2000-2016, the study cover 22 manufacturing industries at the 2-digit level, broadly classified by National Industrial Classification, 1998 (NIC-1988). Furthermore, to examine the innovative performance across different kind of local firms in Indian manufacturing industries, the study also classifies the local firms based on their R&D intensity, such as, low technology, medium-low-technology, medium-high-technology, and high technology firms. Therefore, after classification, the study attempts to investigate, whether the firms innovations and innovativeness of local firms is subject to the R&D intensity, indicating that firms busy in R&D investment facilitate to more innovation and subsequently increase their productivity level than the other low R&D investment competing firms. Moreover, another novel contribution would be that, the study again classifies the horizontal foreign presence based on their source countries, i.e., European, American, and Asian horizontal foreign presence. Furthermore, we attempt to examine, whether the source of foreign presence by different regions really matter for firms innovations and productivity. Nevertheless, by classifying different types of horizontal foreign presence, the proposed study attempts to evaluate the impact of different types of horizontal presence on local firms, and their different existence of technology spillovers effects upon the local firms in India. Finally, the study also attempts to assess the role of absorptive capacity (measured by R&D intensity at firm level), technology imports, and advertising intensity upon the innovation output of local firms in Indian manufacturing industries.

1. Introduction

Foreign direct investment (FDI) is considered to be important component of development strategy, and widely recognized as growth enhancing factor in investment recipient (host) countries. FDI not only brings in capital but also introduces advanced technology that can enhance the technological capability of the host country firms, which further generate long-term and sustainable economic growth (Kohpaiboon, 2006). This motivates the policy makers in many countries to attract FDI by offering more generous incentive packages in the expectation of getting knowledge externalities, which is generated by foreign affiliates. Furthermore, a strong motivation to attract FDI is the possible existence of FDI productivity spillovers, and the transfer of technological and business know-how of the most technological advanced firms to local firms. Furthermore, it is also quite acknowledged that FDI presents a greater potential for knowledge and technology transfer through spillover effects if MNEs display a higher productivity level than the domestic firms. However, the results of empirical research to test the validity of FDI-productivity spillover are from conclusive. Moreover, there is a relatively consensus in the empirical literature on the superiority of MNEs productivity as shown, for example, in Dimelis and Louri (2002), Torlak (2004), and Proenca et al. (2006). Furthermore, the positive benefit from FDI has been only found in some countries. In sum, the potential benefit from FDI and its positive externalities in the form of technology spillovers to local firms depend upon certain country-specific factors and policy environment of the FDI-recipient countries.

Scholars from various disciplines have long examined the firm-specific motivations for, and consequences of, engaging in FDI (Buckley and Casson, 1976; Cantwell, 1989; Kogut and Chang, 1991; Martin and Salomon, 2003). This type of investment is usually referred as outward FDI, while individual firms expanding beyond domestic borders to invest in foreign countries via green-field, alliance, or merger and acquisition (Caves, 1996). Existing studies in international strategy has mainly focussed on the antecedents and consequences of outward FDI. However, relatively little research with few notable exceptions study has been directed at the impact of inward FDI on the firms of host countries. Moreover, most of the existing studies generally address the impact of inward FDI on the total factor, or labor productivity of local firms (Aitken and Harrison, 1999, Blalock and Simon, 2009, Chung et al., 2003; Javorcik, 2004; Konings, 2001). A relatively few research has centered exclusively on the inward FDI impact on innovativeness, a measuring of learning that scholars suggest is vital to understanding the growth of economies (Grossman and Helpman, 1994; Salomon and Shaver,

2005). FDI is often considered as a catalyst for economic development, and countries increasingly compete to attract FDI. Therefore, it is important for managers and policymakers to understand the impact of inward FDI not just only on productivity, but also on firms' innovation. To the best of our knowledge, except few studies, from countries perspective (e.g., Garcia et al., 2013),[1] no study has examined the impact of inward FDI on the innovativeness of local firms in Indian manufacturing industries.

The broader influence of FDI and its innovative performance on the local firms has been explained by the extant theory in a two plausible ways. One ways of reasoning suggest that inward FDI ought to lead to beneficial outcomes for local firms. The supposed mechanism is possible through knowledge spillovers from foreign entrants to local firms, and/or through heightened incentives to innovate to compete with better-endowed foreign entrants (Garcia et al., 2013). The second line of reasoning casts doubt on the positive impact of inward FDI, suggesting that inward FDI could adversely affect the local firm innovation and productivity. This study attempts to examine how the increased competition that comes with foreign entry enforce the domestic firms to more efficient, and in contrast, sometimes the increase competition relegates domestic firms to less innovative market niches and/or crowds indigenous competitors out of the market. Furthermore, taking into the account of the relevance of measuring the innovativeness of local firms in Indian manufacturing industries, the proposed study attempts to examine whether the flows of inward FDI to Indian industries really improve the innovativeness and local firms productivity. In order to estimate the innovative performance of local firms in Indian manufacturing industries, the study takes the expected number of patent applications and product innovation method, by covering the firm-level panel data of 22 manufacturing industries classified by National Industrial Classification-1998 (NIC-1998) over the period 2000-2016. Furthermore, in this study, we propose to use a dynamic longitudinal panel data model to estimate the innovative output of local firms in Indian manufacturing industries.

2. Objectives of the Study

The objectives of this proposed study are given as follows:

(a) The first objective of this study is to examine, how inward FDI affects the innovative performance of local firms across Indian manufacturing industries. Utilizing data from 2000 to 2016, we attempt to examine how the innovative output is influenced by industry-level and

[1] Garcia et al. (2013) studied the impact of inward FDI and innovativeness of local firms in Spanish manufacturing industries over the period 1990-2002.

firm-level FDI inflows. In order to measure the innovation, we use patent application and product innovation counts. Furthermore, to measure the innovative performance at firm level, the proposed study attempts to cover 22 manufacturing industries at the 2-digit level, broadly classified by National Industrial Classification, 1998 (NIC-1988).

(b) The another novel contribution in this proposed study is that we differentiate the source of FDI inflows in the same industry, i.e., horizontal FDI inflows from Asian, European, and American based MNCs. Therefore, the second objective of this study is to examine, whether and how the different source of horizontal foreign presence affect the innovative performance of local firms across Indian manufacturing industries.

(c) The study attempts to examine the role of absorptive capacity (measured by R&D intensity), and technology import intensity upon the local firms' innovations and productivity of Indian manufacturing industries.

(d) Finally, the study attempts to investigate the innovative performance across local firms, classified by R&D intensity. Nevertheless, the study attempts to examine the innovativeness of local firms in Indian industries followed by R&D intensity, i.e. low technology, medium-low-technology, medium-high-technology, and high technology firms. Furthermore, after classification, the study attempts to contribute to the literature by examining the role of R&D intensity, and how different types of local firms are benefitted because of their investment on intangible assets in R&D.

3. Research Questions

In this research study, we propose to resolve the following related questions. **First**, we propose to answer the innovative performance of local firms of Indian manufacturing industries. In order to measure the innovativeness of local firms across Indian manufacturing industries, we take the patent application and product innovation counts as the measurement of innovation, which could be influenced by the set of firm and industry-specific explanatory variables and certain control variables. **Second,** we propose to answer the question by examining the impact of inward FDI upon the innovative performance of local firms in Indian manufacturing industries. To examine the impact of inward FDI, we incorporate the firm and industry-level foreign presence into our empirical specification of the model, and attempt to examine how they affect the innovative performance of local firms in Indian industries. **Third**, we also propose to investigate the role of Asian, American, and European horizontal foreign presence upon the innovative performance (innovation output) of local firms in Indian industries. Nevertheless, the proposed study attempts to answer the research question, whether the source of FDI inflows really matters to increasing the innovativeness of local firms in India. **Fourth,**

the study attempts to investigate the effect of intangible assets such as R&D and technology import intensity upon the innovativeness of local firms, and finally it investigates the impact of marketing (captured by advertising intensity) upon the innovation output of local firms in Indian manufacturing industries.

4. Conceptual Framework and Literature Review

A large body of research in international strategy has focussed on the firm specific productivity and consequences of outward FDI; however, there is a literature in international economics and strategy that has examined the impact of inward FDI on host country firms' productivity. Some studies recognize the potential benefit of FDI and its positive externality in the form of knowledge spillover from foreign entrants to host country local firms. In contrast, other highlights how foreign entry increases the competition in host countries markets. FDI spillovers can occur through five main channels: demonstration/imitation, labor mobility or turnover, exports, competition, and backward and forward linkages with domestic firms.[2] Moreover, Horizontal spillovers of FDI take place when the presence of FDI increases the productivity of the domestic firms in the same industry. Teece (1977) argues that horizontal spillover can occur through three important channels: demonstration effect, labor turnover, and competition effect. Furthermore, there are two generation of empirical studies on horizontal effects. The first generation of empirical studies is characterized by industry-level studies. Most of the first generation studies find a positive relationship between inward FDI and industry-level productivity. They include Caves (1974) for Australia, Globerman (1979) for Canada, Blomstrom and Persson (1983) for Mexico.

The second generation of empirical studies is based on the relationship between inward FDI and firm-level productivity. Reflecting competing explanations, the empirical results are far from conclusive and are mixed. One strand of previous studies has demonstrated the positive impact of inward FDI on the productivity of local firms mostly on developed countries. They include Castellani and Zanefi (2003) for Italy, Keller and Yeaple (2009) for the United states, Gorg and Strobl (2003) for Ireland, and Haskel et al. (2007) for the United Kingdom. However, other strand of literature has demonstrated a negative effect of inward FDI on the productivity of local firms include Aitken and Harrison (1999) for Venezuela, Haddad and Harrison (1993) for Morocco, Konings (2001) for Bulgaria, Romania, and Poland, Javorcik (2004) for Lithuania, and Behera (2015) for India. Garcia et al. (2013) pointed out that regardless of the effect; one thing common in these empirical studies is that almost all papers

[2] For detailed discussion of FDI-spillovers channels, see Crespo and Fontoura (2007).

are exclusively focussed on the impact of inward FDI on either total factor productivity or labor productivity of local firms. Bloom and Van Reenen (2010) suggest that productivity differences at the firm level have been conventionally considered as the measurement of FDI-spillovers in the host countries. Furthermore, they suggest that previous researchers usually consider productivity, because a variety of factors influences productivity and it is difficult to isolate them. However, MacGarvie (2006) and Salomon and Shaver (2005) suggest that innovation represents a fruitful alternative as compared to the standard measurement of productivity. Moreover, Grossman and Helpman (1994) pointed out that technological innovation is central to the theory of economic growth, understanding the impact of inward FDI on innovation, and not simply labor productivity or total factor productivity, assist our understanding of whether, and if so, how inward FDI can act as a catalyst for development.

Previous studies have long recognized the potential benefit of knowledge spillovers from inward FDI in host economies (Caves, 1974; Kearns and Ruane, 2001). According to the theory, the potential benefit from FDI should be driven by the following underlying mechanisms. The increased competitive pressure provides incentives for local firms to improve; an increase in the demand for upstream supply lead to scale economies, facilitate to reduce the cost of all firms; and the opportunity cost for local firms to benefit from knowledge transfer-technology from better-endowed foreign clients in the local markets. However, in order to harvest the positive externalities from inward FDI, Narula and Marin (2003, p. 23) suggest that absorptive capacity of the domestic firms act as a catalyst, includes the ability to internalize knowledge created by others and modifying it to fit for their own specifications, processes, and routines. The conventional industrial organization economics suggests that entry of foreign rivals stimulates the competition to local firms in host countries markets. Chung (2001) suggests that after foreign firms' entry into the local markets, local firms attempt to improve their productivity in order sustain and remain competitive. Therefore, competition via the market mechanism, improves the allocative and technical efficiency of local firms in the host economies (Blomstrom and Kokko, 1998).

Chung et al. (2003) studied a positive relationship between the entries of Japanese automobiles assemblers into the U.S. and productivity among U.S. auto component manufacturers. These authors conclude that productivity improvements were a result of enhanced competitive pressure rather than any direct knowledge transfer. Furthermore, the second mechanism of FDI-spillovers could be driven by the demand side benefits of foreign entry into local factor markets (Rodriguez-Clare, 1996). The underlying rationale is that the presence of foreign entry increases the demand for upstream goods. This further allows local

suppliers to harvest the benefit of scale economies, as local firms to benefit from decreased input costs, which subsequently increases the productivity of local firms. Similarly, Hobday (1995) found that MNEs in Taiwan various industries resulted in increased demand for various intermediate goods, which further lead to increasing the productivity of local firms. These productivity gains in local firms are attributed by economies of scale, and because of quality standard imposed by the foreign firms.

The third mechanism through which productivity gain in local firms is possible through the knowledge transfer either directly or indirectly. The direct knowledge transfer from FDI can occur through the intra-organizational provisions of intangible assets from parent firms to its foreign affiliates (Hobday and Rush, 2007) or through contract between foreign entrants and local suppliers (Blalock and Gertler, 2008, Haskel et al., 2007, Keller and Yeaple, 2009). The indirect knowledge transfers occur through unintended knowledge spillovers (Almeida and Kogut, 1999). This is possible through observing and imitating by local firms, via formal and informal interactions with foreign competitors, and through intelligence gathering from third parties, which interact regularly with the foreign entrants (Salomon, 2006). Caves (1996) study is an example of empirical evidence, for the flow of knowledge between foreign entrants and local firms in host countries, suggests that foreign parents transfer intangible assets to their foreign affiliates. With respect to non-affiliated firms, Javorcik (2004) found that knowledge transferred from foreign entrants in Lithuania to their upstream suppliers increased the productivity of joint venture entries. Similarly, Blalock and Gertler (2008) found that foreign entrants in Indonesia transferred their technology to upstream suppliers, which result in improvement of productivity of local firms.

One group of previous studies find that there are positive externalities for domestic firms from inward FDI, however, other set of studies casts doubt on the existence of such externalities, and even in some cases, negative externalities associated with inward FDI (Aitken and Harrison, 1999, Haddad and Harrison, 1993, Konings, 2001). For instance, Haddad and Harrison (1993) found a negative relationship between industry-level productivity and the productivity of local firms in Morocco. Similarly, Aitken and Harrison (1999) demonstrated that inward FDI had a negative effect on the productivity of local firms in Venezuela. The underlying mechanism is that foreign firms' entry into the local market may create negative externalities thorough competition. Furthermore, increased competitive pressure generated by the foreign firms can motivate the local firms to become more productive to sustain in the competition, however, in contrast, increased competition in local markets may have negative consequences to the local firms. More precisely, foreign entry into the local markets increases

competition for market share, and may result in market stealing.[3] This forces the domestic firms to reduce the output, raising their average costs, and leaving less capital to invest in innovation and new technologies (Aitken and Harrison, 1999; Konings, 2001). Furthermore, reduction in output and downward pressure on prices of the output of local competitors, leading to lower profitability (Hanson, 2001). In some instances, MNCs would likely to pay higher wages than local firms did, the latter may find it difficult to hire qualified employees (Spencer, 2008). Therefore, taking all these mechanism, Blomstrom and Kokko (1998), suggest that foreign entry may crowd local firms out of the market, especially the least efficient ones. Furthermore, even if local firms are not completely forced out from the markets, however, foreign entrants may displace them to less profitable, less innovative segments of the markets (Hanson, 2001). We therefore, propose two suppositions in this paper, as (1) inward FDI could positively affect the innovative performance of local firms across the host county industries in India, (2) inward FDI could negatively affect the innovative output of local firms of Indian manufacturing industries.

5. Methodology and Data Details

This section first describes the paper econometric specification then the data to which it was applied.

5.1 Econometric Specification

In this study, we examine the relationship between inward FDI and the innovative performance of the local firms of Indian manufacturing industries. Nevertheless, the study attempts to examine the impact of inward FDI on the innovativeness of local firms across Indian manufacturing industries. Furthermore, to measure the innovative performance of local firms, we consider to taking the innovation output rather than labor productivity or total factor productivity. More precisely, in order to estimate the innovative performance of local firms, we preferred to consider by taking the proxy for innovation output using two measures: patent application counts and product innovation counts. Our dependent variables- patent applications and product applications are count measures that take non-negative integer values. Furthermore, in case of Indian industries, as many of the observations are close to zero. Scholars suggest a Poisson regression model to deal with dependent count variables of this sort (Greene, 2003). However, the Poisson regression is sensitive to distributional assumptions, as there could be possibility that mean and variance for the observed sample data equal to lambda, then the likelihood function would be misspecified, giving erroneous results. Therefore, in

[3] Note that foreign entrants into the local markets increase the competition for market share, resulting in market stealing, whereby the better-endowed firms steal the largest share from local firms.

order to overcome these problems, Cameron and Trivedi (1998) and Hausman et al. (1984) suggest negative binomial model. Eq. (1) formally expresses the negative binomial model expression to estimate the innovative output of local firms of Indian manufacturing industries, which is as follows:

$$\lambda_{it} = exp\left(\beta_1 m_{i,t-p} + \beta_2 n_{i,t-p} + \beta_3 C_{it} + \varepsilon_{it}\right) \qquad p = 1,2,3 \qquad (1)$$

where λ_{it} represents the expected numbers of patent applications and product innovations for firm i at time t, m_{it-p} captures the industry-level inward FDI for firm i at time t-p, n_{it-p} is the firm-level inward FDI for firm i at time t-p, C_{it} is the vector of control variables, and ε_{it} is the unobserved error term in the model. Furthermore, in the negative binomial model, ε_{it} is assumed to follow standard gamma distribution. The betas are parameter to be estimated.

Furthermore, in case of panel data, specifically handling at firm levels, there could be the possibility of serial correlation of residuals across observations within firms, leading to spurious regression results. Hausman et al. (1984) introduce a fixed-effect to control for serial correlation across the observations. However, there has been still considerable debate whether this method effectively controls for individual heterogeneity (Allison and Waterman, 2002; Guimaraes, 2008). Therefore, to control the serial correlation and individual effects, as an alternative, we turn to a dynamic longitudinal model. Followed by Alzaid and Al-Osh (1990), we introduce the autoregressive process by including the lagged values of dependent variable as regressors.

As discussed before, we use three-year lags of the independent variable; we also incorporate three-year lags of the dependent variable into our empirical specification, Eq. (1). The estimated model is specified as follows:

$$\lambda_{it} = exp\left(\rho_1 y_{i,t-1} + \rho_2 y_{i,t-2} + \rho_3 y_{i,t-3} + \beta_1 m_{i,t-p} + \beta_2 n_{i,t-p} + \beta_3 C_{it} + u_{it}\right), p = 1,2,3 \quad (2)$$

where $y_{i,t-p}$ are the lags of the dependent variable for firm i, u_{it} is an unobserved disturbance term, which is now supposed to be free from the serial correlation. The rhos and betas are parameters to be estimated in the empirical model. Furthermore, including lag effect of the dependent variable into Eq. (2), lead to the reduction of serial correlation by controlling firm-specific unobservables in a flexible manner. Secondly, firm dynamics allow us to control for the endogeneity of FDI presence to the extent that industry and firm-level inward FDI is influenced by the past innovation. Caves (1996) and Kogut and Chang (1991) reported that while entering into local markets, foreign firms not only tend to enter growing industries, but when entering through acquisition, they also tend to acquire more productive, more innovative

local firms. Including firm dynamics allows us to control for the influence of past innovation on current inward FDI (Cameron and Trivedi, 1998).

5.2 Data Details

To estimate the innovative performance of local firms across Indian manufacturing industries, we use data from Prowess database, provided by the Centre for Monitoring of Indian Economy (CMIE) and Capital-line database, Indian Patent Office (IPO), and Annual Survey of Industries (ASI). Furthermore, our purpose is to examine the impact of inward FDI on innovative performance of local firms in Indian industries. We do so by taking into account of the firm-level panel data of 22 manufacturing industries classified by NIC-1998 provided by the CMIE based dataset 'Prowess' between 2000 and 2016. The data are in unbalanced panel format. The domestic and foreign firms are classified based on their foreign equity participation.[4] Moreover, we also want to estimate the innovative performance of local firms based on their technology intensity. Therefore, to estimate the innovative performance of local firms based on technology intensity, we again classify 22 manufacturing industries followed by the OECD definition of R&D intensity, as low technology, medium-low-technology, medium-high-technology, and high-technology industries. Some firms in the initial sample are eliminated due to data problems, for example, incomplete series of outputs or inputs. More specifically, as all dependent and independent variable requires continuous time series information, so, firms not having continuous time series of at least three years data are dropped from the samples. As most of the Indian manufacturing firms doing patent applications and product innovations after 2000 onwards, so, we restricted this study to analyze the period after 2000. The next section discusses the detailed description of variables constructions.

5.3 Dependent Variables

As we mentioned earlier, in this study, we examine the innovation output rather than labor or total factor productivity. To measure the innovative performance of local firms across Indian industries, it is better to take the innovation output, as innovation output could provide the greater insight of inward FDI impacts on innovativeness of local firms in the host country industries in India. We proxy for innovation output using two measures: patent applications and product innovation counts. Indian patent office collects information on the number of patents for which a local firm applied in a given year. The variable we consider as patent applications is expressed as the number of patent applications to protect his intellectual property a firm has filled in a given year, via Indian patent office (IPO).

[4] Firms holding 10% or more than 10% of foreign equity are classified as foreign firms. Followed by International Monetary Fund criterion, this is a standard threshold limit to classify between the foreign and local firms.

We measure total number of patent applications, regardless of whether they are granted rather than only those applications for patents that are later granted. As a result, our patent application variable captures a higher approximation of the number of patents that a firm ultimately receives. Furthermore, in addition to patent counts, we also collect information on product innovation. The variable product innovation captures the number of new and/or modified products introduced by a local firm in India in a given year. Following previous literature, we use product innovation and patent counts as a proxy for innovative productivity (Acs and Audretsch, 1990, Pavitt, 1984). The strength and weakness of taking innovation and patent counts have been well documented by Cohen and Levin (1989). Moreover, patent serve as good indicator of innovation in certain industries (Levin et al., 1987) and product innovation provide a nice complement (Acs and Audretsch, 1990, Salomon and Shaver, 2005).

5.4 Independent Variables

In case of independent variables, we use two measures of inward FDI: industry level inward FDI and firm-level inward FDI. The former captures the foreign presence at industry level in Indian industries. Furthermore, the industry-level foreign presence can be measured by taking into the account of foreign firms' output share in an industry, i.e. it represents the share of foreign presence within an industry. This measure allows us to assess the direct impact of industry-specific horizontal FDI presence upon the innovativeness of the Indian manufacturing firms. Furthermore, based on the source of FDI inflows into Indian industries, we classify the industry-level foreign presence into three groups, such as European, American, and Asian horizontal foreign presence. We want to examine whether the source of FDI presence at industry level really matters for innovativeness of the local firms of Indian industries. Furthermore, the three different types of FDI presence are based on their source country FDI inflows, as in case of European FDI presence, we want to measure this variable as share of all European foreign firms output in a specified Indian industry. Similarly, American, and Asian horizontal foreign presence are constructed by following the share of FDI presence from American and Asian companies at industry level of Indian manufacturing industries.

The firm-specific inward FDI measures the percentage of ownership stake that a foreign parent firms takes in the local Indian firm in a given year. This measure allows us to assess the direct impact of foreign ownership on the innovativeness of Indian affiliates. To measure the three different types of horizontal FDI presence at industry-level and inward FDI at firm level, we collect the data from CMIE based data set Prowess and companies level database like Capital-line. Moreover, these two broad measures of inward FDI inflows at firm and industry level captures how foreign investment, affects the innovative performance of domestic firms in

Indian industries. Furthermore, it takes time for the effects of inward FDI to be really felt by local firms, so, we use three years lag of both of our inward FDI variables. This allows us to explore the temporal relationship between inward FDI and innovation.

5.5 Control Variables

The dependent variable captures the innovative performance of a local firm, we control for other factors that could systematically affect the firm innovation. Scholars have long suggested that firm size influences innovative output (Schumpeter, 1942). Moreover, researchers have suggested that larger firms tend to possess sufficient resources to develop new technologies and are therefore in a better position to harvest the potential benefit from FDI presence, and to appropriate returns from their R&D investment. Nevertheless, small firms do not have sufficient resources to develop new technologies, and not in a position to experiment to develop a new technology. Therefore, to avoid the risk of developing new technologies, they always follow the leader firms' technology. Therefore, regardless of whether small or large firms are better suited to innovation, we control for any potential effect of size on innovation. We define the variable firm size as the natural log of total employees of a local firm in a given year.

Similarly, previous studies have explored the effect of intangible assets such as R&D, technology import intensity, and marketing on innovative productivity (Cohen and Levin, 1989, Behera, 2017). Therefore, we control the effect of R&D investment by including the R&D intensity measure. Similarly, we control the effect of technology imports by including the technology import intensity. We define R&D and technology import intensity as R&D expenditure divided by total sales and technology imports expenditure divided by total sales, respectively. Furthermore, we also take into the account of advertising intensity as another influential factor, affecting the innovative performance of a firm. We define advertising intensity as advertising expenditure divided by sales of a firm. Previous literature has suggested that market structure in the form of industry concentration affect the innovative performance of a firm. Van Cayseele (1998) finds that industry structure affects the competitive and innovative behaviour of the firms. Scholars have long debated over a period of time, which market structure is more conducive to innovation. One groups of scholars argue that oligopolistic or monopolistic market structures is conductive for innovation, while other groups argue that competitive market provide greater incentive for innovation (Aghion et al., 2001; Schumpeter, 1942). Therefore, taking into account of the effect of market structure on innovation, we control the industry concentration. Following prior literature, we include two type of industry

concentration by taking the four-firm concentration ratio in the local firm's primary market and secondly, taking the widely used proxies of Herfindahl–Hirschman index (HHI).

Finally, for reasons unobserved to these researchers, innovativeness of local firms might change over time, with macro-level changes in the business environment. We therefore, include fixed year effects, considered as year dummies into our each specification of empirical models.

6. Tentative Chapterisation

In the first chapter of the Project report, we plan to present an introduction elaborating the background of the study. In Chapter 2, we will discuss the detailed objectives of the study, and research questions related to innovative performance of Indian manufacturing industries. In Chapter 3, we will discuss the conceptual framework of FDI-technology spillover, firms' productivity, and innovations, and an extensive survey of literature. In Chapter 4, we will discuss the methodology comprising of empirical strategy, data sources, and the classification of variables and their expected sign. In Chapter 5, we will discuss the empirical results. In Chapter 6, we will conclude the report with a set of policy implications and finally, we will discuss the research in future direction.

7. Time Fame

Propose Work Plan (First 12 months)

We will do the analysis of FDI and technology spillover, R&D, firms' innovations and local firms' productivity in Indian manufacturing industries. Furthermore, we will trace out the problem of firms innovation and innovative performance of local firms, do the extensive survey of previous studies.

Next 13-24 months

We propose to do the numerical simulation, estimate the dynamic longitudinal panel data model, and interpret our empirical results. Finally, we bind up the study by concluding our results and discussing certain policy implication of the proposed study.

8. Estimated Budget

Detailed Estimate of the Budget

S. No. Expenditure Head

1. Research Staff: Full time/Part-time/Hired Services

		(Monthly Salary)	Duration	Cost
i.	Research Associate	Rs. 16,000	2 years	Rs. 3, 84,000/-

2. Fieldwork: Travel/Logistics/Boarding, etc.

i. Field Staff (person)

ii. Electronic Data Processing Personnel [1 person] Rs. 12,500 Six Months Rs. 75, 000/-

iii. **Domestic Travelling and DA:**

i. for field staff: Rs. 1, 00000/-

ii. for Project Director (if essential):

Rs. 1, 75, 000/-

Total

3. Equipment: computer, printer etc. Books/Journals/ Source Material/Software and Data Sets, etc.

Computer, printer etc. Books/Journals/ Source Material/

Software and Data sets Rs. 6, 00000/-

4. Contingency Rs. 1, 00000/-

5. Publication of Report Rs. 75,000/-

6. Institutional Overheads (over and above the total cost of the project to be paid to public funded institutes only) Rs. 100050/-

000/-

Total Cost: Rs. Rs. 3, 84,000/- + Rs. 1, 75, 000/- +Rs. 6, 00000/- + Rs. 1, 00000/- + Rs. 75,000/- + Rs. 100050/- = Rs. 14, 34, 050/-

S. No	Broad Expenditure Heads	Value
1.	**Research Staff :** Full time/Part-time/Hired Services	Rs. 3,84,000/-
2.	Fieldwork: Travel/Logistics/Boarding, etc.	Rs. 1,75,000/-
3.	**Equipment:** computer, printer etc. Books/Journals/ Source Material/Software and Data Sets, etc.	Rs. 6,00000/-
4.	**Contingency**	Rs. 1,00000/-
5.	**Publication of Report**	Rs. 75,000/-
	Total	Rs. 13, 34,000/-
6.	**4 Institutional Overheads** (over and above the total cost of the project to be paid to public funded institutes only)	Rs. 100050/- Rs. 14, 34,050/-

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FILE NO. TAR/2018/001290

SCIENCE & ENGINEERING RESEARCH BOARD(SERB)

(A statutory body of the Department of Science & Technology, government of India)

5 & 5A, Lower Ground Floor
Vasant Square Mall
Plot No. A, Community Centre
Sector-B, Pocket-5, Vasant Kunj
New Delhi-110070

Dated: 22-Feb-2019

ORDER

Subject: Financial Sanction under Teachers Associateship for Research Excellence (TARE) to Dr. ANJANNA MATTA, ICFAI Foundation For Higher Education , 156/157 Ifhe Campus,Â donthanapally,Shankarapalli Road, Hyderabad, Telangana-501203- under the mentorship of Dr. Puranam Ananth Lakshmi Narayana, at Indian Institute of Technology, Hyderabad Ordinance Factory Estate, Yeddumailaram Hyderabad - 502205- Release of 1st grant.

Sanction of Science and Engineering Research Board (SERB) is hereby accorded to the above mentioned grant at a total cost of Rs. 18,30,000/- (Rs. Eighteen Lakh Thirty Thousand Only) for a duration of 36 months.
The date of start of the project will be 08 November, 2018 .The items of expenditure for which the total allocation of Rs. 18,30,000/- has been approved are given below:
The following budget is proposed for

ICFAI Foundation For Higher Education , 156/157 Ifhe Campus,Â donthanapally,Shankarapalli Road, Hyderabad, Telangana-501203 (Parent)

Sl. No.	Budget Head	Amount
1.	Fellowship	Rs. 0 (@0/- per month (consolidated))
2.	Research Grant	Rs. 2,50,000/- per annum
3.	Overheads	Rs. 25,000/- per annum

Indian Institute of Technology, Hyderabad Ordinance Factory Estate, Yeddumailaram Hyderabad - 502205 (Host)

Sl. No.	Budget Head	Amount
1.	Fellowship	Rs. 60,000 (on completion of 90 days mandatory attendance in the host institute every year)
2.	Research Grant	Rs. 2,50,000/- per annum
3.	Overheads	Rs. 25,000/- per annum

2. Sanction of the SERB is also accorded to the payment of Rs. 2,75,000/- (Rupees Two Lakh Seventy Five Thousand only) to ICFAI Foundation For Higher Education, 156/157 IFHE Campus,Â Donthanapally,Shankarapalli Road , Rs. 3,35,000/- (Rupees Three Lakh Thirty Five Thousand only) to Indian Institute of Technology, Hyderabad Ordinance Factory Estate, Yeddumailaram Hyderabad - 502205 being the first installment of the grant for the year 2018-2019 for implementation of the said research project.

3. The expenditure involved is debitable to
Fund for Science & Engineering Research (FSER)
This release is being made under Teachers Associateship For Research Excellence (TARE). (Atmospheric Sciences)

4. The Sanction has been issued to with the approval of the competent authority vide Diary No. SERB/F/11208/2018-2019 dated 15 February, 2019

5. Sanction of the grant is subject to the conditions as detailed in Terms & Conditions available at website (www.serb.gov.in).

6. Overhead expenses are meant for the host Institute towards the cost for providing infrastructural facilities and general administrative support etc. including benefits to the staff employed in the project.

7. As per rule 211 of GFR, the accounts of project shall be open to inspection by sanctioning authority/audit whenever the institute is called upon to do so.

8. The release amount of Rs. 2,75,000/- (Rupees Two Lakh Seventy Five Thousand only) will be drawn by the Under Secretary of the SERB and will be disbursed by means of RTGS transaction as per their Bank details given below:

Account Name	THE ICFAI FOUNDATION FOR HIGHER EDUCATION
Account Number	05212020001733
Bank Name & Branch	HDFC BANK LIMITED BANARA HILLS, 6-3-249/1/1/A, BHASKAR PLAZA, ROAD NO-1, BANJARA HILLS, HYDERABAD-500034, TELEANGANA.
IFSC/RTGS Code	HDFC0000521
Email address of PI	anjireddyiitm@gmail.com
Email id of A/C Holder	director.fst@ifheindia.org
Email address of concerned officer	ms_tare@serbonline.in

The release amount of Rs. 3,35,000/- (Rupees Three Lakh Thirty Five Thousand only) will be drawn by the Under Secretary of the SERB and will be disbursed by means of RTGS transaction as per their Bank details given below:

Account Name	IIT HYDERABAD R&D
Account Number	30859878032
Bank Name & Branch	STATE BANK OF INDIA IIT HYDERABAD, KANDI, INDIAN INSTITUTE OF TECHNOLOGY HYDERABAD, CAMPUS KANDI, SANGAREDDY, PHONE:040-230160888
IFSC/RTGS Code	SBIN0014182
Email address of PI	anjireddyiitm@gmail.com
Email id of A/C Holder	registrar@iith.ac.in
Email address of concerned officer	ms_tare@serbonline.in

9.Both the institutes will furnish Utilization certificate(UCs) financial year wise to the SERB and an audited statement of accounts pertaining to the grant immediately after the end of each financial year.

10. The institute will maintain separate audited accounts for the fellowship. A part or whole of the grant must be kept in an interest earning bank account which is to be reported to SERB. The interest thus earned will be treated as credit to the institute to be adjusted towards further installment of the grant.

11. The File no. **TAR/2018/001290** may also be mentioned in all research communications arising from the above project with due acknowledgement of SERB.

12. As this is the first grant for the fellowship, no previous U/C is required.

13. The institute may refund any unspent balance to SERB by means of a Demand Draft favoring "**FUND FOR SCIENCE AND ENGINEERING RESEARCH**" payable at New Delhi.

14. The organization/institute/university should ensure that the technical support/financial assistance provided to them by the Science & Engineering Research Board, a statutory body of the Department of Science & Technology (DST), Government of India should invariably be highlighted/ acknowledged in their media releases as well as in bold letters in the opening paragraphs of their Annual Report.

15. In addition, the investigator/host institute must also acknowledge the support provided to them in all publications, patents and any other output emanating out of the project/program funded by the Science & Engineering Research Board, a statutory body of Department of Science & Technology (DST), Government of India.

(Dr. T Thangaradjou)
Scientist E
ms_tare@serbonline.in

To,
Under Secretary
SERB, New Delhi
Copy forwarded for information and necessary action to: -

1.	The Principal Director of Audit, A.G.C.R.Building, IIIrd Floor I.P. Estate, Delhi-110002
2.	Sanction Folder, SERB , New Delhi.
3.	File Copy
4.	**(i) Dr. ANJANNA MATTA** **Mathematics** **ICFAI Foundation for Higher Education , 156/157 ifhe campus,Â donthanapally,Shankarapalli road, Hyderabad, Telangana-501203** **Email: anjireddyiitm@gmail.com** **Mobile: 919550160530** **(ii) Dr. Puranam Ananth Lakshmi Narayana** **Indian Institute of Technology, Hyderabad Ordinance Factory Estate, Yeddumailaram Hyderabad - 502205** (Start date of the project may be intimated by name to the undersigned. For guidance, terms & Conditions etc. Please visit www.serb.gov.in.)
5.	**(i) Director,** **ICFAI Foundation For Higher Education, 156/157 IFHE Campus,Â Donthanapally,Shankarapalli Road** **(ii)Director** **Indian Institute of Technology, Hyderabad Ordinance Factory Estate, Yeddumailaram Hyderabad - 502205** (Receipt of Grant may be intimated by name to the undersigned)

(Dr. T Thangaradjou)
Scientist E
ms_tare@serbonline.in

OKCL
Creating a Knowledge Lit World

ODISHA KNOWLEDGE CORPORATION LIMITED
Regd Off. 108/3607, Behind Pal Heights, Bhubaneswar 751 013, India 0674-2361584, 2361594
www.okcl.org e-mail : info@okcl.org CIN No-U72200OR2011PLC014185

Ref. No.: PO/65/2018-19
Date: 07/12/2018

To,
Mr. Sachinandan Mohanty
E-mail id: sachinandan09@gmail.com
Subject: Work Order for content development and App development with Android

Dear Sir,

With reference to our discussions with regard to the above mentioned subject, we are pleased to engage your services for the content development with android. As per the discussion, the professional fees decided upon is as follows:

Contents	Unit	Price per unit	Total
Theory of Content	40	1200	48000
Take a challenge	600		9000
Crossword Puzzle	40	500	10000
Do-it-Yourself	Ranging from 40-160		3750
Case Study App Development with code and implementation	7	5000	35000
Small Case study App Development	5	1800	9000
Total (One lakh Fifty Six thousand Five hundred)			1,14,750

Terms & Conditions:

1. Minimum Requirements
   a. Power Point Presentation: **40** sessions
   b. Interactivities (Per Session) with explanation wherever possible: **15**
   c. TAC Count (Per Session): **15**
   d. Do-it-Yourself Count (Per Session): **1-4** (Depending on the time required to solve the question(s). Learners should spend at least 40-45 minutes solving these.)
   e. Session End Test Questions Count (Per Session): **10**
   f. Crossword Puzzle Count (Per Session): **1 (No. of questions – 5 in each puzzle)**
2. The above prices are exclusive of all taxes.

3. The schedule of delivery is as follows:-

Milestone	Delivery Date Period
Session 1-10	10th Dec 18-22th Dec 18
Session 11-20	23rd Dec 18-04th Jan 19
Session 21-30	05th Jan 19 -17th Jan 19
Session 31-40	18th Jan 19-30th Jan 19

Payments shall be made after each 10 sessions as per the deliverables mentioned in Point No. 1. The completed PPT shall be presented by you before a committee in our office for approval of the content. Any changes suggested by the committee should be incorporated and re-submitted within 7 days. After final approval from the committee, the same shall be recommended for payment. Satisfactory quality and approval from the committee is a pre-condition for the release of payment.

4. **Incentive & Penalty:** - An additional fee of Rs. 22950/-(i.e. 20% of the professional fees) may be payable if all the Milestones are submitted within the delivery due date mentioned in the Point No. 3.
   Alternatively, if atleast 2 of the milestones are not submitted within the above mentioned due date then a deduction of 10% shall be applied from the payment.

5. **Non-Disclosure Clause: -** The intellectual property with regard to the content shall be with Odisha Knowledge Corporation Limited (OKCL). A Non-disclosure agreement shall be signed between you and Odisha Knowledge Corporation Limited (OKCL) stating that, no part of the content prepared shall be reproduced anywhere by you and your team engaged for the concerned Content development project.

6. **Avoid Plagiarism: -** The contents shall not be copied from any source of Internet and should be a representation of your original work.

7. In case of any requirement related to modification of content and queries from learners, you will extend support for at least 2 years from date of delivery of content.

8. **Support:** Necessary support and handholding with respect to android software to be given whenever required.

9. You are requested to submit the following details of any 2 Android experts in your team within 2 days of the receipt of this PO :-

   - Name of the Expert
   - Contact Details – E-mail id and Mobile No.
   - Android version details in which s/he has expertise
   - Certifications done with respect to Android Course(along with version details)

10. Please mention the P.O. number at the top of the bill/invoice and include our GST number: 21AABCO5489M1Z3.

11. The one point contact regarding this PO is Ms. Mitrabinda Mohapatra. Kindly get your invoice signed by the concerned employee for quality and quantity verification and submit along with your invoice.

You are requested to acknowledge the acceptance of this order to this office immediately

With regards,
Sincerely yours,

Manoranjan Puthal

Manoranjan Puthal
Chief Executive Officer
Odisha Knowledge Corporation Limited (OKCL)

दूरभाषसंख्या:040-27751842,27753662
Telephone No.
फैक्ससंख्या:040-27751405
Fax No.
ई-मेलआईडी:ccernds.drdo@nic.in
E-mail ID

All correspondence should be addressed to CCE(R&D) S and not to any officer by name.

भारतसरकार, रक्षामंत्रालय
Government of India, Ministry of Defence
रक्षाअनुसंधानएवंविकाससंगठन
Defence Research & Development Organization
मुख्य निर्माण अभियंता (अनु०एवं वि०) दक्षिण
Chief Construction Engineer (R&D) South
अकबररोडडाकपेटीक्रमांक–१५६९, सिकंदराबाद – ५०० ००३
Akbar Road, Post Box No. 1569, Secunderabad - 500 003

Ref No.80437/SW/CONS/TFSZ/CON

16 Dec 2021

M/s. Murthy & Manyam Architects & Engineers
859, Banjara Avenue,
(6-3-597/A/12/A/6B)
Hyderabad – 500 004.

PREPARATION OF DETAILED PROJECT REPORT FOR PROPOSED CONSTRUCTION OF TECHNICAL FACILITY AND SUPPORT ZONES AT PURUSHOTHAMPURAM
CONSULTANCY WORK ORDER NO. CCE(R&D)/SW/CWO/TFSZ/03/2021-22

Dear Sirs,

Ref. (i) This office Enquiry No. CCE(R&D)/SW/ENQ/CONS/TFSZ/13/2021-22, Dated 06 Oct 2021.
(ii) Your quotation No. MM/CCE(R&D)/2021-733, dt. 26 Oct 2021.

2. Your offer for the work of "Preparation of Detailed Project Report for Proposed Construction of Technical Facility and Support Zones at Purushothampuram" as per the rates given against each item in Annexure-I is hereby accepted and this job work order is placed. Kindly carryout the work as per the scope of work and other terms and conditions etc., given below:-

Sl.No.	Particulars of job	CWO Amount
1	Bill of quantities as per Annexure-I	Rs.18,89,100.00
2	Date of Commencement	10 Dec 2021
3	Date of Completion	09 May 2022
4	Period	20 (Twenty) weeks

3. The Scope of work, terms and conditions etc, shall be as per the enquiry referred above (Copy enclosed). The work shall be carried out in accordance with standard engineering practice/codes, specifications and as per drawings and site instructions of the rep. of Chief Construction Engineer (R&D)S. Shri Sushant Singh Visen,Sc 'F' is detailed as "Project Manager" and Shri UVP Sivarama krishna, Dy CCE, is detailed as Engineer-in-charge in terms of conditions of Consultancy work order.

4. You are requested to return one copy of this Consultancy Work Order duly signed by you in token of its acceptance.

(B. CHOUBEY)
CHIEF CONSTRUCTION ENGINEER (R&D)S

Encl : As Above

MURTY & MANYAM * HYDERABAD *

MURTY & MANYAM
ARCHITECTS, ENGINEERS & PLANNERS
859, Banjara Avenue, (6-3-597/A/12/A/5B) Hyderabad - 500 004. T.S.
☎ 040-23310020, 23301138, 23318670, 2337 4059
www.murtymanyam.com | email: info@murtymanyam.com

October 26, 2021

Lr. No.MM/CCE (R&D)/2021 – 733

To
Chief Construction Engineer (R&D) South
Govt. of India. Ministry of Defence.
Defence Research & Development Organisation.
P.B No: 1569. Akbar Road
Secunderabad- 500 003

Sir.

Sub: Preparation of Detailed Project Report for Proposed Construction of Technical Facility and Support Zones at Purushothampuram - Reg.

Ref: Consultancy Enquiry No.CCE(R&D)/SW/ENQ/CONS/TFSZ/13/2021-2022 dated 6th October 2021

With reference to the subject work and Tender Enquiry issued, we would like to bring to your kind notice that M/s Graphics Designers have been merged with our firm M/s Murty & Manyam w.e.f. 1st April 2017 and have been already informed vide our Lr. No.MM/CCE (R&D)/2017 – 85, February 11, 2017. We have received all our pending payments post-merger from CCE (R&D). South after submission of this letter.

With reference to the above subject work, please find herewith enclosed offer along with all necessary documents in support of our application for your kind perusal. It is submitted that we are registered under MSME and exempted from paying tender fee and EMD as per the tender. Please find enclosed copy of MSME Registration Certificate for your kind reference.

Thanking you,
Yours sincerely,

K.C.Shivaprasad
Sr.Project Manager
MURTY & MANYAM
Architects & Engineers
Encl: As Above

MURTY & MANYAM HYDERABAD

CCE (R&D)
SEC'BAD

Telephone No.
Fax No.
E-mail ID
All correspondence should be addressed to CCE(R&D) S and not to any officer by name.

Government of India, Ministry of Defence
Defence Research & Development Organisation
मुख्यनिर्माणअभियंता(अनु०एवं वि०) दक्षिण
Chief Construction Engineer (R&D) South
अकबररोडडाकपेटीक्रमांक-१४६९, सिकंदराबाद – ५०० ००३
Akbar Road, Post Box No. 1469, Secunderabad - 500 003

Ref No.23315/CIV/TM/VZG/PLG

06 Oct 2021

M/s Graphic Desingers
859, Banjara Avenue,
(6-3-597/12/A/6B)
Hyderabad- 500 004

PREPARATION OF DETAILED PROJECT REPORT FOR PROPOSED CONSTRUCTION OF TECHNICAL FACILITY AND SUPPORT ZONES AT PURUSHOTHAMPURAM

CONSULTANCY ENQ NO.CCE(R&D)/SW/ENQ/CONS/TFSZ/13/2021-22, Dt. 06 Oct 2021

Dear Sir/Madam,

Quotations are invited for the "Preparation of Detailed Project Report for Proposed Construction of Technical Facility and Support Zones at Purushothampuram" for the items at enclosed **Annexure I** to this enquiry.

2. The brief scope of work and other terms and conditions etc.. for the consultancy services are given below :

2.1 SCOPE OF THE WORK

Preparation of detailed project report and getting the same approved after identification of the following:-

(a) Preparation of Master plan clearly showing the various buildings.

(b) Preparation of line plan of the various buildings (as specified) to cater for all the requirement of the users including internal services.

(c) Calculation of the plinth area, floor area and FSI/FAR/Ground coverage etc. of all the buildings as per prevalent bye-laws.

(d) Calculation of electrical load of individual buildings. The requirement should also specify the standby power arrangement in consultation with the users.

(e) Calculation of HVAC tonnage requirement to achieve the Air-conditioning & ventilation in all facilities in consultation with users

(f) Details of all facilities, MEP services in consultation with users/CCE(R&D)S.

(g) The consultant shall visit the site on his own expenses to obtain the primary ground information required for preparation of the report including liaison with the Users/CCE(R&D)S.

(h) The consultant shall collect available data and incorporate all relevant factors in the study.

MURTY & MANYAM HYDERABAD

CCE (R&D)
SEC'BAD

1. SUBMISSION OF THE FOLLOWING

Submission of Detailed project report (in triplicate) along with soft copy in the form of volumes mentioned below. The consultant maybe required to prepare certain additional details related to the work as per the directions of Engineer-in-charge and may add any other inputs considered essential for the project as a whole.

VOLUME-I comprising of Engineers Appreciation for the following facilities			
(A) TECHNICAL FACILITY AND SUPPORT ZONES . Purushothampuram			
(a) Building including internal services			
Zone - I Area – 14 Acres			
S.NO	Description	Size	Qty
1	GATE	20mX1m	4
2	GUARD ROOM	5mX5m	2
3	FIRE STATION	20mx 15m	1
4	MT POOL	30mx80m	1
5	WEIGHING BRIDGE/SCANNER	20mx10m	1
6	PLAY GROUND	60mx60m	1
7	ROAD	20mtr/15mtr	
8	MULTI PARKING AREA	90mX20m	
9	SECURITY COMPLEX	60mX30m	1
10	WATCH TOWER	5mX5m	10
Zone - II Area – 13 Acres			
11	ESTATE/ADMIN OFFICE	30mx20m	1
12	ACCOMODATION (SERVICE)	100mX30m	1
13	MI ROOM	30m x30m	1
14	CANTEEN	30m x 30 m	1
15	SHOPPING COMPLEX	30m x 30 m	1
16	ACCOMODATION (STAFF)	100mx30m	1
17	COMMUNITY HALL	30mx30m	1
18	ACCOMODATION (OFFICER)	100mx30m	1
Zone - III Area – 13 Acres			
19	[illegible]	[illegible]	[illegible]
20	[illegible]	[illegible]	[illegible]
21	[illegible]	[illegible]	[illegible]

MURTY & MANYAM HYDERABAD

CCE (R&D) SEC'BAD

S.NO	Description	Size	Qty
22	WATER TANK		1
23	PUMP HOUSE	10m x 10m	2
24	GUARD ROOM	5m x 3m	
25	WEIGHING BRIDGE/SCANNER	20mx 10 m	1
Zone - IV Area – 30 Acres			
26	STRAND JACK	60mx21.5m	1
27	ADMIN BUILDING/ LOGISTIC	60mx40m	1
28	TECH AREA FOR WATER FRONT SUPPORT	60mx40m	1
29	MHE PARKING	40 m x 20 m	1
30	STORE HOUSE	60m x 40 m	8
31	HEAVY STORE HOUSE	100mx50m	1
32	DRDL	60m x 20 m	1
33	WORKSHOP	40m x 30 m	1
34	SCRAP YARD	40mx 20 m	
35	HARD STAND	150 m x25 m	1
Zone - V Area – 15.5 Acres			
36	GUEST HOUSE(In Future)	50 m x50m	1
37	MAIN WATER TANK		1
Zone - VI Area – 23.5 Acres			
38	HELIPAD	30mx30m	1
39	STP	15mx20m	1
40	WATER RESERVOIR	100 m dia	1
(b) Furniture			
(c) Special Items of Work			
	(i) Power Wiring		
	(ii) UPS Wiring		
	(iii) Telephone Wiring		
	(iv) Special Earthing		
	(v) Lightning Protection		
	(vi) Fire Alarm System		
	(vii) DG Sets		
	(viii) Fire Fighting		

MURTY & MARYAM HYDERABAD

CCE (R&D) SEC'BAD

	(ix) Cranes		
	(x) Air conditioning		
	(xi) Occupancy Sensors		
	(xii) CCTV System		
	(xiii) BMS System		
	(xiv) Access Control		
	(xv) Public Address System		
(d) External Services			
	(i) Roads/Hard Standing/Drains (Internal and external roads & paths for technical and other facilities.		
	(ii) External Water Supply, pumps, WTP & bore wells		
	(iii) External Power Supply		
	(iv) MRS Substations		
	(v) Sewage Disposal		
	(vi) Area Lighting		
	(vii) Security Lighting		
	(viii) Chain Link Fencing/ Concertina coil for technical and other facilities		
	(ix) Area Development		
	(x) Arboriculture		
	(xi) Compound wall for separating technical and non-technical area, entrance elevation, gates for technical and other facilities.		
	(xii) Storm water drains		

VOLUME-II comprising of following drawings

- Site plan & layout plan including all buildings & services.
- Preliminary Architectural Plan / Section / Elevation.
- Footprints of buildings / services.
- Aerial view of the campus.
- Calculation of plinth Area as per authorization.
- Road register of existing roads showing details carriage way, shoulders, culverts and CD works
- Preliminary MEP scheme

VOLUME- III comprising of the following

[illegible] DSR & APD/ DAR rates with all supporting

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4. TERMS &CONDITIONS:

a) The rates for JOB shall be quoted on item rate / lumpsum basis based on the scope of the work mentioned in the enquiry

b) The Rates quoted shall be inclusive of all charges connected with the work such as visit to Site including travel, data collection, discussions, preparation of drawings/documents, inspections and all taxes including GST payable as applicable.

c) The entire scope of work shall be completed within 20 (Twenty) weeks from the date of issue of Consultancy Work Order.

d) The Rates quoted shall be inclusive of all taxes/duties etc. No other charges shall be paid extra due to statutory changes during the Currency of Consultancy or on any account.

e) Income Tax on Professional Services under Section 194J of Income TaxAct will be deducted at source from the payments made to you as per the Statutory Regulations.

f) Drawings/design evolved for the Project shall be the property of Chief Construction Engineer(R&D)South, Secunderabad and it shall have full rights to use the same for any Project/Location without any restriction through Copy Right or otherwise.

g) The Rates quoted shall be valid for a period of 90 (Ninety) days from the date of opening of Quotations.

5. ELIGIBILITYCRITERIA

a) Consultancy firms approved by DCWE HQ under strategic category, please read the details of PQ criteria as under:

The following PQ criteria shall be followed to verify eligibility of tenderers for opening of Price Bid (cover -2) of Tender Enquiry. The applicant is requested to submit all necessary documentary proof for meeting the following PQ criteria for Preliminary Consultancy services.

(i) Average Annual Financial turnover during the last 3 years, ending 31st March of the previous financial year, should be at least 30% of the estimated cost of ₹23.89 Lakhs amounting to ₹7.17 Lakhs and the details for last 05 years to be provided to assess the bid capacity. The values provided to be supported by abridged Balance sheet along with profit and loss statement & TDS certificates. This Form (PROFORMA FOR GROSS ANNUAL TURNOVER is enclosed separately as Appendix -A) shall be duly certified by Chartered Accountant / Company Auditor in original under his signature, stamp and membership number along with UDIN for the document to be submitted in cover no 1

(ii) Experience of having successfully completed all parts of the similar works during last 7 years ending last day of month previous to the one in which applications are invited should be either of the following :-

[illegible] completed works each costing not less than the amount [illegible] of ₹23.89 Lakhs amounting to ₹9.56 Lakhs

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OR

(bb) Two similar completed works each costing not less than the amount equal to 50% of the estimated cost of ₹23.89 Lakhs amounting to ₹11.95 Lakhs

OR

(cc) One similar completed work costing not less than the amount equal to 80% of the estimated cost of ₹23.89 Lakhs amounting to ₹19.11 Lakhs

(iii) A Similar work is considered as the one for which consultancy services are provided for preparation DPR/conceptual plan for technical facilities having a RCC framed building works including internal services and external works like roads, drains, compound wall, area development and special items of works, road bridges along with strengthening of roads etc., each of value not less than of the estimated cost put to tender with some Central Government Department / State Government Department / Central Autonomous Body / State Autonomous Body / Central Public Sector Undertaking/State Public Sector Undertaking/City Development Authority/Municipal Corporation of City formed under any Act by Central / State Government and published in Central/ State Gazette.

(iv) The value of executed work shall be brought to current costing level by enhancing the actual value of the work at simple rate of 7% per annum, calculated from the date of completion to the last date of submission of bid.

Note : The Consultant to forward copies of PQ criteria along with enclosures. (Cover-I)

b) Minimum experience of the firm in providing design services to similar type of projects shall be minimum 05 years.

c) In addition to above, No firm should have incurred any loss during last two financial years. Profit and Loss statement duly signed by the Charted Accountant shall be submitted.

6. Estimated Cost:

The cost of the work on which the consultancy fee is admissible will be based on the Sanctioned amount for the scope of work for which consultancy is being offered i.e. ₹23.89 Lakhs

7. Performance Guarantee/ Security Deposit:

The Consultant shall submit an Initial Security [illegible] consultancy fee in the form of Bank Guarantee [illegible] payment days to award of consultancy [illegible] Guarantee Bond issued by any Nationalized/Scheduled Bank [illegible] Consultancy agrees [illegible] the Bank [illegible] [illegible] in favour of the Bank [illegible]

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RETENTION MONEY :

Retention Money @ 5% (Five Percent) of Consultancy fee will be deducted from each running bill. This Retention Money deducted from each running bill amount will be released after consultancy work is over and completion certificate is issued by the CWE/EE.

9. **RECOVERY OF AMOUNT FOR NON - PERFORMANCE OF WORK/NON- COMPLETION OF WORK AS PER MILESTONES AT INTERMEDIATE STAGES :**

The consultant will adhere to the time frame specified for the work in the contract. Since the PDC of the work is 20 (Twenty) weeks certain recovery of amount will be made for non-performance of work/non completion of work as per milestones at intermediate stages.
The schedule of work shall consist of the following milestones:

MILESTONE – I:-

(a) Time frame :- 07 (Seven)Weeks from date of CWO to consultant.
(b) Physical target :-

1. Obtaining the detailed requirements from the user.
2. Completion of survey and soil investigation.

(c) Financial Target :- 20%

(d) Recovery of Non-Performance at MILESTONE-I–

The recovery will be made at the rate of Rs.1,00,000/- per day or LD1, whichever is higher, subjected to a maximum of 1.5% of the total contract price.

$$LD1 = \frac{0.015 \times \text{contract value}}{\text{No of days between Milestone I \& II}}$$

The payment shall be withheld from the Running Account Receipt due to the consultant.

MILESTONE – II:-

(a) Time frame :- 10 (Ten) weeks from the date of CWO to consultant.

(b) Physical target :-

1. Submission and Approval of Preliminary drawings.

(c) Financial Target :-55%

(d) Recovery of Non-Performance at MILESTONE-II–

The recovery will be made at the rate of Rs.1,50,000/- per day or LD2, whichever is higher, subjected to a maximum of 2% of the total contract price.

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HYDERABAD

LD2 = $\frac{0.03 \times \text{contract value}}{\text{No of days between Milestone II\&III}}$

The payment shall be withheld from the Running Account Receipt due to the consultant.

MILESTONE – III:-

(a) Time frame :- 15 (Fifteen) weeks from the date of CWO to consultant.
(b) Physical target :-

1. Submission of Detailed project report and Approximated estimate Part-I & Part- II.

(c) Financial Target :-80%

(d) Recovery of Non-Performance at **MILESTONE-III–**

The recovery will be made at the rate of Rs.2.00,000/- per day or LD3, whichever is higher, subjected to a maximum of 5.5% of the total contract price.

LD3 = $\frac{0.055 \times \text{contract value}}{\text{No of days between Milestone III\&IV}}$

The payment shall be withheld from the Running Account Receipt due to the consultant.

MILESTONE – (FDC date as per CWO) - IV:-

(a) Time frame :- 20 (Twenty)weeks from the date of LOI to consultant or Completion of the work contract whichever is later
(b) Physical target :- Approval of Detailed project report by the Employer.

(c) Recovery of Non-Performance at **MILESTONE-IV**

The liquidated damages for delay will be made @ 1% of the total contract price per week subject to a maximum of 10% of the total contract price/CWO amount, inclusive of the liquidated damages levied for delays in completion of work at Milestone –I, II & III. This recovery will be made from the running account receipt due to the consultant firm.

RELEASE / RETURN / FUTURE OF WITH HELD AMOUNT:-

The total amount withheld on account of liquidated damages at MILESTONE-III will only be released after successful completion of the works specified at MILESTONE-IV. Thereafter the amount withheld at MILESTONE-II.

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The total amount withheld on account of non-performance of Completion schedule at **MILESTONE – II** will only be released, if the consultant is able to complete the work at the end of **MILESTONE-III**, along with the scope specified in MILESTONE-III otherwise the amount withheld on this account will be forfeited by the department.

In case the total work (including that at MILESTONE-I, II & III) is not completed within the stipulated time frame of the contract then the following conditions for recovery will be applicable.

In case the amount of forfeited either at **MILESTONE-I** or **MILESTONE-II** then the total liquidated damages to be recovered will be equal to the total amount of liquidated damages applicable (as per general condition of contract) less the amount forfeited either at **MILESTONE-I** or **MILESTONE-II**.

In case the amount of forfeited either at both the **MILESTONE-I & II**, then the total liquidated damages to be recovered will be equal to the total amount of liquidated damages applicable (as per general condition of contract) less the amount forfeited at **MILESTONE-I & II**.In no case the recovery against the subject contract will be more than 10% of the total contract price.

10. PROFESSIONAL LIABILITY INSURANCE

a) Consultants will maintain Professional Liability Insurance including coverage for errors and omissions by consultant's negligence, breach in the performance of its duties under this contract from an Insurance Company permitted to offer such policies in India. Consultant will bear all expenses to maintain this insurance cover. The insurance coverage will be for 05 Years effective from Completion of consultancy services and will be for minimum of the following amount:-

i) Total professional fees including reimbursable expenditures made or expected to be made to the consultants.
ii) Proceeds, the Consultants may be entitled to receive from any insurance maintained by the Consultants to cover such a liability.

b) The indemnity limit in terms of "Any One Accident" (AOA) and "Aggregate limit on the policy period" (AOP) should not be less than the amount stated in the contract. In case of joint venture or "in association", the policy should be in the name of joint venture/in association entity and not by the individual partners of the joint venture/association.

c) In the event of failure to comply the above clause by the consultant no further tender enquiry will be issued to the consultant in future.

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11. **TERMS OF PAYMENT**

The consultancy fee will be paid at the following stages:-

(a) 20% (Twenty per cent) on pro-rata based on the cost of preliminary consultancy services as approved by Chief Construction Engineer(R&D) on submission of the draft detailed requirements from the user along with submission of survey report and soil investigation report., as per scope of work.

(b) 55% (Fifty-five per cent) on pro-rata based on cost of preliminary consultancy services as approved by Chief Construction Engineer(R&D) on submission and approval of draft Master plan of the area. Submission and Approval of Preliminary drawings along with all supporting documents

(c) 10% (Ten per cent) on the pro-rata based on the cost of preliminary consultancy services as approved by Chief Construction Engineer(R&D) on Submission of Detailed project report and Approximated estimate I & II as per scope of the work.

(d) 10% (Ten per cent) payment will be made on preliminary consultancy services order against the completion of relevant JOB including deviations / modifications and submission of 03(three) sets of Detailed technical project reports for the complete scope of work along with the soft copy (CD) for the relevant scope of work and on issuance of completion certificate.

12. You are requested to intimate your willingness to render the Consultancy services for the above work. If you are willing to take up the work, please submit your offer, so as to reach this office on or before 27 Oct 2021 at 1500 Hours. The quotation(s) will be opened on the same day at 1530 Hours in the presence of the tenderers or their authorized representatives present at the time of opening.

13. **EARNEST MONEY DEPOSIT :**

Bid Security declaration duly filled and signed as per proforma attached to this enquiry as Appendix-B to be submitted along with bid.
(As per Min. of Finance, Department of Expenditure OM No. F.9/4/2020-PPD, Dt 12 Nov 2020).

14. **COST OF TENDER :**

Rs.500/-(Rupees Five Hundred Only) in the form of Demand Draft/ Banker's cheque drawn in favour of CCE(R&D) payable at SECUNDERABAD to be submitted to this office before due date of opening of Cover No.1.

15. Any further information required by tenderers may be had from the office of the undersigned/Superintending Engineer (R&D)/SE(R&D)/SE(R&D)/SE(R&D) during office hours.

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PROFORMA FOR GROSS ANNUAL TURNOVER

On CA's letter head along with address.

FINANCIAL INFORMATION

Financial Analysis – Details to be furnished duly supported by figures in balance sheet for the last three year and profit /loss account for the last three years duly certified by the Chartered Accountant, as submitted by the applicant to the Income Tax Department (copies to be attached).

(I) Annual Turnover: (Rs. In Lacs)

Particulars	2017-18	2018-19	2019-20
Gross Annual Turnover			

(ii) Profit / Loss (Rs. In Lacs)

Particulars	2017-18	2018-19	2019-20
Profit / Loss			

(i) Gross Annual turnover of construction/design works.
(ii) Profit / Loss
(iii) Financial arrangements for carrying out the proposed work.

Signature of Chartered Accountant with Seal.
UDIN number:

Signature of Bidder(s).

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Appendix-B

BID SECURITY DECLARATION

(On company Letter head)

To

Chief Construction Engineer (R&D) South
Govt. of India, Ministry of Defence,
Defence Research & Development Organisation,
P.B No : 1569, Akbar Road
Secunderabad- 500 003

PREPARATION OF DETAILED PROJECT REPORT FOR PROPOSED CONSTRUCTION OF TECHNICAL FACILITY AND SUPPORT ZONES AT PURUSHOTHAMPURAM

CONSULTANCY ENQ NO.CCE(R&D)/SW/ENQ/CONS/TFSZ/13/2021-22, Dt. 06 Oct 2021

We, the undersigned, declare that:

We understand that, according to your conditions, bids must be supported by a Bid-Security Declaration. We accept that we will automatically be suspended from being eligible for bidding in any contract with you, for the time as specified in the Tender documents , if we are in breach of our obligation(s) under the bid conditions, more specifically, if we:

a. withdraw or modify our Bid after deadline for submission of bids, during the period of bid validity specified in the Bid or
b. having been notified during the period of bid validity specified in the bid, about the acceptance of our Bid by you,
   i. fail to sign the Contract
   ii. fail to submit performance security, in accordance with the tender conditions within the time period specified in the bid.

We understand this Bid-Securing Declaration shall expire if we are not the successful Bidder, upon the earlier of (i) our receipt of your notification to us of the name of the successful Bidder; or (ii) thirty days after the expiration of our Bid.

Date : . . . .

. . . . . .
Signature of applicant including
Title and capacity in which
application is made

MURTY & MANYAM HYDERABAD

CCE (R&D)
SEC'BAD

NOTICE INVITING TENDER

Para 1	Name of Work	:	**PREPARATION OF DETAILED PROJECT REPORT FOR PROPOSED CONSTRUCTION OF TECHNICAL FACILITY AND SUPPORT ZONES AT PURUSHOTHAMPURAM**
Para 1(a)	Enq No.	:	**CCE(R&D)/SW/ENQ/CONS/TFSZ/13/2021-22, Dt. 06 Oct 2021**
Para 2	Estimated cost of work	:	Rs.23.89 Lakhs
Para 2(a)	Cost of tender documents	:	Rs.500/-(Rupees Five Hundred Only) in the form of Demand Draft/ Banker's cheque drawn in favour of CCE(R&D) SOUTH, payable at SECUNDERABAD to be submitted to this office before due date of opening of Cover No.1.
Para 3	Period of completion	:	20 (Twenty) Weeks
Para 4	Last date of receipt of bid	:	Refer critical dates shown below
Para 4 (a)	Date of opening bid	:	Refer critical dates shown below
Para 4 (b)	Submission of tender	:	The tender documents shall be submitted in two separate sealed covers i) Cover No.1:- Containing Technical Bid i.e., Tender cost, Bid Security Declaration (**proforma enclosed as Appendix A**), Pre-Qualification criteria ii) Cover No.2:- Containing Financial Bid i.e. Bill of quantities duly filled shall be submitted. Technical bid shall be sealed in separate cover as above and superscribed as '**Technical Bid cover No.1'.** Similarly, financial bid shall also be sealed in a separate cover as above and superscribed as '**Financial Bid Cover No.2'.** Completed tender documents sealed in 2 covers viz., **Technical bid cover No.1 and Financial bid cover No.2** as described above shall be sealed in a larger envelope superscribing the name of the work, tender enquiry no. and date of receipt of tender as stated above. The complete tender documents (larger envelope) as above shall be deposited in the tender box before due date.
Para 5	Eligibility Criteria	:	Consultancy firms approved/enlisted by DCWE HQ for Strategic works only. Please read details of PQ criteria under Para 13 The consultant to submit as per PQ criteria along with enclosures (cover no. 1)
Para 6	Amount of earnest money (EMD)		Bid Security declaration duly filled and signed as per proforma attached to the enquiry to be submitted along with bid. (As per Min. of Finance, Department of Expenditure OM No. F.9/4/2020-PPD, Dt. 12.11.2020)

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CRITICAL DATES			
Para 7 & 8	Issue of tender	:	06 Oct 2021
	Receipt of tender	:	27 Oct 2021 at 1500 hrs
	Date and time of bid opening (Cover No.1)	:	27 Oct 2021 at 1530 hrs
	Date and time of bid opening (Cover No.2)	:	The financial (Price) bids of tenders whose technical bids are qualified shall only be opened. The time and date of opening of financial bids shall be intimated to all the qualified tenderers in the technical bid. The financial bid shall be opened in the presence of tenderers or their authorized representatives intending to attend the opening.
Para 9	Type of contract/work order	:	Item rate contract
Para 10	Accepting Authority Next Higher Engineer Authority	:	CCE(R&D) SOUTH, Secunderabad. DCW&E, DRDO, New Delhi
Para 11	Independent External Monitors		1. Shri Hem Kumar Pande, IAS Retd., email : hempande@nic.in Mobile. 9810132693 2. Dr. Anjan Kumar Banerjee, IA & AS (Retd) email : anjan.banerjee@gov.in Mobile. 8853381627
Para 12	Similar Work Definition		A Similar work is considered as the one for which consultancy services are provided for preparation DPR/conceptual plan for technical facilities having a RCC framed building works including internal services and external works like roads, drains, compound wall, area development and special items of works, road bridges along with strengthening of roads etc.
Para 13	Prequalification Criteria		a) Consultancy firms approved by DCWE HQ under strategic category, please read the details of PQ criteria as under: The following PQ criteria shall be followed to verify eligibility of tenderers for opening of Price Bid (cover -2) of Tender Enquiry. The applicant is requested to submit all necessary documentary proof for meeting the following PQ criteria for Preliminary Consultancy services. (i) Average Annual Financial turnover during the last 3 years, ending 31st March of the previous financial year should be at least 30% of the estimated cost of ₹23.89 Lakhs amounting to ₹7.17 Lakhs and for duration of years to be provided in respect of the bid capacity. The values provided in the application by the Applicant should be supported with profit and loss statement and balance sheet.

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SEC'BA

of engineer under his signature, stamp and membership number along with UDIN for the document to be submitted in cover no 1.

(iv)Experience of having successfully completed all parts of the similar works during last 7 years ending last day of month previous to the one in which applications are invited should be either of the following: -

(aa) Three similar completed works each costing not less than the amount equal to 40% of the estimated cost of **₹23.89 Lakhs** amounting to **₹9.56 Lakhs**

OR

(bb) Two similar completed works each costing not less than the amount equal to 50% of the estimated cost of **₹23.89 Lakhs** amounting to **₹11.95 Lakhs**

OR

(cc) One similar completed work costing not less than the amount equal to 80% of the estimated cost of **₹23.89 Lakhs** amounting to **₹19.11 Lakhs**

(iii) A Similar work is considered as the one for which consultancy services are provided for preparation DPR/conceptual plan for technical facilities having a RCC framed building works including internal services and external works like roads, drains, compound wall, area development and special items of works, road bridges along with strengthening of roads etc., each of value not less than of the estimated cost put to tender with some Central Government Department / State Government Department / Central Autonomous Body / State Autonomous Body / Central Public Sector Undertaking/State Public Sector Undertaking/City Development Authority/Municipal Corporation of City formed under any Act by Central / State Government and published in Central / State Gazette.

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		(iv) The value of executed work shall be brought to current costing level by enhancing the actual value of the work at simple rate of 7% per annum, calculated from the date of completion to the last date of submission of bid. Note : The Consultant to forward copies of PQ criteria along with enclosures. (Cover-I) b) Minimum experience of the firm in providing design services to similar type of projects shall be minimum 05 years. c) In addition to above, No firm should have incurred any loss during last two financial years Profit and Loss statement duly signed by the Charted Accountant shall be submitted.

Notes: -

(i) Cost of tender documents shall be non-refundable. Application not accompanied by requisite value in terms of DD/Banker's cheque towards cost of Tender & Bid security declaration in original shall not be considered. Please note that cover No. 2 (price bid will be opened only is respect of qualified and eligible firms who fulfil the eligibility criteria according to their PQ bid submitted in Cover No 1 (applications & PQ Bid).

(ii) Submission of bid doesn't constitute any guarantee for opening of price bid of Tenderer. Opening of price bid (Cover No 2) of tender will be decided by the Competent authority based on inter alia, past track record, financial position fulfilling PQ criteria and experience of similar works executed by the applicant/consultant.

(iii) The Accepting Officer shall receive applications (Cover No 1) up to the last date & time of bid submission/ extended date of bid submission as applicable and as mentioned Eligibility Documents, Enquiry Documents, & GST Registration are to be submitted by the bidder in cover No. 1

(iv) All revisions, clarification, corrigendum etc. to the tenders (if required) shall also be informed through a letter/mail.

BID EVALUATION

MURTY & MANYAM HYDERABAD

CCE (R&D) SEC'BAD

दूरभाष संख्या : 040-27751542
Telephone 040-27753062
फैक्स संख्या : 040-27751405
Fax No
ईमेल आईडी : ccermds.drdo@nic.in
Email ID

All correspondence to be addressed to CCE(R&D)S

भारत सरकार, रक्षा मंत्रालय
Govt of India, Ministry of Defence
रक्षा अनुसंधान एवं विकास संगठन
Defence Research & Development Organization
मुख्य निर्माण अभियंता (अनु० एवं वि०) दक्षिण
CHIEF CONSTRUCTION ENGINEER (R&D)S
अकबर रोड, डाक पेटी सं०.१५६९, सिकंदराबाद -५००००३
Akbar Road PB No.1569, SECUNDERABAD – 500003

Ref No.23315/CIV/TM/VZG/PLG

25 Oct 2021

M/s Graphic Desingers
859, Banjara Avenue,
(6-3-597/12/A/6B)
Hyderabad- 500 004

AMENDMENT No.1
PREPARATION OF DETAILED PROJECT REPORT FOR PROPOSED CONSTRUCTION OF TECHNICAL FACILITY AND SUPPORT ZONES AT PURUSHOTHAMPURAM CONS. ENQ NO.CCE(R&D)/SW/ENQ/CONS/TFSZ/13/2021-22,Dt. 06 Oct 2021.

Ref : Tender Enquiry issued by this office vide letter no. even dt 06 Oct 2021.

2. The following amendment may please be carried out to the tender enquiry of the subject work:

(a) In Enquiry, Para No.12 - Page No.10 of 12 :-

For :

12. You are requested to intimate your willingness to render the Consultancy services for the above work. If you are willing to take up the work, please submit your offer, so as to reach this office on or before **27 Oct 2021** at 1500 Hours. The quotation(s) will be opened on the same day at 1530 Hours in the presence of the tenderers or their authorized representatives present at the time of opening.

Read :

12. You are requested to intimate your willingness to render the Consultancy services for the above work. If you are willing to take up the work, please submit your offer, so as to reach this office on or before **03 Nov 2021** at 1500 Hours. The quotation(s) will be opened on the same day at 1530 Hours in the presence of the tenderers or their authorized representatives present at the time of opening.

(b) In the Notice inviting tender (NIT) Para7 & 8 under "Critical Dates" - Page no. 2

For :

Receipt of tender	:	27 Oct 2021 at 1500 hrs
Date and time of bid opening (Cover No.1)	:	27 Oct 2021 at 1530 hrs

Read

Receipt of tender	:	03 Nov 2021 at 1500 hrs
Date and time of bid opening (Cover No.1)	:	03 Nov 2021 at 1530 hrs

MURTY & MANIVANNAN HYDERABAD

CCE (R&D)
SEC'BAD

(P.T.O)

02/12/21

2/12/21 02/12

PREPARATION OF DETAILED PROJECT REPORT FOR PROPOSED CONSTRUCTION OF TECHNICAL FACILITY AND SUPPORT ZONES AT PURUSHOTHAMPURAM

ENQUIRY NUMBER CCE(R&D)/SW/ENQ/CONS/TFSZ/13/2021-22,
Dt. 06 Oct 2021

BILL OF QUANTITIES

(TO BE SUBMITTED IN COVER-2)

MURTY & MANYAM * HYDERABAD *

MURTY & MANYAM * HYDERABAD *

CCE (R&D)
SEC'BAD

MURTY & MANYAM
ARCHITECTS, ENGINEERS & PLANNERS
859, Banjara Avenue, (6-3-597/A/12/A/68) Hyderabad - 500 004. T.S.
☎ 040-23318020, 23301138, 23328670, 23374059
www.murtymanyam.com | email: info@murtymanyam.com

Lr. No.MM/ICFAI/2021 - 853

December 23, 2021

To
Sri.Sarit Chanda,
Asst Professor & Nucleus Member
Faculty of Science & Technology
The ICFAI Foundation for Higher Education (IFHE)
(Deemed-to-be-University u/s 3 of UGC Act, 1956)
Dontanapalli, Shankarpalli Road,
Hyderabad – 501 203

Sir,

Sub: ***Collaboration for the Research project received from DRDO – Reg.***

Ref: ***Consultancy Work Order issued by Chief Construction Engineer (R&D), No.CCE(R&D)/SW/CWO/TFSZ/03/2021-22***

With reference to the subject work, we have received Work Order to prepare Detailed Project Report for Proposed Construction of Technical Facility and Support Zones at Purushothampuram. In this regard, we have been asked to get done the Topographical Survey & Soil Investigation of the site apart from Preliminary designs and approximate Estimates for proposed Project.

The project is from DRDO which is the R&D wing of Ministry of Defence, Govt of India. They are into production of strategic systems and platforms such as Agni and Prithvi series of missiles; light combat aircraft, Tejas; multi-barrel rocket launcher, Pinaka; air defence system, Akash; a wide range of radars and electronic warfare systems; etc., As the project is for Ministry of Defence, we request you to maintain secrecy of project and not to retain any material received from us in this regard after the task is completed.

You are requested to accord your acceptance to take up Topographical Survey & Soil Investigation of the project along with Preliminary Designs of Helipad. We shall share the user requirements upon your acceptance.

The project cost is INR 18.89 lakh.

Thanking you,
Yours sincerely,

K.C.Shivaprasad
MURTY & MANYAM
Architects & Engineers

भारतसरकार, रक्षामंत्रालय
रक्षाअनुसंधानतथाविकाससंगठन
मुख्यनिर्माणअभियंता(अनुसंधानतथाविकास) दक्षिण
डाकपेटीक्रमांक - १५६९
अकबररोड
सिकंदराबाद–५००००३

Government of India, Ministry of Defence
Defence Research & Development Organization
Chief Construction Engineer (R&D) South
Post Box No. 1569
Akbar Road
Secunderabad - 500 003

All correspondence should be addressed to CCE(R&D) S and not to any officer by name.

Ref No.83550/CONS/CAS/Con

23 Oct 2019

M/s Murty & Manyam
859, Banjara Avenue
(6-3-597/A/12/A/6B)
Hyderabad – 500 004

CONSULTANCY WORK ORDER NO.CCE(R&D)/CWO/CIV/CONS/CAS/ 07 /2019-20
CONSULTANCY SERVICES FOR CIVIL WORKS AND ALLIED SERVICES FOR STORAGE AND TEST FACILITY FOR CAS NEAR SECUNDERABAD
e-Tender ID No.2019 _DRDO_501514_1

Dear Sirs,

Reference (i) This office enquiry No. CCE(R&D)/ENQ/CIV/CONS/CAS/05/2019-2020 dated 09 Sept 2019 and Amendment No.1 dated 24 Sept 2019.
(ii) Your quotation No.MM/CCE R&D/2019 - 686 dated 01 Oct 2019.

2. Your offer for the items of work mentioned at Annexure - A to this Consultancy Work Order is hereby accepted at the rates quoted against each item and this consultancy work order is placed. Please carry out the work accordingly. The details of Consultancy Work Order are furnished below:

Sl. No.	Particulars of Job		CWO Amount (Rs.)
a)	As per Annexure 'A', Bill of Quantities (BOQ)	:	**Rs.45,60,049.00**
b)	Date of commencement	:	23 Oct 2019
c)	Period	:	24 (Twenty four) months
d)	Date of completion	:	22 Oct 2021

3. The scope of work and other terms and conditions etc., shall be as per enquiry referred above (Copy enclosed). Shri N Ravindra Chary, Sc 'D' is detailed as "Engineer–in-Charge" in terms and conditions of contract.

4. You are requested to return one copy of this Consultancy Work Order duly signed by you in token of its acceptance.

(B CHOUBEY)
CHIEF CONSTRUCTION ENGINEER(R&D)S

Encls: As above.

डेपोएचएक्स/Phone EPABX:040-27751842, 27753662, फैक्स/Fax: 040-27751405, ई-मेल/E-mail: ccernds.drdo@nic.in

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Item Rate BoQ

Annexure-1

Tender Inviting Authority: CHIEF CONSTRUCTION ENGINEER (R&D) SOUTH, SECUNDERABAD

Name of Work: CONSULTANCY SERVICES FOR CIVIL WORKS AND ALLIED SERVICES FOR STORAGE AND TEST FACILITY FOR CAS NEAR SECUNDERABAD

Reference ID : CCE(R&D)/CWO/CIV/CONS/CAS/07 /2019-2020 Dated 23 OCT 2019

Bidder Name :	MURTY & MANYAM

PRICE SCHEDULE

(This BOQ template must not be modified/replaced by the bidder and the same should be uploaded after filling the relevent columns, else the bidder is liable to be rejected for this tender. Bidders are allowed to enter the Bidder Name and Values only)

Sl. No.	Item Description	Quantity / Estimated cost	Units	Percentage To be entered by the Bidder	TOTAL AMOUNT	TOTAL AMOUNT In Words
1	CONSULTANCY SERVICES SHOULD BE QUTED IN PERCENTAGE %					
2	Consultancy services for detailed architectural and structural designing, engineering for the proposed building structures, civil works and other services including preparation and submission of 03 (three) sets of As-built drawings and submission of 01 (one) set of reproducible prints along with 2 (two) soft copies (CDs) for the As-built drawings as per scope of work given at para 2.1(a).	189988000	JOB	2.00%	3799760.00	INR Thirty Seven Lakh Ninety Nine Thousand Seven Hundred & Sixty Only
3	Plan and design special items of work including collection of requirement and other inputs from OWNER and USERS (CAS), visiting the site, preparation of tender documents, line plans/schematic drawings, submission of cost estimates, detailed bill of quantities and as-built drawings of completed works for the following works as per the scope of work given at para 2.1(b).					
3.1	Air conditioning	13009000	JOB	1.50%	195135.00	INR One Lakh Ninety Five Thousand One Hundred & Thirty Five Only
3.2	Power wiring	10268000	JOB	1.00%	102680.00	INR One Lakh Two Thousand Six Hundred & Eighty Only
3.3	Flame proof fittings	6803000	JOB	0.50%	34015.00	INR Thirty Four Thousand &Fifteen Only
3.4	UPS wiring	1123000	JOB	1.00%	11230.00	INR Eleven Thousand Two Hundred & Thirty Only
3.5	Lightning protection	2536000	JOB	1.00%	25360.00	INR Twenty Five Thousand Three Hundred & Sixty Only
3.6	Special earthing	3256000	JOB	1.00%	32560.00	INR Thirty Two Thousand Five Hundred & Sixty Only

CCE (R&D)

Sl. No.	Item Description	Quantity / Estimated cost	Units	Percentage To be entered by the Bidder	TOTAL AMOUNT	TOTAL AMOUNT In Words
3.7	Telephone conduits	869000	JOB	1.00%	8690.00	INR Eight Thousand Six Hundred & Ninety Only
3.8	Fire alarm system	6642000	JOB	1.00%	66420.00	INR Sixty Six Thousand Four Hundred & Twenty Only
3.9	Fire fighting system	10518000	JOB	0.75%	78885.00	INR Seventy Eight Thousand Eight Hundred & Eighty Five Only
4	Plan and design external servcies of work including collection of requirement and other inputs from OWNER and USERS (CAS), visiting the site, preparation of tender documents, line plans/schematic drawings, submission of cost estimates, detailed bill of quantities and as-built drawings of completed works for the following works as per the scope of work given at para 2.1(c).					
4.1	Roads and Drains	44380000	JOB	0.10%	44380.00	INR Forty Four Thousand Three Hundred & Eighty Only
4.2	Water supply	3372000	JOB	0.50%	16860.00	INR Sixteen Thousand Eight Hundred & Sixty Only
4.3	Electric supply	10029000	JOB	0.50%	50145.00	INR Fifty Thousand One Hundred & Forty Five Only
4.4	Sewage disposal	2079000	JOB	0.50%	10395.00	INR Ten Thousand Three Hundred & Ninety Five Only
4.5	External lighting	5173000	JOB	0.30%	15519.00	INR Fifteen Thousand Five Hundred & Nineteen Only
4.6	Vertical inner face traverse	58478000	JOB	0.10%	58478.00	INR Fifty Eight Thousand Four Hundred & Seventy Eight Only
4.7	Chain link fencing	3179000	JOB	0.30%	9537.00	INR Nine Thousand Five Hundred & Thirty Seven Only
Total in Figures					**4560049.00**	Forty Five Lakh Sixty Thousand &Forty Nine Only
Quoted Rate in Words		**INR Forty Five Lakh Sixty Thousand &Forty Nine Only**				

(B CHOUBEY)
CHIEF CONSTRUCTION ENGINEER(R&D)S

TENDER DOCUMENT

(BOOK I OF I)

FOR

CONSULTANCY SERVICES FOR CIVIL WORKS AND ALLIED SERVICES FOR STORAGE AND TEST FACILITY FOR CAS NEAR SECUNDERABAD

TENDER ENQUIRY No.
CCE (R&D)/ENQ/CIV/CONS/CAS/05/2019-2020
Dtd. 09 SEPT 2019

CHIEF CONSTRUCTION ENGINEER(R&D)
P.B No.1569, AKBAR ROAD
SECUNDERABAD - 500 003

PHONE : 040 - 27751842, 27753662
FAX : 040 - 27751405

CCE (R&D)
SEC'BAD.

GOVT. OF INDIA - MINISTRY OF DEFENCE
DEFENCE RESEARCH & DEVELOPMENT ORGANISATION

TENDER DOCUMENT

(BOOK I OF I)

ANNEXURE - I

i) INVITATION TO TENDER
ii) DRAFT PROFORMA FOR BG FOR EMD
iii) DRAFT AGREEMENT
iv) INTEGRITY PACT (APPENDIX-I to III)

ANNEXURE – II

PERIOD OF COMPLETION,
SCOPE OF WORK

ANNEXURE – III

PREAMBLE TO SCHEDULE OF ITEMS
&
SCHEDULE OF ITEMS

CHIEF CONSTRUCTION OWNER(R&D)
P.B No.1569, AKBAR ROAD
SECUNDERABAD - 500 003
PHONE : 040 - 27751842, 27753662
FAX : 040 – 27751405

ANNEXURE - I

INVITATION TO TENDER

FOR

CONSULTANCY SERVICES FOR CIVIL WORKS AND ALLIED SERVICES FOR STORAGE AND TEST FACILITY FOR CAS NEAR SECUNDERABAD

TENDER ENQUIRY No.
CCE (R&D)/ENQ/CIV/CONS/CAS/05/2019-2020
Dtd. 09 SEPT 2019

CCE (R&D)
SEC'BAD.

INVITATION TO TENDER

NAME OF WORK : Consultancy services for civil works and allied services for storage and test facility for CAS near Secunderabad

1. **RECEIPT OF TENDERS:**

Tenders shall be received latest by: 1500 Hours on 30 Sept 2019

2. **REFERENCE CODE FOR TENDER**

CCE (R&D)/ENQ/CIV/CONS/CAS/05/2019-2020 Dtd. 09 Sept 2019

3. **TENDER DOCUMENTS:**

Tender Documents shall comprise of following:

BOOK 1 of 1 CONSISTING OF:

i) Invitation to tender
ii) Draft Agreement (General Conditions)
iii) Special Conditions of Contract
iv) Preamble to Schedule of Items
v) Scope of work and completion mile stones
vi) Schedule of items

4. **SUBMISSION OF TENDER:**

Tender shall be submitted in original set duly signed on all pages under cover of a letter of offer. Terms and Conditions as stipulated in the draft Contract Agreement are **NOT NEGOTIABLE** and any **CONDITIONAL OFFER SHALL BE LIABLE FOR REJECTION**. Item rates shall be given both in figures and in words.

5. **CLARIFICATIONS AND TENDER DOCUMENTS:**

For any technical and other clarifications in connection with this invitation to tender, tenderer may contact the following address:

THE CHIEF CONSTRUCTION ENGINEER (R&D)
P.B.No. 1569, AKBAR ROAD,
SECUNDERABAD – 500 003
Telephone : 040-27751842, 27753662

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SEC'BAD.

6. **INSPECTION OF SITE:**

Tenderer is advised to inspect, at his option, site of work and acquaint himself with working conditions including constraints and collect all necessary information for carrying out the work.

7. **LANGUAGE:**

Tender including tender drawings, if any and other information shall be prepared and submitted in English language.

8. **VALIDITY OF TENDER:**

The tender and the price / rate quoted shall remain valid for acceptance for a period of 3 (three) months from the date of opening of Tenders.

9. **SIGNING OF TENDER:**

Tender shall be signed by person / persons holding necessary power of attorney. Documentary evidence shall be submitted along with the tender to prove that the signatory to the tender is competent and authorized to submit tender to be legally binding upon the tenderer.

10. **EARNEST MONEY:**

Tender shall be accompanied by Earnest money as stated below :

a) Amount of EMD : Rs.1,77,000/- (Rupees One lakh seventy seven thousand only)

b) Form of Earnest Money

- Demand Draft / Fixed Deposit Receipt (FDR) / Bankers Cheque issued by a Scheduled Bank.

- A part of earnest money is acceptable in the form of bank guarantee also. In such cases 50% of earnest money or Rs.20.00 lakhs whichever is less, will have to be deposited in the form of Demand Draft / Fixed Deposit Receipt (FDR) / Bankers cheque issued by Scheduled Bank and the balance only can be accepted in the form of bank guarantee issued by a Scheduled bank.

- FDR is pledged in favour of the tender inviting authority. It is in the tenderer's own interest to keep the FDR valid as long as it is required. There is no need for the department to insist upon the tenderer keeping the FDR valid, since he can in cash the FDR only when it is assigned back to him by the tender inviting authority.

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SECUNDERABAD.

- The bank guarantee submitted as part of earnest money shall be valid for a period of six (06) months or more from the date of submission of tender.

- **EMD value Rs.1,77,000.00**
- Rs.1,77,000.00 acceptable in the form of DD/FDR/BC
  Or
- Rs.88,500.00 in form of DD/FDR/BC and Rs.88,500.00 in form of BGB.

a) **Refund of Earnest Money**

- The earnest money given by all the tenderers except the lower tenderer should be refunded immediately after the opening of the tenders, or latest within a week from the date of receipt of tenders.

b) **Forfeiture of Earnest Money**

- If the tenderer withdraws his tender before the expiry of the validity period, or before the issue of letter of acceptance, whichever is earlier, or makes any modification in the terms and conditions of the tender which are not acceptable to the department, then the Government shall, without prejudice to any other right or remedy, be at liberty to forfeit 50% of the earnest money absolutely. This provision would naturally apply only to the lowest tenderer once the earnest money of all the tenderers except those of the lowest is refunded.

- If CONSULTANT fails to furnish the prescribed performance guarantee within the prescribed period, the earnest money is absolutely forfeited to the President automatically without any notice.

- In case the CONSULTANT fails to commence the work specified in the tender documents on the 15th day of such time period as mentioned in letter of award, after the date on which the OWNER-in-charge issues written orders to commence the work, or from the date of handing over of the site, whichever is later, the Government shall, without prejudice to any other right or remedy, be at liberty to forfeit whole of the earnest money absolutely.

- If only a part of the work as shown in the tender is awarded, and the CONSULTANT does not commence the work, the amount of the earnest money to be forfeited to the Government should be worked out with reference to the estimated cost of the work so awarded.

- In case of forfeiture of earnest money as prescribed in above paras, the tenderer shall not be allowed to participate in the retendering process of the work.

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11. **COST OF TENDER DOCUMENT**

Cost of the tender documents is Rs.1000 /- and is not refundable

12. **CLARITY OF WRITING:**

BLANK

13. **SUBMISSION OF TENDER:**

Tender shall be submitted in sealed cover super scribing the name of the work and the due date of receipt.

PAN and TIN numbers shall also be superscribed on the tender cover.

Tender shall be submitted in person or sent by Registered Post addressed to the office as stated below so as to reach not later than the last date and time of receipt of tender:-

THE CHIEF CONSTRUCTION ENGINEER (R&D) SOUTH
DRDO, P.B.No. 1569, AKBAR ROAD,
SECUNDERABAD – 500 003

14. **OPENING OF TENDER:**

Tender shall be opened on the same day of receipt of Tenders at **15.30** hours.

Tenderer or his duly authorized representative, not exceeding 2, may be present on the date and time set out above, to attend opening of tender if so desired by him.

15. **EXPENSES FOR TENDER PREPARATION:**

For the preparation and submission of tender, tenderer shall not be entitled to any cost, expenses or other claims whether or not the tender is accepted, rejected or Invitation to Tender withdrawn or cancelled.

16. **COMPLETENESS OF TENDER:**

The scope of work, terms and conditions and other details have been specified in the tender document. Tenderer shall prepare and submit his tender keeping in mind the requirements of tender documents. Any tender not quoting for the complete work as per tender documents or is otherwise incomplete or is not in compliance with the tender documents shall be liable for rejection.

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17. **AMENDMENTS TO TENDER DOCUMENTS:**

Owner shall have the right to amend / delete / add to the various provisions in the tender documents or withdraw / cancel the invitation to tender without assigning any reasons whatsoever. The amendments / errata issued by the owner shall be read carefully in conjunction with tender documents. The CONSULTANT price / rate / amount shall be deemed to be worked out taking into account amendments / errata also.

18. **ACCEPTANCE OF TENDER:**

Owner shall not be bound to accept the lowest or any tender or to assign reasons for non-acceptance of any tender. Owner also reserves the right to accept a tender either in whole or in part. Breakup of prices / item rates shall be binding on the tenderer even in the case of acceptance of a tender in part.

19. **TENDERER NOT TO RESILE :**

Tenderer shall not resile from his technical, commercial and price offer. Should the tenderer resile from his tender in any manner whatsoever the tender submitted by him shall be liable to rejection. Tenderer shall be allowed to revise his offer only if specifically so requested by the Owner.

20. **RETENTION MONEY :**

Retention money @ 5% (five percent) will be deducted from each running bill. This Retention Money deducted from each running bill amount will be released after consultancy work is over and completion certificate is issued by the OWNER.

21. **PROFESSIONAL LIABILITY INSURANCE**

a) Consultants will maintain Professional Liability Insurance including coverage for errors and omissions by consultants negligence, breach in the performance of its duties under this contract from an Insurance Company permitted to offer such policies in India. Consultant will bear all expenses to maintain this insurance cover. The insurance coverage will be for 05 Years effective from Completion of Consultancy Services and will be for minimum of the following amount:-

i) Total professional fees including reimbursable expenditures made or expected to be made to the consultants.

ii) Proceeds, the Consultants may be entitled to receive from any insurance maintained by the Consultants to cover such a liability.

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b) The indemnity limit in terms of "Any One Accident" (AOA) and "Aggregate limit on the policy period" (AOP) should not be less than the amount stated in the contract. In case of joint venture or "in association", the policy should be in the name of joint venture/in association entity and not by the individual partners of the joint venture/association.

c) In the event of failure to comply the above clause by the consultant no further tender enquiry will be issued to the consultant in future.

22. COST OF WORK :

The cost of work on which the consultancy fee is admissible should be minimum of the following.

(a) Sanctioned amount for the scope of work for which consultancy is being offered.

(b) Detailed estimated cost prepared by the consultant.

(c) Completion cost of the scope of work.

23 TERMS OF PAYMENT :-

i) The consultancy fee will be paid at the following stages:-

(a) 20% (Twenty per cent) on the estimated cost of work as approved by Chief Construction Engineer(R&D)South on submission and approval of preliminary sketch drawings, tender drawings and tender documents, bill of quantities, cost estimates and requirement of cement and steel for the entire scope of work and preparation of tender Appraisal report for the main work.

(b) 20% (Twenty per cent) on the estimated cost of work as approved by Chief Construction Engineer(R&D)South on submission of 6 (six) sets of detailed structural and architectural drawings good for construction including design calculations duly proof checked by the approved agency.

(c) 45% (forty five per cent) on the actual physical/financial progress of work executed at site as approved by Chief Construction Engineer(R&D)South.

(d) Balasnce payment will be made after completion of the relevant work including deviations / modifications if any and on submission of 3 (three) sets of As-built drawings, one set of reproducible prints along with the soft copy (CD) for the relevant scope of work.

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DRAFT PROFORMA FOR BANK GUARANTEE FOR EARNEST MONEY

This deed of guarantee made this _____ Day of _____ Two Thousand eighteen between _____ (Name of Banker) having its Registered Office at _____

_____

(hereinafter referred to as the "Surety") and President of India acting by and through Chief Construction Engineer (R&D), Defence Research & Development Organisation, P.B.No. 1569, Akbar Road, Secunderabad – 500 003 (hereinafter referred to as the "Owner").

WHEREAS _____ (Contractor's name) (hereinafter referred to as "Contractor"), a company registered under Companies Act 1956 and having their registered Office at _____Bound to deposit with the OWNER by way of EARNEST MONEY Rs._____(Rupees _____ Only) in connection with their Tender for _____ _____ (Name of work) with reference to OWNER'S Tender Enquiry No. _____ dated: _____ as per specification and terms and conditions enclosed therein.

WHEREAS the CONTRACTOR as per clause No. 10 of invitation to Tender has agreed to furnish a Bank Guarantee valid upto _____ (date) instead of deposit of Earnest Money.

NOW THIS WITNESSETH

That the surety in consideration of the above tender made by the CONTRACTOR to the OWNER hereby undertake to guarantee payment on demand to the OWNER of the said amount of Rs. _____ which the CONTRACTOR is bound to deposit with the OWNER by way of Earnest Money in connection with his tender.

CCE (R&D)
SEC'BAD.

Not withstanding anything contained in the foregoing, the surety's liability under the guarantee is restricted to Rs. _____ (Rupees _____ _____ Only). The Guarantee shall remain in force and effective upto _____ and shall expire _____ and become ineffective on intimation thereof being given to the SURETY by the OWNER in which event this guarantee shall stand discharged.

This guarantee shall not be affected by any change in the constitution of the OWNER, CONTRACTOR or the SURETY.

The OWNER shall be eligible to make any claim under this guarantee only if the CONTRACTOR submitting the tender, resile from the offer or modify the terms and conditions thereof in a manner not acceptable to the OWNER or fail to sign the contract and deposit initial security deposit within 10 (Ten) days after the OWNER has advised the CONTRACTOR the acceptance for _____ (name of work) on mutually agreed terms and conditions. The OWNER's decision in this regard shall be final and binding.

The SURETY cannot revoke this guarantee during its currency except by the previous consent of the OWNER in writing.

Notwithstanding anything contained hereinabove, unless a demand or claim under this guarantee is DEBEL on the SURETY in writing on or before _____ the SURETY shall be discharged from all liabilities under this guarantee hereafter.

For and on behalf of
(BANKER'S NAME)

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CCE (R&D)
SEC'BAD.

DRAFT AGREEMENT

This Agreement for "_____" bearing Contract Agreement No._____ made and entered into this _____ between the President of India acting by and through Chief Construction Engineer(R&D), Defence Research & Development Organization (DRDO), P.B.No.1569, Akbar Road, Secunderabad – 500 003 hereinafter referred to as the "OWNER" (which expression shall, unless excluded by or repugnant to the context or meaning thereof, be deemed to include its successors and assigns) of ONE PART.

AND

M/s. _____ having their registered office and principal place of business at "_____" hereinafter referred to as the "CONTRACTOR/CONSULTANT" (which expression shall, unless excluded by or repugnant to the context or meaning thereof, be deemed to include its successors and assigns) of OTHER PART.

WITNESSETH THAT

WHEREAS the OWNER invited the CONTRACTOR/CONSULTANT to submit tender for "_____" vide Tender Enquiry No. _____.

AND

WHEREAS, the CONTRACTOR/CONSULTANT submitted tender to the OWNER for execution of the work in accordance with the tender documents including technical specifications, schedule of items and tender drawings vide their letter No._____ Dated _____.

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CCE (R&D)
SEC'BAD.

WHEREAS, the OWNER has accepted the tender submitted by the CONTRACTOR/CONSULTANT for the execution of the aforesaid work and placed Letter of Intent No._____.

AND WHEREAS, the CONTRACTOR/CONSULTANT has agreed to execute the aforesaid work on the terms and conditions stated hereinafter and has also agreed to submit to the OWNER Initial Security Deposit required to be submitted in accordance with the conditions of the Tender.

NOW, THEREFORE, in consideration of the foregoing promises and mutual covenants herein contained, the parties hereby agree to fulfill the obligations stated in the tender documents along with contractors offer.

AND WHEREAS, _____ is hereby authorized to initial and sign all the documents pertaining to the contract on behalf of Chief Construction Engineer (R&D).

IN WITNESS

WHEREOF, the Chief Construction Engineer (R&D), Defence Research & Development Organisation, P.B.No.1569, Akbar Road, Secunderabad – 500 003 has set his hand for and on behalf of President of India.

AND

_____ for and on behalf of "_____" has affixed his signature and the seal of the said company in accordance with the Articles of Association.

SIGNED AND DELIVERED BY

BY

SIGNED AND DELIVERED

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CCE (R&D)
SEC'BAD.

CHIEF CONSTRUCTION ENGINEER(R&D)
ACCEPTING OFFICER
FOR AND ON BEHALF OF
PRESIDENT OF INDIA

Dated : _____

SIGNATURE AND ADDRESS
OF FIRM

Dated : _____

WITNESS :

1.

2.

WITNESS :

1.

2.





TENDER ENQUIRY No.
CCE (R&D)/ENQ/CIV/CONS/CAS/05/2019-2020 Dtd. 09 SEPT 2019

"In lieu " Page to

GENERAL CONDITIONS OF CONTRACTS (APPENDIX 'E' TO RDCE WP – 99)

A copy of General conditions of Contracts (Appendix "E" to RDCE WP-99) as amended has been supplied to me / us and is in my / our possession. I / We have read and understood the provisions contained in the aforesaid General Condition of Contracts before submission of this tender and I / we agree that I / we shall abide by the terms and conditions thereof as modified, if any, elsewhere in these tender documents.

2. It is hereby further agreed and declared by me / us that the general conditions of contracts including condition 47 thereof pertaining to settlement of dispute by arbitration form part of these tender documents.

CONSULTANT

Date:..... 2019

ACCEPTING OFFICER

Date:.....2019

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CCE (R&D)
SEC'BAD.

APPENDIX – I

INTEGRITY PACT

To,

The Chief Construction Engineer (R&D)South
Akbar Road, PB No. 1569,
Secunderabad – 500 003

Sub:- "Consultancy services for civil works and allied services for storage and test facility for CAS near Secunderabad"

Dear Sir,

I/ We acknowledge that DRDO is committed to follow the principles thereof as enumerated in the Integrity Agreement enclosed with the Tender Document.

I/We agree that the Tender Document is an invitation to offer made on the condition that I/We will sign the enclosed Integrity Agreement, which is an integral part of the Tender Documents, failing which I/We will stand disqualified from the tendering process. I/We acknowledge that THE MAKING OF THE BID SHALL BE REGARDED AS AN UNCONDITIONAL AND ABSOLUTE ACCEPTANCE of this condition of the Tender Document.

I/We confirm acceptance and compliance with the Integrity Agreement in letter and spirit and further agree that execution of the said Integrity Agreement shall be separate and distinct from the main contract, which will come into existence when offer/bid is finally accepted by DRDO. I/We acknowledge and accept the duration of the Integrity Agreement, which shall be in the line with Article 1 of the enclosed Integrity Agreement.

I/We acknowledge that in the event of my/our failure to sign and accept the Integrity Agreement, while submitting the tender/bid, DRDO shall have unqualified, absolute and unfettered right to disqualify the applicant/bidder and reject the offer/bid is accordance with terms and conditions of the Tender Document/bid document.

Yours faithfully,

(Duly authorized signatory of the Applicant)

CCE (R&D)
SEC'BAD.

APPENDIX – II

INTEGRITY PACT

To,

M/s. _____

_____

_____

Sub:- "Consultancy services for civil works and allied services for storage and test facility for CAS near Secunderabad"

Dear Sir,

It is hereby declared that DRDO is committed to follow the principles of transparency, equity and competitiveness in public procurement. The subject is an invitation to offer made on the condition that the applicant will sign the Integrity Agreement, which is an integral part of Tender Document, failing which the applicant will stand disqualified from the tendering process and the offer of the bidder would be summarily rejected.

This declaration shall form part and parcel of the Integrity Agreement and signing of the same shall be deemed as acceptance and signing of the Integrity Agreement on behalf of the DRDO.

Yours faithfully,

Chief Construction Engineer (R&D) South

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CCE (R&D)
SEC'BAD.

APPENDIX – III

INTEGRITY PACT

This Integrity Agreement is made at Secunderabad on this ..... day of 2019.

BETWEEN

President of India represented through Chief Construction Engineer(R&D)South Ministry of Defence, DRDO, Akbar Road, PB.No.1569, Secunderabad – 500 003 , (Hereinafter referred as the CCE(R&D)South 'OWNER', which expression shall unless repugnant to the meaning or context hereof include its successors and permitted assigns)

AND

M/s_____
___ "Bidder/CONTRACTOR" and which expression shall unless repugnant to the meaning or context hereof include its successors and permitted assigns)

PREAMBLE

WHEREAS the OWNER has floated the Tender **"Consultancy services for civil works and allied services for storage and test facility for CAS near Secunderabad"** and intends to award, under laid down organizational procedure, contract for **"Consultancy services for civil works and allied services for storage and test facility for CAS near Secunderabad"** hereinafter referred to as the "Contract".

AND WHEREAS the OWNER values full compliance with all relevant laws of the land, rules, regulations, economic use of resources and of fairness/transparency in its relation with its Bidder(s) and CONTRACTOR(s). AND WHEREAS to meet the purpose aforesaid both the parties have agreed to enter into this Integrity Agreement (hereinafter referred to as "Integrity Pact" or "Pact"), the terms and conditions of which shall also be read as integral part and parcel of the Tender/Bid documents and Contract between the parties.

NOW, THEREFORE, in consideration of mutual covenants contained in this Pact, the parties hereby agree as follows and this Pact witnesses as under:

CLAUSE 1: COMMITMENT OF THE OWNER

1) The OWNER commits itself to take all measures necessary to prevent corruption and to observe the following principles:

(a) No employee of the OWNER, personally or through any of his/her family members, will in connection with the Tender, or the execution of the Contract, demand, take a promise for or accept, for self or third person, any material or immaterial benefit which the person is not legally entitled to.

(b) The OWNER will, during the Tender process, treat all Bidder(s) with equity and reason. The OWNER will, in particular, before and during the Tender

CCE (R&D)
SEC'BAD.

process, provide to all Bidder(s) the same information and will not provide to any Bidder(s) confidential / additional information through which the Bidder(s) could obtain an advantage in relation to the Tender process or the Contract execution.

(c) The OWNER shall endeavour to exclude from the Tender process any person, whose conduct in the past has been of biased nature.

2) If the OWNER obtains information on the conduct of any of its employees which is a criminal offence under the Indian Penal code (IPC)/Prevention of Corruption Act, 1988 (PC Act) or is in violation of the principles herein mentioned or if there be a substantive suspicion in this regard, the OWNER will inform the Chief Vigilance Officer and in addition can also initiate disciplinary actions as per its internal laid down policies and procedures.

CLAUSE 2: COMMITMENT OF THE BIDDER(S)/CONTRACTOR(S)

1) It is required that each Bidder/CONTRACTOR (including their respective officers, employees & agents) adhere to the highest ethical standards, & report to the Government /Department all suspected acts of fraud or corruption or Coercion or Collusion of which it has knowledge or becomes aware, during the tendering process & throughout the negotiation or award of a contract.

2) The Bidder(s)/CONTRACTOR(s) commits himself to take all measures necessary to prevent corruption. He commits himself to observe the following principles during his participation in the Tender process and during the Contract execution:-

a) The Bidder(s)/CONTRACTOR(s) will not, directly or through any other person or firm, offer, promise or give to any of the OWNER's employees involved in the Tender process or execution of the Contract or to any third person any material or other benefit which he/she is not legally entitled to, in order to obtain in exchange any advantage of any kind whatsoever during the Tender process or during the execution of the Contract.

b) The Bidder(s)/CONTRACTOR(s) will not enter with other Bidder(s) into any undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to cartelize in the bidding process.

c) The Bidder(s)/CONTRACTOR(s) will not commit any offence under the relevant IPC/PC Act. Further the Bidder(s)/CONTRACTOR(s) will not use improperly, (for the purpose of competition or personal gain), or pass on to others, any information or documents provided by the OWNER as part of the business relationship, regarding plans, technical proposals & business details, including information contained or transmitted electronically.

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d) The Bidders(s)/Contractor(s) of foreign origin shall disclose the names and addresses of agents/representatives in India, if any. Similarly Bidder(s)/Contractors(s) of Indian Nationality shall disclose names and addresses of foreign agents/representatives, if any. Either the Indian agent on behalf of the foreign principal or the foreign principal directly could bid in a tender but not both. Further, in cases where an agent participate in a tender on behalf of one manufacturer, he shall not be allowed to quote on behalf of another manufacturer along with the first manufacturer in a subsequent/parallel tender for the same item.

f) The Bidder(s)/CONTRACTOR(s) will, when presenting his bid, disclose (with each tender as per proforma enclosed) any & all payments he has made, is committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the Contract.

3) The Bidder(s)/CONTRACTOR(s) will not instigate third persons to commit offences outlined above or be an accessory to such offences.

4) The Bidder(s)/CONTRACTOR(s) will not, directly or through any other person or firm indulge in fraudulent practice means a willful misrepresentation or omission of facts or submission of fake/forged documents in order to induce public official to act in reliance thereof, with the purpose of obtaining unjust advantage by or causing damage to justified interest of others and/or to influence the procurement process to the detriment of the Government interests.

5) The Bidder(s)/CONTRACTOR(s) will not, directly or through any other person or firm use Coercive Practices (means the act of obtaining something, compelling an action or influencing a decision through intimidation, threat or the use of force directly or indirectly, where potential or actual injury may befall upon a person, his/her reputation or property to influence their participation in the tendering process).

CLAUSE 3 : CONSEQUENCES OF BREACH

Without prejudice to any rights that may be available to the OWNER under law or the Contract or its established policies & laid down procedures, the OWNER shall have the following rights in case of breach of this Integrity Pact by the Bidder(s)/CONTRACTOR(s) & the Bidder/ CONTRACTOR accepts & undertakes to respect & uphold the Principal/OWNER's absolute right:

I) If the Bidder(s)/CONTRACTOR(s), either before award or during execution of Contract has committed a transgression through a violation of Clause 2 above or in any other form, such as to put his reliability or credibility in question, the OWNER after giving 14 days notice to the CONTRACTOR shall have powers to disqualify the Bidder(s)/CONTRACTOR(s) from the Tender process or terminate/determine the Contract, if already executed or exclude the Bidder/ CONTRACTOR from future contract award processes. The imposition & duration of the exclusion will be determined by the severity of transgression & determined by the Principal/OWNER. Such exclusion may be forever or for a limited period as decided by the Principal/OWNER.

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2) Forfeiture of EMD/Performance Guarantee/Security Deposit: If the OWNER has disqualified the Bidder(s) from the Tender process prior to the award of the Contract or terminated/ determined the Contract or has accrued the right to terminate/determine the Contract according to Clause 3(1), the OWNER apart from exercising any legal rights that may have accrued to the Principal/OWNER, may in its considered opinion forfeit the entire amount of Earnest Money Deposit, Performance Guarantee & Security Deposit of the Bidder/ Contractor.

3) Criminal Liability: If the OWNER obtains knowledge of conduct of a Bidder or Contractor, or of an employee or a representative or an associate of a Bidder or Contractor which constitutes corruption within the meaning of Indian Penal code (IPC)/Prevention of Corruption Act, or if the OWNER has substantive suspicion in this regard, the OWNER will inform the same to law enforcing agencies for further investigation.

CLAUSE 4 : PREVIOUS TRANSGRESSION

1) The Bidder declares that no previous transgressions occurred in the last 5 years with any other Company* in any country confirming to the anticorruption approach or with Central Government or State Government or any other Central/State Public Sector Enterprises in India that could justify his exclusion from the Tender process.

2) If the Bidder makes incorrect statement on this subject, he can be disqualified from the Tender process or action can be taken for banning of business dealings/holiday listing of the Bidder/Contractor as deemed fit by the OWNER.

3) If the Bidder/CONTRACTOR can prove that he has resorted/recouped the damage caused by him and has installed a suitable corruption prevention system, the OWNER may, at its own discretion, revoke the exclusion prematurely.

CLAUSE 5 : EQUAL TREATMENT OF ALL BIDDERS/CONTRACTOR(S)/SUB CONTRACTOR(S)

1) The Bidder(s)/CONTRACTOR(s) undertake(s) to demand from all subcontractors a commitment in conformity with this Integrity Pact. The Bidder/CONTRACTOR shall be responsible for any violation(s) of the principles laid down in this agreement/Pact by any of its Sub-contractors/sub-vendors.

2) The OWNER will enter into Pacts on identical terms as this one with all Bidders and Contractors .

3) The OWNER will disqualify Bidders, who do not submit, the duly signed Pact between the OWNER and the bidder, along with the Tender or violate its provisions at any stage of the Tender process, from the Tender process.

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CLAUSE 6 : OTHER PROVISIONS

1) This Pact is subject to Indian Law, place of performance & jurisdiction is the Headquarters of the Division of the OWNER, who has floated the Tender.

2) Changes and supplements need to be made in writing. Side agreements have not been made.

3) If the Contractor is a partnership or a consortium, this Pact must be signed by all the partners or by one or more partner holding power of attorney signed by all partners & consortium members. In case of a Company, the Pact must be signed by a representative duly authorized by board resolution.

4) Should one or several provisions of this Pact turn out to be invalid; the remainder of this Pact remains valid. In this case, the parties will strive to come to an agreement to their original intensions.

5) It is agreed term & condition that any dispute or difference arising between the parties with regard to the terms of this Integrity Agreement/Pact, any action taken by the OWNER in accordance with this Integrity Agreement/Pact or interpretation thereof shall not be subject to arbitration.

CLAUSE 7 : LEGAL AND PRIOR RIGHTS

1) All rights and remedies of the parties hereto shall be in addition to all the other legal rights & remedies belonging to such parties under the Contract and/or law & the same shall be deemed to be cumulative & not alternative to such legal rights & remedies aforesaid. For the sake of brevity, both the parties agree that this Integrity Pact will have precedence over the tender documents with regard any of the provisions covered under this Integrity Pact.

2) IN WITNESS WHEREOF the parties have signed and executed this Integrity Pact at the place and date first above mentioned in the presence of following witnesses:

.....
(For and on behalf of OWNER)

.....
(For and on behalf of Bidder/CONTRACTOR)

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ANNEXURE-II

SCOPE OF WORK, COMPLETION MILESTONE

FOR

CONSULTANCY SERVICES FOR CIVIL WORKS AND ALLIED SERVICES FOR STORAGE AND TEST FACILITY FOR CAS NEAR SECUNDERABAD

TENDER ENQUIRY No.
CCE (R&D)/ENQ/CIV/CONS/CAS/05/2019-2020
Dtd. 09 SEPT 2019

CCE (R&D)
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NAME OF WORK : Consultancy services for civil works and allied services for storage and test facility for CAS near Secunderabad

Tender Enquiry No. & Date : CCE (R&D)/ENQ/CIV/CONS/CAS/05/2019-2020 Dtd. 09 SEPT 2019

SCOPE OF WORK AND COMPLETION MILE STONES

1. SCOPE OF WORK :

a) Site development works

b) Building including internal services:

i) Main test bed facility – 400 Ton capacity
   a) Main hall of P A 466 sqm (Approx) and 15m Height
   b) Annexe block of P A 188 sqm (Approx) and 3.3m Height
   c) Gas flooding, Mechanical equipment, Utility and LIR of P A 140 sqm and 4.5m Height.
   d) Test bed, thrust wall and joists assembly

ii)) Rocket motor integration facility
   a) Main hall of P A 563 sqm (Approx) and 12m Height
   b) Annexe block of P A 528 sqm (Approx) and 4m Height

iii) Rocket motor storage facility
   a) Main hall of P A 125 sqm (Approx) and 6m Height

iv) Pyros storage facility
   a) Storage bins of P A 839 sqm (Approx) and 6m Height

v) Conditioning chamber facility
   a) Main hall of P A 162 sqm (Approx) and 8m Height
   b) Annexe block of P A 74 sqm (Approx) and 4m Height

vi) Data acquisition & Mission control centre of P A 651 sqm (Approx) and 4m Height

c) Air conditioning

d) Power wiring

e) Flame proof fittings

f) UPS wiring

g) Lightning protection

h) Special earthing

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j) Telephone conduits

k) Fire alarm system

l) Fire fighting system

m) Roads and Drains

n) Water supply

p) Electric supply

q) Sewage disposal

r) External lighting

s) Vertical inner face traverse

t) Chain link fencing & Gates

u) Arboriculture

2. DETAILED ENGINEERING :

The scope of work/detailed engineering and consultancy services to be rendered by CONSULTANT are as follows:

2.01 Finalisation of details in consultation with Chief Construction Engineer (R&D) Secunderabad and user units including visiting the proposed site for collecting ground data whenever and wherever necessary.

2.02 The above facilities are to be planned as required after consultation and approval of the Users and CCE(R&D)S, Secunderabad.

2.03 Preparation and submission of preliminary line plans of the proposed facilities including services for the complete scope of work.

2.04 Preparation and submission of most economic and structurally sound designs confirming to relevant Indian / International Codes for all the structures.

2.05 Preparation and submission of layout/part layout plan indicating the existing and proposed facilities along with roads, storm water drainage system and other services etc., if any.

2.06 Development of line plans/schemes of the proposed facilities/services in to architectural plans, sections and elevations, detailed engineering drawings etc., for the entire scope of work.

2.07 Preparation, submission and obtaining approval of detailed technical specifications for all the items involved in the project. Specifications for special items shall invariably be submitted along with approved manufacturer's recommendations.

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2.08 Preparation and submission of Bill of Quantities, tender documents along with tender drawings separately for different tender packages. Number of tender documents sets shall be on as required basis. The consultant shall ensure that quantities as indicated in BOQ shall not very more than +/- 5% of the actual quantities including individual quantities. Estimates against all BOQ will be on DSR 2016/ prevalent market rates. The consultant shall submit draft tender documents as per direction of Engineer-In-Charge. The consultant shall submit market rate Analysis for Non-DSR items along with all supporting documents and quotation obtained from the reputed traders /dealers.

2.09 Design of foundations and structures based on the soil conditions. Design of all structural members including submission of design calculations for all structures/services. The structural drawings shall be submitted along with the designs duly proof checked by an agency approved by Chief Construction Engineer (R&D). The rates quoted shall be inclusive of the same.

2.10 Preparation and submission of 06 (six) sets of detailed architectural, structural and internal services like water supply, sanitary works, plumbing etc., complete and working drawings for the entire scope of work.

2.11 Furnishing of details of cement, reinforcement steel and structural steel required for the entire scope of work. The cement requirement shall be supported by break-up details of quantities and norms for various items of BOQ. Steel requirement shall be furnished diameter wise for reinforcement steel and section wise for structural steel.

2.12 Coordination with service CONSULTANT to incorporate architectural and structural details required for the electrical, mechanical and other services.

2.13 The CONSULTANT shall visit the site at least once every month and shall submit the detailed inspection report.

2.14 Witnessing the testing of the equipment at site and commissioning of the system.

2.15. Submission of DBR (Design Based Report) and ATP (Accepted test procedure)

2.16 Coordination with service CONSULTANT to incorporate architectural and structural details required for the electrical, mechanical and other services.

2.17 CONSULTANT shall render necessary assistance during supervision, erection/installation, testing and commissioning covering the following aspects:

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a) Rendering necessary clarification in working/construction drawing.

b) Providing site modification based on site constraints.

c) Rendering technical clarification during testing and commissioning.

d) Addition and alteration of specification befitting to the site condition.

e) Technical clarification on additional items of work.

f) System of interaction/meeting among the CONSULTANTs including meeting for progress review and monitoring.

g) Preparation of complete erection and commissioning schedule.

h) Monitoring and follow up installation work to ensure important details are not missed out.

i) Witnessing the testing and commissioning of each relevant work at site also forms part of scope.

2.18 Consultant and his team will attend / visit O/o of CCE(R&D)South, Secunderabad / site whenever and wherever necessary.

2.19 All drawings will be issued by in A1/A2/A3 size as per requirement.

2.20 All drawings will be handed over to the authorized person as nominated by CCE(R&D)S, Secunderabad.

2.21 No communication /transmission of drawings/documents will be made through email or any electronic means.

2.22 All Drawings will have water mark of copy No.

2.23 Preparation and submission of one set of reproducible drawings and a soft copy (CD) containing all the As-built drawings in Auto CAD format.

2.24 Preparation and submission of 02 (Two) set of PSMB, RPMB, Road Register and 03 (three) sets of As-built drawings of architectural, structural and working drawings for buildings and all services based on the completed works on ground.

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Sl. No.	Scope of Work	Period of Completion from effective date of L.O.I.
3.	**COMPLETION MILE STONES**	
	(a) Scope of work as per para at 2.01 to 2.08	02 (Two) months
	(b) Scope of work as per para at 2.09 to 2.11 as per scope of work at 2.3 (m).	04 (Four) months
	(c) Entire scope of work	24 (Twenty four) months or one month from the date of physical completion of work on ground whichever is later.





MURTY & MANYAM
ARCHITECTS, ENGINEERS & PLANNERS
859, Banjara Avenue, (6-3-597/A/12/A/6B) Hyderabad - 500 004. T.S.
☎ 040-23318020, 23301138, 23328670, 23374059
www.murtymanyam.com | email: info@murtymanyam.com

Lr.No. MM/ICFAI/2019- 824

October 30, 2019

To
Dr.M.L. Pavan Kishore, Asst. Professor,
Faculty of Science & Technology
The ICFAI Foundation for Higher Education (IFHE)
(Deemed-to-be-University u/s 3 of UGC Act, 1956)
Dontanapalli, Shankarpalli Road,
Hyderabad – 501 203

Dear Sir,

Sub: Collaboration for the Research project received from DRDO – Reg.

With reference to the subject work and discussions the undersigned had with you, we request your collaboration for FEM analysis of a foundation structure using software's like Ansys or Nisa etc. and detailed design calculations with report duly showing output of required parameters for submission to client.

The project is from DRDO which is the R&D wing of Ministry of Defence, Govt of India. They are into production of strategic systems and platforms such as Agni and Prithvi series of missiles; light combat aircraft, Tejas; multi-barrel rocket launcher, Pinaka; air defence system, Akash; a wide range of radars and electronic warfare systems; etc., As the project is for Ministry of Defence, we request you to maintain secrecy of project and not to retain any material received from us in this regard after the task is completed

The project cost is INR 45.60 lakh.

You are requested to contact the undersigned (+91 9490491805) for any further information and co-ordination for this project.

Thanking you,

Yours sincerely,

K.C.Shivaprasad
MURTY & MANYAM
Architects & Engineers

Encl: Details of the Static test facility and parameters required thereof

Consultant copy

भारत डायनामिक्स लिमिटेड
BHARAT DYNAMICS LIMITED
भारत सरकार का उद्यम
Govt. of India Enterprise
रक्षा मंत्रालय
Ministry of Defence
कंचनबाग, हैदराबाद - 500 058. टि.एस, भारत.
Kanchanbagh, Hyderabad - 500 058. T.S. INDIA
CIN : U24292TG1970GOI001353

WORK ORDER

REF: BDL/05/CE/8693(11)

DATE: 30/05/2018

To,
M/s. MURTY & MANYAM,
859, BANJARA AVENUE,
6-3-597/A/12/A/6B,
VENKATA RAMANA COLONY,
KHAIRATABAD,
Hyderabad – 500 004.

Sir,

Sub: "**CONSULTANCY SERVICES (Design & PMC) FOR PHASE – II, IBRAHIMPATNAM PROJECT**".

Ref:

i. Tender Notice No. **BDL/05/CE/8693**, Dt: **12/10/2017**. Tender Id: **59611**
ii. Corrigendum's **# 01 to 04**
iii. Your submitted bid Dt: **20/11/2017**
iv. e-bidding Dt: **16/02/2018**
v. Your price bid confirmation letter Dt: **16/02/2018**
vi. Letter Of Intent ref: **BDL/05/CE/8693(08)** Dt: **24/05/2018**

I. On behalf of **M/s. BHARAT DYNAMICS LIMITED** the work of **"CONSULTANCY SERVICES (Design & PMC) FOR PHASE – II, IBRAHIMPATNAM PROJECT"** is awarded to **M/s. MURTY & MANYAM**.

II. The bill of Quantities, description of work, rates & amounts are enclosed herewith. The value of work according to the bill of quantities is ₹ 1,88,90,000 /- **(Rupees One Crore Eighty Eight Lakhs Ninety Thousand Only)** inclusive of GST as on 16/02/2018.(Base Value = Rs.1,60,08,475 and GST @ 18% = Rs.28,81,525)

III. The duration of the contract is **TWENTY FOUR (24) months** from the date of handing over of site to the Contractor or **actual completion of works whichever is later.**

CONSULTANT 8/6/18

30/5

OWNER
ANIL VERMA
अपर महाप्रबंधक (इं.) परियोजना एवं इंजीनियरिंग
Addl. Gen. Manager (Civil Engg.)

टेलिफोन Tel. :
फैक्स Fax :
ईमेल E-mail :
वेबसाईट Website : http://bdl.ap.nic.in

Annexure-II

DESIGN CONSULTANCY SERVICES

DETAILS OF THE PROPOSED CONSTRCTUION

The details of the proposed construction of buildings and magazines at BDL, Ibrahimpatnam unit, are as follows:

1) SCOPE OF WORKS:

1.1 At BDL, Ibrahimpatnam :

i. **Survey:** Consultant has to carry out the detailed topographic survey but not limiting to the following for the whole site spread in 626 Acres (approx.)
   a. The consultant shall carry out the Topographical survey and preparation of plans (Contour Maps) of the areas.
   b. Five (5) Mt. interval spot levels and One (1) Mt. Interval Contour map (in 1:500 and 1: 4000 scales) have to be taken during the survey work.
   c. Mapping of all existing features like bunds, embankments, pits, canals, drains, fencings, temporary and permanent structures, external and internal roads, power and telecommunication lines, trees, plantations etc., in acquired and adjacent areas (in 1:500 and 1:4000 scales)
   d. Mapping of the boundaries of the plot. (in 1:500 and 1:4000 scales).
   e. Establishment of permanent Bench Marks at four corners of the plot and linking them to the nearest Bench Marks of Survey of India/concerned State/Central authorities.
   f. The CONSULTANT shall submit calculations to establish the accuracy of the work done, area of the plot and such other calculations that may be necessary.
   g. Site location plan drawn to a scale 1:4000.
   h. One drawing, showing the complete plot and prominent features in and around it, drawn to a scale of 1:4000.
   i. Contour Map drawn to a scale of 1:500 with Contour Interval of 1mt. The contours shall be drawn in 3-Dimensions such that all the spot levels indicated on the drawings bear all the three co-ordinates viz. X, Y and Z – co-ordinates.
   j. 3D Terrain map of the whole site.
   k. Apart from the above, CONSULTANT has to perform a detailed soil investigation at various locations of the site to derive Soil Bearing Capacity (SBC) and other factors deemed necessary for carrying out design and preparation of estimates.
   l. Furnishing of the field data & drawings in soft copy (on CDs) in AutoCAD format apart from hard copies.

ii. Consultant has to carry out the detail layout of the project comprising Administrative, Production, Explosive buildings including all Allied Services.

CONSULTANT 8/6/18

OWNER

iii. The total area of the site is approx. 626 acres. Consultant has to prepare a concept layout of the project in discussion with BDL. The approximate total building area is as per the list enclosed.

iv. The consultant has to prepare the layout of these buildings in the project site considering the utilities of the building, as per site requirement and in consultation with BDL as per the production layout.

v. After freezing of layout consultant has to carry out the detail design and project consultancy works (but not limited to) of the following buildings and the areas indicated are purely tentative for getting a broad idea of the project. However the final areas will be decided by the Consultant after discussions with the User.

S.No	NAME OF THE BUILDING	UNITS	Approx. AREA
1	Non Explosive Building (NEB) - 2 bldgs.+ Utility	SQM	3960
2	Explosive Building (EB) - 3 bldgs. + Utility	SQM	7682
3	Non Explosive Storage Building (NESB) - 2 bldgs. + Utility	SQM	2420
4	Missile Storage Buildings (HD 1.1F) - 3 bldgs.+ Utility	SQM	2838
5	Explosive / Propellant Storage Buildings (Magazine) - 5 bldgs. + Utility	SQM	2970
6	Equipment Park & Work Shop Logistic Centre & Admin. Bldg. - 2 bldgs. + Utility	SQM	3997
7	Admin Building	SQM	520
8	Canteen Building	SQM	500
9	Sewerage Treatment Plant (STP) 200kld	KL	200
10	Fire Station & Fire Pump House	SQM	200
11	Sand Model	LS	1
12	Roads, Levelling Of Site Cutting & Filling	SQM	35000
13	Horticulture	Sqm	Ls
14	Security Post	Sqm	72
15	Guest House	Sqm	1232
16	Static Water Tank (SWT)	Sqm	116
17	Loading & Unloading Platforms	SQM	1430
18	CNC Shop & GMS Shop	SQM	1646
19	Detailed Survey & Soil Investigation Survey	LS	1
20	Services & Utilities	LS	1
21	Sewerages lines	LS	1
22	Explosive Burning Area	LS	1
23	Fire Hydrant	RMT	3000
24	Motors & Pumps	NO	4
25	Scrap Yard	LS	1
26	Auto Garage	LS	1
27	Document, Design & Training Centre	LS	1
28	CISF Family Quarters	LS	1
29	D&E And R & D Building	SQM	264
30	CRECHE	SQM	100
31	Welfare Bhavan	SQM	100
32	Union Office	SQM	100
33	Sub Stations	NO	2

CONSULTANT 8/6/18

OWNER 30/5

1.2

i) Estimated cost of the proposed construction at BDL, Ibrahimpatnam is Rs.16500 Lakhs.

ii) Scope of the work shall consist of study of the requirements and setting up of buildings, utilities / facilities (tentatively as listed below) within BDL, Ibrahimpatnam premises satisfying / meeting our parameters.

a) Construction of Buildings listed above.

b) Working out the power requirement including emergency power supply taking into consideration the existing power generation and consumption.

c) Study of existing fire-fighting system, fire-alarm system and work out requirement of the building.

d) Shop lighting, shop electrical, air-conditioning, compressed air and other utilities / facilities as may be required.

e) Mechanical works like cranes, ventilation system, communication systems, LAN system, Armour doors, etc.

iii) Scope of work may undergo some changes during actual setting up of facilities and the items enumerated above are only indicative but not exhaustive. The consultant shall be responsible for detailed engineering of only those, which are required after detailed discussions and finalization of the requirements with the employer.

iv) The item which are not shown above but are required for the work shall be the responsibility of the consultant to design if asked for, Decision of the employer in this regard would be final.

2) SCOPE OF SERVICES:

Scope of services for the work shall be in four stages as defined here under:

2.1 First Stage:

i. Surveying&Soil Investigation as per scope of works clause 1)1.1-i (pg: 02of 18)

ii. Discussions with the employer's representatives to understand requirements and setting up of the buildings, utilities, facilities for the work and other packages like A/C, Fire Alarm, Ventilation and Cranes etc.

iii. To study and ensure application of all the relevant rules and regulations, acts, statues, STEC norms etc. for the project.

iv. Based on the discussions with the employer and studies required as mentioned at S.No. 2.1(ii), to prepare preliminary draft sketches / drawings and notes sufficient to explain the consultant's general understanding of the employer's requirements and outline of their plan for the best way of fulfilling them including a rough estimate of the cost involved. The cost estimate shall be to give a rough idea of the total cost including all facilities / utilities. The draft sketches / drawings shall include architectural plans, elevations and perspective of building proposed and master plan showing layout of approach road, other infrastructure facilities and services etc.

v) To discuss the draft sketches / drawing and notes including cost estimate as prepared at S.No. 2.1 (iv) above, with the employer and make such modifications as may be necessary to satisfy the employer that their requirement have been / will be fulfilled. The notes draft sketches / drawings; cost estimate may have to be modified / revised till the employer is fully satisfied.

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vi) Submission of final report with notes, drawing /sketches and cost estimate based on the approval in principle accorded for S.No. 2.1(iv).
vii) Submission of tentative time schedule for completion of building with all facilities of the project in line with the employer's requirement / need.
viii) Submission of architectural plans / Elevation drawing and other necessary Drawing of the building proposed including area lighting layout of shop Electricals.
ix) Assist in obtaining approval from STEC authority (CFEES), Factory inspector, Electrical Inspectorate etc.

2.2 Second Stage:

i. Identification of group of works in different packages for tendering purpose.
ii. Preparation and submission of draft specification, bill of quantities, tender drawings, for employer's approval in principle of all the works.
iii. Discussions and finalization of the documents as at 2.2 (ii) and submission of detailed estimates work wise.

Note: Estimate shall be detailed item wise for works and the rates shall be based on DSR / market with proper rate analysis of all the items. The detailed estimate along with the rate analysis has to be submitted to the employer.

iv. Preparation of required number of sets of tender documents package wise as required for invitation of offers from tenders.
v. Submit the sand table/ model (scale 1:1000) of the buildings of the whole site including roads and boundary wall.
vi. To prepare project schedule taking into consideration the points at S.No. (i) Above in the form of Master CPM/PERT network in consultation with the Employer.

2.3 Third Stage:

i. Preparation and submission of complete working drawings for the works (Civil, Electrical Air-conditioning etc.,) in detail including layout. Working drawings for civil works shall include architectural and structural drawings also scaffoldings / staging drawings required for roof slab.

ii. To supply the employer required number of sets of working drawings, schedules, bill of quantities, specifications, and other Contract documents for departmental use and issuance to the Contractor for all works.

iii. Consultant has to do the proof checking of Design through reputed agency approve by BDL (Annexure-VI) and submit the proof check data.

iv. Submission of final requirement of cement, reinforcement and structural steel for the work.

v. To assist BDL in techno – commercial negotiation for finalization of Suitable agency for award of project work.

CONSULTANT 8/6/18

OWNER 30/5

2.4 Fourth Stage:

i. To prepare realistic work schedule for execution of all works in consultation with the employer.

ii. To check and approve layout of buildings/utilities/facilities in consultation with the Employer for taking up of the construction/erection works by the contractors/agencies.

iii. A team of Architects/Structural Engineers/specialist as required may have to visit the site whenever required or as directed by Engineer in charge once in a month to ensure effectively the work at S.No.(ii) and (iii) above.

iv. To have discussions with the Employer and to incorporate changes or modifications if any in the drawings/specifications/items of works required due to technical reasons/practical problems during the course of execution.

v. To prepare and submit the required drawings in view of the necessity arising.

vi. To advise client if the total value of work is likely to extend 10% of the work order value and submit the revised estimate.

vii. To issue final certificate regarding the quality and acceptance of the works in the proforma approved by BDL on its completion.

3. Tentative schedule of completions of the consultancy services for Ibrahimpatnam:

i. First Stage : **06 weeks** from the date of award of work.

ii. Second Stage : **06 weeks** from the date of completion of 1st stage.

iii. Third Stage : **04 weeks** from the date of completion of 2nd stage.

iv. Fourth Stage : **24 months** from the date of handing over of site or **actual period of the completion of all works whichever is later.**

NOTE: The consultant and the employer would make all efforts to ensure completion of the works earlier to the schedule give above.

4) Changes in The Work:

i. During the progress of work the employer may require deviations, additions or deletions in the drawings, specifications and the scope of work originally agreed upon between the consultant and the employer and such changes shall not invalidate the contract.

ii. No changes in the scope of work shall be made without written instructions from the employer.

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Annexure- III

5) PROJECT MANAGEMENT CONSULTANCY SERVICES

5.1. Planning and Co-ordination

i. Planning, scheduling and implementing construction programs to complete the project in time.
ii. To co-ordinate with the Engineer in charge / Architect / Consultant for the necessary drawings.
iii. To Study & scrutinize Drawings and point out discrepancies, if any, as also to ensure incorporation.

5.2. Construction Supervision

i. Shall physically verify all dimensions of site and ensure that they are as per drawings. Discrepancies shall be notified to BDL immediately. Shall be responsible to maintain the dimension at site as per the drawing.

ii. Shall Study all drawings, Contract Agreement, Specifications etc. and ensure implementation at site.

iii. Shall be responsible for overall monitoring of the construction and shall be available at site EVERYDAY (including nights if the contractor carries out work in shifts to achieve the project completion schedule) for Supervision & coordination of site work with the Institute and Contractors.

iv. Shall be responsible for checking Earthwork, PCC, RCC, Brick masonry, Flooring, the levels, steel reinforcement, centering, shuttering and scaffolding, etc.

v. Checking all the measurements recorded in the bill prepared by contractor at site with respect to approved drawings and to certify the accuracy. If in case, it is necessary to take measurements at site and record and finalize the bills, the PMC shall also do so to make timely payment for the works done.

vi. The PMC shall check the bills submitted by the contractor and certify the accuracy within three to four days from the date of receipt of bill from contractor by the Engineer in charge.

vii. If bills / measurements not submitted by the contractor, the PMC shall take measurements jointly with contractor's representative, record them in measurement sheets (MBs) and obtain contractor's signature in token of acceptance & Prepare Bills. Hidden measurements, which cannot be recorded in future, shall be recorded before covering up the work.

viii. If contractor's representative fails to attend at the measurements or Contractor fails to countersign after giving reasonable notice to the contractor, PMC should take measurements and prepare bills and send for payment. On completion of work, the PMC shall have the responsibility to finalize the final bills for the work as per actual execution.

ix. The PMC should settle the Final Bill within three months after completion of Project.

CONSULTANT 8/6/18

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अपर महाप्रबंधक (सिविल इंजी. प्रभाग)
Addl. Gen. Manager (Civil Engg.)

x. Shall maintain cement register, steel register, daily labour register, drawing register, hindrance register, register for payment of advances and recoveries, register for reconciliation of materials to facilitate recoveries, register for movement of field books / measurement books, site instructions book, diary of work, Quality Assurance (QA) records, etc., and any other register as advised by BDL and shall return all register referred above after completion of the project or as advised by BDL.

xi. Shall ensure that article stipulated in General Conditions of Contract of BDL between BDL and contractor is complied. The PMC shall ensure compliance by contractors of all labour laws relevant statutory acts including labour license, minimum wages, etc.

xii. Shall ensure that all instructions to the contactors will be issued in the form of letter written by Engineer in charge to the contractor or site instructions to the contractor written by Engineer in charge or his representative in site instructions book. They shall maintain the record of all such instructions for verification at any time. It will be PMC responsibility to regular all verbal instructions given by competent authority in unavoidable circumstances by obtaining written confirmations/ratifications. PMC shall ensure that extra / deviated items are not executed unless approved by BDL in principle.

xiii. Suggest modification, if any, due to site conditions and advise reasoned justification of cost variations on account of resultant extra items and excess supported by proper analysis.

6) **Quality Control**

6.1 Monitor the quality of the work and control the quality as per specification, relevant codes and as per Sound Engineering practices.

6.2 Maintain the registers for mandatory tests to be conducted for all materials before incorporation in work and as desired by BDL. The guidelines may be taken from the Engineer in charge regarding the registers to be maintained.

6.3 Inspect and approve the materials at site as per specifications before they are used in work.

6.4 Maintenance of records as per CTE guidelines and assisting BDL in audit replies.

7) **Site co-ordination**

7.1 Shall attend periodic site meetings / meetings in BDL office and discuss site conditions bottlenecks faced likely hindrances, time overruns, cost overruns and any other important matter along with solutions proposed. PMC will be required to submit periodic reports concerning quality standard and progress of the project by using project management tools viz CPM/PERT, MS Project, Risk Management, Stake holder management, etc in executing the project.

7.2 Shall submit physical and financial progress reports once every month or as desired by BDL.

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8) Personnel

8.1 PMC is expected to ensure that men of proven ability and adequately qualified are only employed at site and they work diligently. In case, BDL finds any Engineers not up to the mark, PMC will have to withdraw him / them from site and replace him / them by posting new ones in his / their position. BDL reserves the right to remove such personnel and ask for a substitute of required caliber. In case an Engineer resigns from their employment, PMC shall immediately provide a substitute of equivalent caliber. PMC shall not make any changes in the personnel deployed by them on work site without prior permission.

8.2 The PMC shall furnish the list of Engineers and Supervisors (Civil and Electrical) with details of their qualifications, experience, etc., to BDL.

8.3 The PMC shall not have any objection to BDL maintaining any Engineering staff at its own cost at the site of work to carry out work and duties allotted to them by BDL, in respect of all the work at site or other areas outside the scope of PMC works for overall surveillance, security and verification.

8.4 PMC shall make their own arrangement for their site office functioning including all necessary soft goods, stationary, surveying equipment, etc. Location for setting up of PMC site office shall be finalized in consultation with BDL.

8.5 PMC shall provide manpower at site timely and only experienced persons will be provided at site. It will be compulsory for PMC to place following full-time qualified adequate Engineers on site throughout the execution of work.

(i) **One Project Engineer (Civil) Graduate** having minimum **8-10 years' experience.**

(ii) **Two Graduate Civil Engineer** with **4-5 years' experience.**

(iii) **One Electrical graduate engineers** minimum **4-5 years' experience.**

(iv) **Four Site Engineer (Civil) Diploma** minimum **4-5 years' experience (Out of Four, One Engineer should have profound knowledge of surveying and related works).**

(v) **One Electrical Diploma Engineer** minimum **4-5 years' experience.**

(vi) **One Mechanical Diploma Engineer** minimum **4-5 years' experience.**

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9) **PMC's responsibility after completion of project and defects liability period:**

9.1 PMC shall carry out detailed inspection on completion of project and get rectified all defects noticed during inspection. PMC shall also carry out detailed inspection during defects liability period and get rectified all defects noticed during such inspection before the end of defects liability period.

9.2 PMC shall advise BDL with regards to extra claims or disputes / arbitration cases between Institute and the contractor(s), if any, and assist in case of any dispute till the cases are resolved either by mutual negotiation or through Arbitration or Court as the case may be.

10) Termination of Contract

10.1 It shall be open to the BDL to abandon or give up at any stage of the construction of any of the site buildings or any part thereof. In the event of such abandonment or giving up or in the event of termination of the agreement. The PMC shall be paid fees up to duration worked by them.

10.2 If the PMC fails to perform any of its obligations under this agreement or if BDL is dissatisfied with the services of the PMC, BDL may issue seven days written notice intimating the PMC of their failures or deficiencies and calling upon.

10.3 PMC to rectify within such time as may be specified in the notice and if the PMC fails to perform such obligation or make good such deficiencies as Pointed out to the PMC in the notice, BDL may terminate the services of PMC Under this agreement.

10.4 BDL may also terminate the PMC's service if the firm is adjudged a bankrupt or if the firm makes a general assignment for the benefit of their creditors or if a Receiver is appointed on account of their insolvency or they disregard law, Ordinances, rules, regulations or orders of any public authority having Jurisdiction on the works.

10.5 The termination shall be without prejudice to all right, liabilities and remedies that have arisen or accrued till date of such termination or that may arise on Account of such termination and BDL may get the project completed by whatever method they may deem expedient. In such case, the PMC shall not Be entitled to receive any further payment, if due, until the loss damage or Expense incurred by BDL due to breach of this agreement by PMC have been Settled by them.

10.6 In case the PMC abandons the work during the course of the project, BDL has the right to appoint an alternate PMC or make an arrangement for carrying out the work of PMC, at the risk and cost of the PMC.

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8/6/18

Annexure- IV

11) CONDITIONS OF CONSULTANCY SERVICES AND PROJECT MANAGEMENT SERVICES

11.1 Professional indemnity

PMC warrant that it shall exercise high degree of care and diligence in rendering the services pursuant to this agreement and that such service shall be of a high quality and standard satisfactory to BDL. The PMC shall indemnify BDL from any damage or loss arising from such lack of care and diligence or arising out of any unsatisfactory performance of service by PMC. For this purpose, PMC shall subscribe to a professional liability insurance policy with a nationalized insurance company for an amount equivalent to 20% of the total fee payable by BDL to the PMC. PMC shall provide adequate evidence to BDL, if asked for, showing that such insurance has been taken and being maintained and that all the premium thereon have been paid. Period of insurance starts from the day of handing over of site and valid till Twenty Four (24) months or actual completion of all works whichever is later.

11.2 Third Party Liability

The BDL shall not be liable for any injury / death, caused to any official, employee, representative or agent of the PMC or their consultants working at the site or damage to their properties for any reason whatsoever and BDL shall not entertain any claim from any person on that behalf. It would be the responsibility of the PMC to get their officials, employees, representatives, agents or their consultants insured against the possible risks involved in the discharge of their duties at the work site.

11.3 Arbitration:

All the disputes or differences whatsoever arising between the parties out of or relating to the contract meaning and operation or effect of this contract of breach thereof shall be settled by arbitration in accordant with the rules of arbitration of the Indian Council of Arbitration and Conciliation Act 1996 or Statutory modification or re-enactment thereof and the award made in pursuance thereof shall be binding on the parties. However in case of public undertakings the following shall apply:

In the event of any dispute or difference relating to the interpretation and application of the provisions of the Contract, such dispute or difference shall be referred by either party to the arbitration of one of the arbitration in the department of public enterprises to be terminated by the secretary to the Government of India, In charge of public enterprises.

11.4 Guarantee Of The Designs:

The consultant shall guarantee that the buildings designed under the scope of the work are technically safe, sound and as per the Indian Standards. The consultant shall indemnify the employer for any damage or defect arising due to faulty design within twelve months from the date of completion of the work by the contractor. The consultant shall also furnish the corrective technical studies and engineering as may be required in case of defects due to design faults without any additional fee. The consequential modifications, repairs or replacement of structures shall be under taken by the employer of the consultants cost under the technical instructions and supervision of the consultant.

CONSULTANT 8/6/18

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Addl. Gen. Manager (Civil & Infra)

11.5 Correction of Error:
Bids determined to be substantially responsive will be checked by BDL for any arithmetical errors in computation and summation. Where there is a discrepancy between unit rates quoted in figures and in words the unit rates quoted in words will govern,

11.6 Copy Right:
The drawings and designs prepared by the consultant shall be the copy right of the consultant. However the Employer shall have the right to make use of these drawings / designs for duplicating a structure in TOTO or In parts anywhere he like to make use of it.

11.7 Sub-Letting:
The consultant shall not sublet the whole or any part of its item of work without written consent of the employer, and such consent if given shall not establish any contractual relationship between the subcontractor and employer and this consent shall not relieve the consultant of any responsibility, liability or obligations under the contract and the consultant shall be responsible for the acts, defaults or negligence of any subcontractor as fully as if they were the acts, defaults or negligence of the consultant.

11.8 Secrecy;
The consultant shall ensure that all persons employed of any work connected with this agreement have noticed that the Indian official secret act 1923 (XIX of 1923) applies to them and will continue to apply even after the termination or expiry of the agreement. This condition will also apply to the sub-contractors of the consultant.

11.9 Executive Control:
Executive control of this contract shall be with the AGM (Civil & Infra) or Unit Head of the employer or representative as authorized by the Employer.

11.10 Assignment;
It is clearly understood that the employer shall be free at all times and stages of the execution of the work to assign any of their duties, responsibilities and rights under this agreement to any person or persons or Persons per organizations and the consultant shall accept such person (s) or organizations (s) as parties to the agreement. The Consultant shall not transfer or assign their duties and obligations under this agreement, to any other person or party without prior written consent of the employer.

11.11 Security Regulations:

The consultant shall abide by all the security regulations at site promulgated by the employer from time to time.

11.12 Assistance for audit and inspection:

The consultant shall be responsible to give clarifications and replies to queries from the technical audit and inspection and all the government/ statutory bodies from time to time, both during the execution of work and the latter dates in respect of the consultancy works services.

CONSULTANT 8/6/18

अनिल वर्मा
ANIL VERMA
अपर महाप्रबन्धक (सिविल एवं इन्फ्रा)
Addl. Gen. Manager (Civil & Infra)
OWNER

11.13 Agreement:
The agreement for this work shall be executed in duplicate. The original shall be retained by the employer and the duplicate by the consultant.

12) Payment Terms for Design Consultancy part:

I The Consultancy fee payable shall be as lump sum and shall be inclusive of all taxes as on today. Any increase in the project cost will not have any bearing on the consultancy fees.

II. **For Design part only:**

(i) **20%** of the total fee payable on quoted price on completion of **FIRST STAGE** as per clause 2.1 above. (Rs.12,80,677.98 and GST Rs.2,30,522.04)

(ii) **30%** of the total fee payable on quoted price on completion of **SECOND STAGE** as per clause 2.2 above. (Rs.19,21,016.98 and GST Rs.3,45,783.06)

(iii) **30%** of the total fee payable on quoted price on completion of **THIRD STAGE** as per clause 2.3 above. (Rs.19,21,016.98 and GST Rs.3,45,783.06)

(iv) **20%** of the total fee payable on quoted rates on completion of **all works.** (Rs. 12,80,677.98 and GST Rs.2,30,522.04)

III The Performance Guarantee money at the rate of the 10% shall be deducted from the each stage wise of consultancy fee which shall be refunded after completion of defect liability period of 12 months and accepted by the owner. This amount can be released against the bank guarantee of like amount from any nationalized/ schedule bank in approved Performa valid for defect liability period of 12 months plus a claimant period of 03 months. EMD submitted along with the tender will be returned after the recovery of equivalent amount in the form of Performance Guarantee money.

IV) **As-built Drawings:**
The consultant shall supply the Employer two sets of complete as built drawings and their original reproducible negatives before release of the fourth stage final payment.

No advance payments shall be made.

13) Payment Terms for Project Management Service part

The 80% fee shall be paid on monthly basis on man-month basis as per deputed persons at site and given in both certified by EIC (as per BOQ). Balance 20% fee shall be paid after completion of work and certified by EIC.
If the project gets delayed, in case of circumstances beyond the control of PMC. The PMC shall be suitably compensated for manpower deployed without profit margins.

CONSULTANT 8/6/18

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14. Engineer-In-charge:

Shri. **SEKH HAKIKULLAH** will be the **Engineer-in-Charge.**
Shri. **NAVEEN DAKEY** will be the **Site-in-Charge.**
Shri. **CHANDA ANISH** will be the **Electrical-in-charge.**
You are requested to contact them for further Information.

15. Stamp Duty:
Stamp Duty if any in respect of the agreement shall be borne by the consultant.

16. Proof Check of Design:
Consultant has to carry out proof check of the design with agency approved by BDL at his own cost

17. TAXES
Tax would be deducted as per applicable rules

For **Bharat Dynamics Limited**

ANIL VERMA
Addl. General Manager (Civil & Infra)

अनिल वर्मा
ANIL VERMA
अपर महाप्रबंधक (सिविल एवं संरचना)
Addl. Gen. Manager (Civil & Infra)

CONSULTANT 8/6/18

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BILL OF QUANTITES for CONSULTANCY FEE (DESIGN & PMC) FOR "CONSULTANCY SERVICES FOR PHASE – II, IBRAHIMPATNAM PROJECT"

S. No.	Description	Unit	Qty	Rate Rs.	Amount Rs.
1.	Design consultancy and the scope of services / stipulated in Annexure – II For Ibrahimpatnam	As per scope of work	1	64,03,389.92	64,03,389.92
2.	Project management consultancy services and the scope of work as stipulated in the annexure – III (Monthly basis) **A) One Project Engineer (Civil)** Graduate having 8-10 years' experience	Months	24	66,701.98	16,00,847.52
	Project management consultancy services and the scope of work as stipulated in the annexure – III (Monthly basis) **B) Graduate Civil Engineer#1** with 4-5 years' experience.	Months	24	46,691.38	11,20,593.12
	Project management consultancy services and the scope of work as stipulated in the annexure – III (Monthly basis) **C) Graduate Civil Engineer#2** with 4-5 years' experience.	Months	24	46,691.38	11,20,593.12
	Project management consultancy services and the scope of work as stipulated in the annexure – III (Monthly basis) **D) Site Engineer (Civil) #1** Diploma minimum 4-5 years' experience.	Months	24	31683.44	760402.56
	Project management consultancy services and the scope of work as stipulated in the annexure – III (Monthly basis) **E) Site Engineer (Civil) #2** Diploma minimum 4-5 years' experience.	Months	24	31683.44	760402.56
	Project management consultancy services and the scope of work as stipulated in the annexure – III (Monthly basis) **F) Site Engineer (Civil) #3** Diploma minimum 4-5 years' experience.	Months	24	31683.44	760402.56

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S. No.	Description	Unit	Qty	Rate Rs.	Amount Rs.
	Project management consultancy services and the scope of work as stipulated in the annexure – III (Monthly basis) **G) Site Engineer (Civil) #4** Diploma minimum 4-5 years' experience.	Months	24	31683.44	760402.56
	Project management consultancy services and the scope of work as stipulated in the annexure – III (Monthly basis) **H) One Electrical Graduate engineer** minimum 4-5 years' experience	Months	24	46,691.38	11,20,593.12
	Project management consultancy services and the scope of work as stipulated in the annexure – III (Monthly basis) **I) One Electrical Diploma** minimum 4-5 years' experience	Months	24	33,350.99	8,00,423.76
	Project management consultancy services and the scope of work as stipulated in the annexure – III (Monthly basis) **J) One Mechanical Diploma** minimum 4-5 years' experience	Months	24	33,350.99	8,00,423.76

I. Total = Rs.1,60,08,474.56

II. GST @ 18% on (I) = RS.28,81,525.44

Grand Total (I+II) = Rs.1,88,90,000.00

(Rupees ONE CRORE EIGHTY EIGHT LAKHS NINETY THOUSAND only)

Note: 1. Consultant has quoted for above work as a one unit in e-bidding and this quoted amount has been be distributed as per annexure-V.

2. 20% Payment of PMC fee to be withheld for final completion of work.

For Bharat Dynamics Limited

30/5

ANIL VERMA
Addl. General Manager (Civil & Infra)

8/6/18

CONSULTANT

OWNER

ANNEXURE – V

BILL OF QUANTITES FOR CONSULTANCY FEE (FOR DESIGN & PMC) FOR "CONSULTANCY SERVICES FOR PHASE – II, IBRAHIMPATNAM PROJECT".

The quoted amount shall be distributed as follows

S.No.	Description	Unit	Qty	Percentage on Quoted Amount
1.	Design consultancy and the scope of services / stipulated in Annexure – II For Ibrahimpatnam	As per scope of work	1	40%
2.	Project management consultancy services and the scope of work as stipulated in the annexure – III (Monthly basis) a) One Project Engineer (Civil) Graduate having 8-10 years' experience.	Months	24	10%
	b) Two Graduate Civil Engineer with 4-5 years' experience. **.(Rate Shall be for Two(2) Engineers)**	Months	24	14%
	c) Four Site Engineer (Civil) Diploma minimum 4-5 years' experience. **(Rate Shall be for Four(4) Engineers)**	Months	24	19%
	d) One Electrical Graduate engineers minimum 4-5 years' experience.	Months	24	7%
	e) One Electrical Diploma minimum 4-5 years' experience.	Months	24	5%
	f) One Mechanical Diploma minimum 4-5 years' experience.	Months	24	5%

For **Bharat Dynamics Limited**

30/5

(ANIL VERMA)
Addl. General Manager (Civil & Infra)

CONSULTANT 8/6/18

अनिल वर्मा
ANIL VERMA
अपर महाप्रबंधक (सिविल एवं संरचना)
Addl. Gen. Manager (Civil & Infra)
OWNER

ANNEXURE – VI

List of Approved Proof Check Agencies of BDL

1) Structural Engineering Research Centre (SERC) - Roorkee,
2) Construction Industries Development Council (CIDC)- Delhi,
3) Central Building Research Centre (CBRC),
4) Indian Institute of Technology (IIT),
5) Indian Institute of Science (IISc) – Bangalore,
6) National Institute of Technology (NIT),
7) National Academy of Construction (NAC) – Hyderabad,
8) College of Engineering, Osmania University (OU) – Hyderabad,
9) Birla Institute of Technology & Science (BITS) - Hyderabad & Pilani.

For Bharat Dynamics Limited

30/6/2018

(ANIL VERMA)
Addl. General Manager (Civil & Infra)
अनिल वर्मा
अपर महाप्रबंधक (सिविल एवं इन्फ्रा)
Addl. General Manager (Civil & Infra)

CONSULTANT 8/6/18

OWNER

MURTY & MANYAM
ARCHITECTS, ENGINEERS & PLANNERS
859, Banjara Avenue, (6-3-597/A/12/A/6B) Hyderabad - 500 004. T.S.
☎ 040-23318020, 23301138, 23328670, 23374059
www.murtymanyam.com | email: info@murtymanyam.com

March 3, 2021

Lr.No. MM/ICFAI/2021- 213

To
Dr. Chandrashekhar A, Asst. Prof.
Faculty of Science & Technology
The ICFAI Foundation for Higher Education (IFHE)
(Deemed-to-be-University u/s 3 of UGC Act, 1956)
Dontanapalli, Shankarpalli Road,
Hyderabad – 501 203

Dear Sir,

Sub: ***Collaboration for the Research project received from Bharat Dynamics Limited – Reg.***

With reference to the subject work, we request your technical collaboration to conduct FEM Analysis of blast resistance structures (explosive buildings). In this regard we request you to kindly allocate the following faculty for an introductory meeting on 4th March 2021 at our office to discuss the project requirements and finalization for way forward towards successful completion of work.

The project is from Bharat Dynamics Limited (BDL), Hyderabad a Public Sector Undertaking under the Ministry of Defence, Government of India. They are the manufacturing base for guided missile systems and allied equipment for the Indian Armed Forces. We request you to maintain secrecy of project and not to retain any material received from us in this regard after the task is completed. As the project is for Ministry of Defence, we request you to maintain secrecy of project and not to retain any material received from us in this regard after the task is completed.

The project cost is INR 160.08 lakhs

The parameters for implementation of the work as specified by the Client M/s Bharat Dynamics Limited would be intimated to the Team during the discussion.

Thanking you,

Yours sincerely,

K.C.Shivaprasad
MURTY & MANYAM
Architects & Engineers
Encl: Work Order / Agreement as received from Bharat Dynamics Limited, Ministry of Defence, Govt of India

MURTY & MANYAM
ARCHITECTS, ENGINEERS & PLANNERS
859, Banjara Avenue, (6-3-597/A/12/A/6B) Hyderabad - 500 004. T.S.
☎ 040-23318020, 23301138, 23328670, 23374059
www.murtymanyam.com | email: info@murtymanyam.com

Lr.No. MM/ICFAI/2021- 844

December 16, 2021

To
Dr.Chandrasekhar A, Asst.Prof.
Faculty of Science & Technology
The ICFAI Foundation for Higher Education (IFHE)
(Deemed-to-be-University u/s 3 of UGC Act, 1956)
Dontanapalli, Shankarpalli Road,
Hyderabad – 501 203

Dear Sir,

Sub: Collaboration for the Proposed High Rise Steel Building in Phase – 3, Techno Park, Trivandrum, Kerala for KSITIL – Reg.

With reference to the subject work and discussions the undersigned had with you, we request your collaboration for Structural Analysis and design of Proposed High Rise Steel Structure using software's like Ansys or Nisa etc. and detailed design calculations with report duly showing output of required parameters for submission to client.

The project is from KSITIL which is the IT Infrastructure Development Organization established by Government of Kerala to improve facilities for IT Sector.

The project cost is INR 120 Lakhs. (15% of the Project cost is towards overheads)

You are requested to contact the undersigned (+91 9490491805) for any further information and co-ordination for this project.

Thanking you,

Yours sincerely,

K.C.Shivaprasad
MURTY & MANYAM
Architects & Engineers

Dr.Avinash Panwar
Head & PI

DEPARTMENT OF COMPUTER SCIENCE

VIGYAN BHAWAN, BLOCK-A MOHANLAL SUKHADIA UNIIVERSITY
UDAIPUR (Raj.) 313 001.

RUSA funded project: "A Customizable LMS for proper utilization and adoption of Global Knowledge Pool: An adaptation of contingency theory of E-Learning."

No.CS/VB/MLSU/2020-21/RUSA/ **Dated: 05-01-2022**

To whomsoever it may concern

This is to state that following are the co-principal investigators in the MHRD RUSA 2.0 funded research project titled *"A Customizable LMS for proper utilization and adoption of Global Knowledge Pool: An adaptation of contingency theory of E-Learning."*.

A. Dr. Sumangla Rathore, Asst. Professor, Dept. of Operations and IT, ICFAI Business School Hyderabad, ICFAI Foundation of Higher Education

B. Dr. Deepak Khazanchi, Associate Dean for Academic Affairs, College of Information Science and Technology, University of Nebraska at Omaha, USA

C. Professor K. Srinivas, Head ICT & Project Management Unit at National Institute of Educational Planning and Administration (NIEPA),a Deemed to be University under Ministry of Human Resource Development (MHRD) Government of India Institution in New Delhi, INDIA

(Dr. Avinash Panwar)
Principal Investigator

MOHANLAL SUKHADIA UNIVERSITY : UDAIPUR

No.PD/OS/SPD-(RUSA-Phase-II)/CSA-1-(3)/2020-21 243 dt: 20-08-2020
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ORDER

In pursuance of MHRD Deptt. of Hr. Edu. New Delhi sanction letter No. 2447/2014-U.Policy (RJMulti-Gen) dt: 03-02-2020 & Govt. of Rajasthan, State Project Directorate-RUSA, Jaipur letter No. F.30(16)/SPD/RUSA/2016/178 dt: 31-03-2020 & No. 316 dt: 06-08-2020, I am directed to convey financial sanction for payment of **Rs. 1750 lakh (Rupees seventeen Crore fifty Lakh)** only to the Dean/Director/Head of the Departments of concerned Colleges, MLSU, Udaipur for arranging payment to the Principal Investigator of Research Project as per list enclosed, as 1st Installment under Component 10: Research Innovation and Quality Improvement (Research Proposals) under RUSA-2.

Admissible expenditure be incurred as per relevant rules/procedure of sponsoring agency/State Project Directorate-RUSA Jaipur as well as of this University rules and as per guidelines of Nodal Officer-RUSA (enclosed vide No. RUSA/NODAL OFF./2016-17/163 dt: 14-08-2020) it shall be met out of Central/State Agencies budget under **head "CSA-1-(3)-IV-RI&QI (Research Proposals)-7-B-(a)-(i) / 7-B-(a)-(ii) / 7-B-(a)-(iii) / 7-C-(a)-(i)/ 7-D-(i) / 7-D-(ii)/7-E(a)-(i)/7-E(a)-(ii)/7-E(b)-(i)/ 7-E-(b)-(ii) / 7-F-(i) / 7-F-(ii) / 7-F-(iii) / 7-G-(i) / 7-I(a)-(i) / 7-K-(i) / 7-K-(ii) / 7-K-(iii) / 7-K-(iv) /8-B-(i) / 8-C-(i) / 8-D-(i) / 9-A / 9-B-(i) / 9-C-(i) / 9-C-(ii) / 9-C-(iii) / 9-C-(iv) / 9-D-(i) / 9-E-(i)/ 9-E-(ii) / 9-F-(i) / 9-F-(ii) / 9-G-(i) / 9-G-(ii) / 9-H-(i) / 9-H-(ii) / 9-I-(i) / 9-J-(i) / 9-K-(i) / 9-L-(i) /9-L-(ii) / 9-P-(i) / 11-A-(i) / 11-A-(ii) / 11-A-(iii) / 11-A-(iv) / 11-A-(v) / 11-A-(vi) / 11-A-(vii) /11-A-(viii) / 11-A-(ix) / 11-A-(x) / 12-(i) / 12-(ii) / 12-(iii) / 12-(iv)"** where in necessary provision shall be made in Revised Estimates 2020-21.

COMPTROLLER

Copy to:-

1. The Registrar, MLSU, Udaipur.
2. The Dean, UCCMS/UCoS/UCSSH, MLSU, Udaipur.
3. Prof. Kanika Sharma, Nodal-officer, RUSA-Programme, Deptt. of Botany, UCoS, MLSU, Udaipur with ref. to letter No. RUSA/NODAL OFF./2016-17/163 dt: 14-08-2020.
4. The Head Department of Physics/Chemistry/Botany/Zoology/Maths. & Stats./Env. Sci./ Geology/Pharmacy, UCoS, MLSU, Udaipur.
5. The Director, Computer Centre, MLSU, Udaipur.
6. The Head, Deptt. of Economics / English / Geography / Hindi / History / Library Sci. / Political Sci./ Psychology / Readymade Garments / Sociology / Incharge-Centre for Women Studies, UCSSH, MLSU, Udaipur.
7. The Head, Deptt. of Acctts. & Stats./B.B.E./Bus. Adm., UCCMS, MLSU, Udaipur.
8. The P.S. to Hon'ble Vice-Chancellor, MLSU, Udaipur.
9. The S.O. Bill/Compilation/Cheque, MLSU, Udaipur.
10. The R.E. File 2020-21.
11. The Officer Incharge, University Website, MLSU, Udaipur.
12. Guard file.

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List of R & I Project proposals approved by MHRD for Financial Grant under RUSA2.0

S.No.	Department	Principal Investigator	Co-Investigator	Project Title	Total Amt. Budget Head- CSA-1-(3)-IV-	Sanctioned Amount (Ist Instalment)
1	Biotechnology	Dr. Nitish Rai	Dr. Namita Ashish Singh, Dr. Vivek Jain, Dr. Avinash Marval	Evaluation of ne neuroprotective effect and its underlying molecular mechanism by Costus Speciosus, a traditional medicinal plant of Udaipur district, Rajasthan	3000000 7-E(b)-(i)	1500000
2	Biotechnology	Dr. Harshada Joshi	Dr. Avinash Marwal	Screening and Use of Calcite Solubilizing Bacteria for Restoration of Marble Slurry Contaminated Soil	3000000 7-E(b)-(ii)	1500000
3	Botany	Prof. Kanika Sharma	Dr. G.S. Deora, Dr. Vinit Soni, Dr. Rohini Trivedi, Dr. Jaya Arora, Dr. Harish, Dr. Kuldeep Sharma, Dr. Amit K. Gupta, Dr. Tripta Jain , Dr. Mukesh Meena	Capacity building and livelihood security of tribals of south Rajasthan through bioprospecting, biotechnological interventions and disease management of ginger	30598480 7-E(a)-(i)	15299240

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4	Chemistry	Dr. Jyoti Choudhary	Prof. Pinki Bala Punjabi, Dr. Shikha Agrawal, Dr. Poonam Khandelwal, Dr. Chetna Ameta, Dr. Dinesh Pandey, Dr. Neetu Kumari, Dr. Dinesh Kumar Yadav, Dr. Nitin Kumar, Dr. Prabhat Kumar Baroliya, Dr. Sidharth Sharma, Dr. Rama Kanwar Khangarot, Dr. Gangotri Pemawat, Dr. Lokesh Kr. Agrawal, Ms. Himanshu Sharma, Dr. Pradhuman Singh Ranawat, Dr. Tarun Kumar, Dr. Devendra Singh, Mr. Vipin Khokher, Ms. Kiran Meena	Noval natural products from traditional medicinal plants of South Rajasthan region: Structural, synthetic and biological studies	47500000 7-C-(a)-(i)	23750000
5	Computer Sc.	Dr. Avinash Panwar	Prof. Deepak Khazanchi, Prof. K. Srinivas, Dr. Sumangla Rathore	A Customizable LMS for proper utilization and adoption of Global Knowledge Pool: An adaptation of contingency theory of E-learning	29295000 7-I(a)-(i)	14647500

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6	Env. Science	Prof. B.R. Bamania	Prof. Nidhi Rai, Dr. D.S. Rathore, Dr. Anuya Verma	Environmental issues of urban & rural tribal areas of Southern Rajasthan	26538000 7-G-(i)	13269000
7	Geology	Prof. S.R. Jakhar	Ms. Neha Rarh	Remote Sensing Based Study odDessicatedLik River of the Thar Dessert for Demarcating its course, its Rejuvination Possibilities abd Social Benefits	2020000 11-A-(i)	1010000
8	Geology	Dr. Maya Choudhary	Prof.(Retd.) M.L. Nagori	Study of Ostracods and Foraminifers from the Bagh Group (Upper Cretaceous) of Lower Narmada Valley: Determination of Age (OAE2 and OAE3) events and their Paleogeographic Implications	3035000 11-A-(ii)	1517500
9	Geology	Dr. Harish Kapasya	Dr. Ritesh Purohit	A Study of Tectonic Evolution of the Neoproterozoicmetasediments from Southern parts of Pali districts of Rajasthan	2950000 11-A-(iii)	1475000
10	Geology	Dr. Ankush Srivastava	Dr. Ashutosh K. Singh	Investigating the role of interoceanic exchange on Indian Ocean surface head redistribution and its impact on Indian monsoon during Quaternary: A multi-proxy approach	4159000 11-A-(iv)	2079500
11	Geology	Dr. Anjali Singh	Dr. Sudhir Kumar , Dr. Avner Vengosh	Assessment of Ground Water Quality and mapping Human Health Risk of Drinking Ground Water Resources in Rajasthan State, India	4844000 11-A-(V)	2422000
12	Geology	Mr. Akhil Kumar Dwivedi	Prof. Jayanta Kumar Pati, Dr. Anil Dutt Shukla, Dr. Ritesh Purohit	Heavy Metal approtionment of Geogenic and Anthropogenic souurces in Ganga River using Geomagnetic and Geochemical studies	4175000 11-A-(vi)	2087500

13	Geology	Mr. Niranjan Mohanty	Dr. Ritesh Purohit, Dr. Rajnikant Patidar	Geochemistry and Isotope syntematic of Ultramaficmafic rocks of Phulad shear zone, Aravalli-Delhi fold belt, North West India: Implication on Geodynamic significance and Platinum Group Elements (PGEs) Mettallogeny	3702800 11-A-(vii)	1851400
14	Geology	Mr. Rajanikant Patidar	Mr. Niranjan Mohanty	Geology, Geochemistry and Petrogenesis of Carbonatites and Associated Rocks of Siriwasan area district Chota Udepur, Gujrat	2287800 11-A-(viii)	1143900
15	Geology	Mr. Subhash Chandra Janagal	---	Study of Mineralogical and Thermo-mechanical Properties of Clay Deposit from Bikaner district, Rajasthan.	1775000 11-A-(ix)	887500
16	Geology	Prof.(Retd.) Vinod Agrawal	Dr. Harish Kapasya	Geological and Geotechnical Studies of Commercial Marbles of Rajasthan	4104000 11-A-(x)	2052000
17	Maths & Stats.	Dr. Mahesh Puri Goswami		Applications of Bicomplex algebra to fundamental Electromagnetics using fractional calculus	542640 7-D-(i)	271320
18	Maths & Stats.	Dr. Pradeep Kumar Vishwakarma	Dr. Abhimanyu Singh Yadav	Bayesian Analysis of Lifetime Models-Application to the Survival Data	1321000 7-D-(ii)	660500
19	Pharmacy	Dr. Joohee Pradhan	Prof. Lalit Singh Chouhan, Dr. Shikha Agrawal	Conjunction Based Drug Design Approach in Search of Third Generation Anti dpileptics: Design, Synthesis, Anticonvulsant Evaluation and Computer Aided Drug Design Studies of 4-(5-phenyl-1hpyrazol-3-yl) Benzenamine derivatives.	5000000 7-K-(i)	2500000
20	Pharmacy	Dr. Garima Joshi	Dr. Deepak Choudhary, Dr. Harish	Design, Development and Characterization of Oral Nanoformulation for Treatment of Cencer	5000000 7-K-(ii)	2500000

Nodal Officer
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21	Pharmacy	Dr. Saurabh K. Sinha	Prof. Lalit Singh Chauhan	Design, Synthesis, Evaluation and kinetic studies of derivatives of 4-aminopiperidine as potential antiamnesic and cognition enhancing agents.	5000000 7-K-(iii)	2500000
22	Pharmacy	Dr. Vivek Jain	Prof. Lalit Singh Chouhan,, Dr. Nitish Rai	In-vitro and In-vivo screening of poly herbal formulation (PHF-1) in age induced Alzheimer disease in mice	5000000 7-K-(iv)	2500000
23	Physics	Prof. B.L. Ahuja	Dr. Gunjan Arora, ,Dr. Lekhraj Meena	Measurement of magnetic Compton profiles of spintronics and magnetocaloric materials	11560720 7-B-(a)-(i)	5780360
24	Physics	Prof. N. Lakshmi	Prof. Sudhish Kumar, Dr. Ghanshyam Purohit, Dr. Dinesh Patidar	Development and optimization of energy conversion and storage materials based on perovskites, ferrites and graphene	9550000 7-B-(a)-(ii)	4775000
25	Physics	Prof. M.S. Dhaka	Dr. Shikha Agrawal	Fabrication of stable and high efficiency perovskite solar cell device	8829600 7-B-(a)-(iii)	4414800
26	Zoology	Prof. Arti Prasad	Dr. Girima Nagda	Survey and Analysis of Pesticide Residues in Consumable products (Fruits and Vagetables) Obtained from Different Vegetable market(Sabzi mandis) of Udaipur Region	12000000 7-F-(i)	6000000
27	Zoology	Prof. Arti Prasad	Dr. Devendra Kumar	Surveillance and insecticide resistance mapping against mosquitoes of malaria, dengue and chickungunya in Southern Rajasthan and Bacterial bio-pesticide as an urgent alternate tool for resistance management and vector control.	11980000 7-F-(ii)	5990000

Nodal Officer
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P.T.O.

28	Zoology	Dr. Vijay Kumar Koli	Dr. K.S. Gopi Sundar	Resource partitioning of three sympatric Ibis species (red-naped, Black-headed and Glossy) in Dungarpur district, Rajasthan: diet, habitat and landscape selection across seasons.	2896000 7-F-(iii)	1448000
29	Centre for Women Studies	Dr. Garima Mishra	---	Impact Assessment of Awarness about Women's Ligal Rights through Advocacy of Course on 'Women and Legal Rights'	935000 9-I-(i)	467500
30	Economics	Prof. Sanjay Lodha	Dr. Neha Paliwal Dr. Deepa Soni Mr. Mukesh Meena Dr. Anita Joya Dr. Vinita Rajpurohit	Exploring the Multidimensional Impact of MGNREGA : A Case Study of Rajasthan. (A) Impact of MGNREGA on Women Empowerment in Rajasthan (B) Impact of MNAREGA on Purchasing power of Beneficiaries (C) An Assessment of impact of assets creation in MNREGA (D) Impact of MGNREGA on Financial Inclusion (E) Impact of MGNREGA on migration and employment generation in Rajasthan	4000000 9-B-(i)	2000000
31	English	Prof. Seema Malik	Dr. P. Trikha, Dr. Bhanupriya Rohila, Mr. M.S.Purohit,Dr. Neetu Parihar, Dr. Suresh Salvi	Folklore of Vagad Region: Mapping oral Traditions	3145000 9-K-(i)	1572500
32	Geography	Dr, Bhanwar Vaishvendra Raj Singh	Dr. Bijay Singh Meena	Inclusive & Sustainable Development of Bombora, Boria, Sulawas, Sihad Gram Panchayat: Smart Village Initatives	2500000 9-C-(i)	1250000
33	Geography	Dr. Sabiha Khan	---	Prediction Model for Road Accidents: A Case Study of Udaipur City, India	1500000 9-C-(ii)	750000

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34	Geography	Dr. D.S. Chouhan	Prof. Seema Jalan, Dr. Shailesh Chaure	Impact of Water Quality on Health in Vagad Region of Rajasthan: An Application in Web-GIS	3004000 9-C-(iii)	1502000
35	Geography	Prof. Seema Jalan	Dr. Shailesh Chaure, Dr. Urmi Sharma	Electoral Information System for Governanace and Developmental Planning: A G-Governance Initiative	5725000 9-C-(iv)	2862500
36	Hindi	Dr. Ashish Sisodia		Mewari-vagad bolion ka hindi da sath tulnatmak addhyan	750000 9-L-(i)	375000
37	Hindi	Dr. Navin Kumar Nandwana	---	Aadivasi samaj me parivartan aur samkalin hindi upanyas	1884000 9-L-(ii)	942000
38	History	Prof. Pratibha	Prof. Digvijay Bhatnagar, Dr. Peeyush Bhadviya, Dr. Kailash Chand Gurjar, Mr. Manish Shrimali	Evolving Strategies of Conserving Cultural Heritage of Udaipur	3003000 9-P-(i)	1501500
39	Library Sc.	Dr. P.S. Rajput	---	Automation of Libraty services: An easy access to electronic resources and enhancement of research activities	5475000 9-D-(i)	2737500
40	Mass Comm.	Dr. Kunjan Acharya		Contribution of mass media in socio-economic development of tribal sub plan areas of Rajasthan.	1540000 9-J-(i)	770000
41	Political Science	Prof. Sanjay Lodha	Dr. Sanjay Kumar	Analyzing Voting Behaviour in Rajasthan: Post-poll study of the 2019 Lok Sabha Elections	3838825 9-E-(i)	1919412
42	Political Science	Prof. Sanjay Lodha	Dr. Vijay Dixit, Dr. Satish Chand, Dr. Baludan Barahath	Impact of Social Welfare Policies on Voting Behaviour: Case study of Assembly Elections in Madhya Pradesh, Rajasthan and Gujrat, 2008-2018	3603425 9-E-(ii)	1801713

(Dinesh Kumar)
Asstt. Registrar (PUR)
MLSU

43	Psychology	Prof. Kalpana Jain	Dr. Rashmi Singh, Dr. Hema Kumari Mehar	Strength based development of tribal adolescents of Southern Rajasthan: An empirical study	2100000 9-F-(i)	1050000
44	Psychology	Dr. Tarun Kumar Sharma	---	Suicides in Kota: Understanding causes and preparing prevention strategies in the form of a documentary film	700000 9-F-(ii)	350000
45	Readymade Garments	Dr. Dolly Mogra	Dr. Garima Mishra, Dr. Rupal Babel	Dimensions of Gender Discrimination in Textile Industry of Rajasthan	1196000 9-H-(i)	598000
46	Readymade Garments	Dr. Dolly Mogra	---	Empowering Enterpreneurial Skills Through Advocacy of "Fashion Design and Technology" Diploma Course	3788020 9-H-(ii)	1894010
47	Sociology	Dr. Raju Singh	Dr. Sangeeta athwal	Research Skill Development in social Sciences, Communication and Management	1500000 9-G (i)	750000
48	Sociology	Prof. P.M. Yadav	Dr. Rajkumari Ahir	Government plans and policies related to mother-child health: A Comparative sociological study (Special reference to tribal society)	3800000 9-G-(ii)	1900000
49	Accountancy and Statistics	Prof. G. Soral	Prof. Shurveer s. Bhanawat, Dr. Avinash Panwar, Dr. Shilpa Vardia, Dr. Shilpa Lodha, Dr. Asha Sharma, Dr. Parul Dashora, Sh. Pushpraj Meena	Blockchain Accounting : An Exploratory Research	5000000 8-B-(i)	2500000

Nodal Officer, PURA
MLSU

50	Banking & Buss. Eco.	Prof. Renu Jatana	---	Changing India: Training and market access for organic farming	3543000 8-C-(i)	1771500
51	Business Adm.	Prof. Rajeshwari Narendran	Prof. Manju Baghmar, Dr. Hemraj Choudhary	Measuring the impact of Workplace Happiness upon individual & Organizational performance: An interdisciplinary Intervention with Yoga and Meditation	2935000 8-D-(i)	1467500
52	FMS	Prof. Anil Kothari	---	Economics of Temple- An empirical Study of Selected Temples of North India	1000000 12-(i)	500000
53	FMS	Prof. Hanuman Prasad	---	Digital Financial Awareness: A Study of 'X' and 'Y' Generation Citizens of Rajasthan	1000000 12 (ii)	500000
54	FMS	Prof. Meera Mathur	Dr. Shubham Goswami	Study on Sustainable Consumption Behaviour of Urban Consumers Towards Electronic Products in Rajasthan	1500000 12 (iii)	750000
55	FMS	Prof. Karunesh Saxena	---	Stress Management using Training Intervention Techniques among the Adolescent Students : A Study of major cities of Rajasthan.	1000000 12-(iv)	500000
56	Botany	Head, Botany		D S Kothari Central Research Facility	28370690 7-E (a)-(ii)	14185345
				Total Rs.	350000000	175000000

Nodal Officer, IPR
MLSU

COMPTROLLER
Mohanlal Sukhadia University
UDAIPUR

(15)

Mohanlal Sukhadia University, Udaipur – 313039
Office of the Nodal Officer-RUSA, MLSU
(Rashtriya Uchhatar Shiksha Abhiyaan)

Prof. Kanika Sharma
Nodal Officer, RUSA
MLSU

RUSA/NODAL OFF./2016-17/ 163

Date: 14.08.2020

To
Comptroller,
Mohanlal Sukhadia University,
Udaipur.

Sub.: Financial Sanction for R & I Projects under RUSA 2.0
Ref.: No. F30(16)SPD/RUSA/2016/178 dated 31.03.2020

Dear Sir,

With reference to above you are requested to grant Financial sanction for the R & I proposals submitted and approved by MHRD under RUSA 2.0 as per the list enclosed so that work may be commenced on these projects.

Further you are requested to issue the sanction to individual PI with the instruction that all payments will be done through treasury after submission and approval of FVC bills by the PI. Also kindly issue the following guidelines to all PI with regard to the expenditure and implementation of project:

1. GF & AR i.e. Financial Rules and norms of Government of Rajasthan are to be followed.
2. The expenditure will be incurred as per the RUSA guidelines, PAB approvals and DPR submitted by the PI to the institution and forwarded to MHRD.
3. Proper accounts of the expenditure incurred out of the grant are to be maintained and ensure utilization of funds only under approved budget heads. A separate stock register and cash book must be maintained for RUSA grant.
4. Utilization certificate in the GFR 12-C showing clearly the actual expenditure incurred under various heads above and the unspent balance available with the PI, shall be furnished to the University, within 3 months from the receipt of the fund. Non submission of UC on time shall debar PI from release of next installment.
5. The final UC of complete grant supported by audited statement of expenditure to the effect that the grant has been utilized for the purpose for which it has been sanctioned shall be furnished to the SPD office by the institution on the basis of UC submitted by individual PI.
6. Audited record of assets acquired wholly or substantially out of the grant and a Register of Assets shall be maintained.
7. RUSA account details for receipts and payments shall be mapped on PFMS portal to facilitate fund transfer and monitoring.
8. The Council of SPD or its nominee shall have the right to check/verify the accounts to satisfy that the funds have been utilized for the purpose for which they were sanctioned.

Dy. Registrar

SO (Plan)

12/8/2020

9. FUND TRAKER FORM and Geotag Photographs on Bhuvan portal depicting the progress of implementation for activities carried out under the project are to be updated at periodic intervals showing three stage of implementation, i.e. (a) Before commencement, (b) The intermediate stage and (c) After the completion of the project.
10. No constructions is allowed under RUSA2.0
11. Any Renovation of existing facility will be allowed but only if it has been mentioned in the project proposal submitted to Rusa Nodal Officer.
12. Renovated facility and Equipment created/ acquired under the grant should display the RUSA logo for which this grant is being used.
13. Monthly progress report shall be submitted to the RUSA Nodal officer who will forward it to SPD RUSA for monitoring.
14. Monitoring will be based on action plans submitted along with the proposals and achievements made with respect to a set of norms as defined by the institutional development plan.
15. No change in the approved DCF/DPF/Proposals will be done at PI level. In case it is essential to undertake modification in the approved activities, the proposal for revision in DCF will first be discussed and approved in BOG of the institute and then submitted to SPD/RSHEC for approval of proposed changes with justification note and copy of BOG minutes.

Thanking you,

Yours Sincerely,

(Prof. Kanika Sharma)
Nodal Officer RUSA-MLSU

Nodal Officer RUSA
MLSU

ICFAI FOUNDATION FOR HIGHER EDUCATION ★ HYDERABAD

REGISTRAR
ICFAI FOUNDATION FOR HIGHER EDUCATION
(Deemed-to-be-University establishes under section 3 of UGC Act 1956.)