

Proactive Disclosure under Section 4(1)(b) of the RTI Act, 2005

Manual - 1:

1. Objective/Purpose of the public authority:

To prepare the students admitted to M. Sc. and Ph. D. programs in Mathematics for their final examinations.

2. Mission/Vision Statement of the public authority:

Looking at education as the all-inclusive and holistic activity, our vision is to try to impart mathematical information and the knowledge not merely from exam point of view, but also to develop mathematical aptitude, in the larger sense of the phrase, which is useful in the varied contexts.

3. Brief History of the public authority and the context of its formation:

The Department of Mathematics was established in 1959. World famous Relativist and Ex-Vice-Chancellor Dr. P. C. Vaidya was appointed as Professor and Shri H. N. Raval was appointed as Reader. Then after, renowned Mathematicians Prof. Saiyad Izhar Hussain, Prof. D. S. Basan, Prof. A. M. Vaidya, Shri B. M. Shah, Dr. M. Mishra, Prof. I. H. Sheth, Dr. L. K. Patel, Dr. N. C. Shah, Prof. P. J. Bhatt, Prof. N. R. Ladhawala served the department at different times. The introduction of 'New Mathematics' at all the levels was a huge task which was achieved by the able leadership of Prof. P. C. Vaidya with the help of his colleagues. The department was instrumental in establishing Suganitam Trust and Gujarat Ganit Mandal which have been playing an important role in organizing several activities related to mathematics and mathematics education.

4. Duties of the Public authority:

To engage in teaching and research according to the norms and regulations which are laid down by the higher authorities of the university on recommendations of UGC.

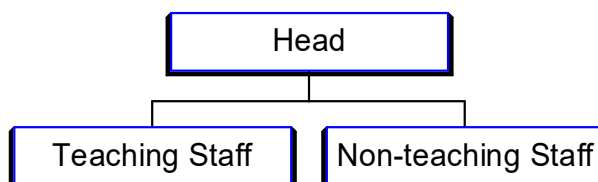
5. Main Activities/Functions of the public authority:

Teaching and research including the examination related work.

6. List of services being provided by the public authority with a brief write up on them:

Teaching, counseling, placement information and departmental library are some of the main services provided to the students of the department.

7. Organization of Department of Mathematics:



8. Expectation of the public authority from the public for enhancing its effectiveness and Efficiencies:

It is expected that public/students should inquire only after having a look at the website and the notice boards of the department.

9. Arrangements and methods made for seeking public Participation/contribution:

The office of the department can be contacted for any participation/contribution.

10. Mechanism available for monitoring the service delay and public grievance resolution:

Depending on the issue either the head will address the problem or shall bring to the notice of higher authorities.

11. Address: Department of Mathematics, Gujarat University, Navrangpura, Ahmedabad – 380 009.

12. Working hours:

Monday to Saturday : 11:00 am to 5:00 pm

Holidays on 2nd & 4th Saturday

Manual - 2: The Powers and Duties of Officers and Employees:-

Sr No.	Name	Designation	Duties
1	Dr. Nita H. Shah	Professor & Head	Apart from normal duties of teaching and conducting exams as per UGC guidelines, he coordinates the whole department.
2	Mr. Kaushik V. Thaker	Associate Professor	Apart from normal duties of teaching and conducting exams as per UGC guidelines, she looks after equipment purchase and maintenance.
3	Dr. Narendra P. Shrimali	Associate Professor	Apart from normal duties of teaching and conducting exams as per UGC guidelines, he looks after sports related students' activities. He looks after the placement of the students.
4	Dr. Ravi M. Gor	Associate Professor	Apart from normal duties of teaching and conducting exams as per UGC guidelines, he also coordinates Post Graduate Diploma in Actuarial Sciences (PGDAS) program.
5	Mr. Rohan D. Shah	Head Clerk	Office Administration and Computer Lab Maintenance

Manual - 3:

The Procedure followed for decision making process, including channels of supervision and accountability.

(1) What is the procedure followed to take a decision for various matters? (A reference to Secretariat Manual and Rule of Business Manual, and other rules / regulations etc can be made)? What are the documented procedures / laid down procedures / Defined Criteria / Rules to arrive at a particular decision for important matters? What are different levels through which a decision process moves?

- The important decisions are taken according to the rules and regulations of the university acts and statutes which are the public documents. The day-to-day matters of running the department are decided by the Head having consultations with the colleagues.

(2) What are the arrangements to communicate the decision to the public?

- Direct classroom communication
- Department Notice Boards
- Gujarat University Website: www.gujaratuniversity.org.in
- Very important announcements are also done through news-paper

(3) Who are the officers at various levels whose opinions are sought for the process of decision making?

- Head, Director, Dean, Registrar, PVC, VC and members of the statutory bodies like Board of Studies, Finance Committee, Academic Council, Executive Council and Senate as documented in the Gujarat University Act.

(4) Who is the final authority that vets the decision?

- Head – for the matters related to day-to-day functioning of department.
- Registrar and VC

(5) Please provide information separately in the following format for the important matters on which the decision is taken by the public authority.

Sl. No.	1
Subject on which the decision is to be taken	Admission Process
Guideline / Direction, if any	P.G. Circulars directed through P. G. Section of the University
Process of Execution	Implementation through the HOD.
Designation of the officers involved in decision making	Head and the admission committee instituted by the Head.
Contact information of above mentioned officers	Head, Department of Mathematics, Gujarat University, Ahmedabad - 9 Tel. 079-26301154 e-mail: maths-gujuni@hotmail.com
Sl. No.	2
Subject on which the decision is to be taken	Utilization of money sanctioned for the department
Guideline / Direction, if any	We follow the guidelines laid down by the university authorities.
Process of Execution	Our proposals are scrutinized and sanctioned by the CAO/DO/Registrar/VC/Finance Committee depending on the size/volume of the matter as per the university rules and regulations
Designation of the officers involved in decision making	Head and the higher authorities as stipulated earlier
Contact information of above mentioned officers	As mentioned above and also available elsewhere
Sl. No.	3
Subject on which the decision is to be taken	Assignment of teaching schedule
Guideline / Direction, if any	The whole teaching schedule is designed according to the guidelines laid down in the CBCS.
Process of Execution	Implementation through the HOD
Designation of the officers involved in decision making	As mentioned above
Contact information of above mentioned officers	As mentioned above

Manual – 4:**The Norms set by it for the discharge of its functions:-**

Please provide list of rules, regulations, instructions, manual and records, held by public authority or under its control or used by its employees for discharging functions as per the following format. This format has to be filled for each type of document.

Name /Title of Document	P. G. Rules (Ordinance & Regulations) and Syllabi
Type of Document	Various rules and regulations for M. Sc., M. Phil. & Ph. D. programs
From where one can get a copy of rules, regulations, instruction, manual and record (If any)	Gujarat University Website and P. G. Section
Fee Charges by the department for a rules regulations, instruction, manual and record (If any)	Free

Manual – 5:**The Rules, Regulations, Instructions, Manuals and Records, held by it or under its Control or used by its Employees for discharging its Functions:**

While discharging our functions we follow Rules, Regulations, Instructions Manuals and Records communicated by the university and UGC from time to time.

Manual – 6:**A Statement of the Categories of Documents that are held by it or under its control:**

Use the format given below to give the information about the official documents. Also mention the place where the documents are available for e.g. at Secretariat level, directorate level, others (Please mention the level in place of writing "Others").

S. No.	Category of the Document	Name of the document & its introduction in online	Procedure to obtain the document	Held by / under control of
1	University Acts and Statutes	Gujarat University Handbook Part-A,B,C,D	Available free at Gujarat University Website	Registrar, Gujarat University
2	P. G. Rules (Ordinance & Regulations) and Syllabi	Ordinance & Regulations M. Sc.	-do-	-do-
3	Ph. D. Program	Rules, Regulations and Ph. D. Ordinances	-do-	-do-

Manual – 7: The Particulars of any arrangement that exists for consultation with, or representation by, the members of the public in relation to the formulation of its policy or implementation thereof:

S. No.	Subject / Topic	Is it mandatory to ensure public participation (yes / no)	Arrangements for seeking public participation.
	Not Applicable		

Manual – 8: A Statement of the Boards, Councils, Committees and other Bodies Consisting of Two or more Persons Constituted as its part those Boards, Councils, Committees and other Bodies are open for the public, or the Minutes of such Meetings are Accessible for Public:

NOT APPLICABLE

Manual – 9: A Directory of its Officers and Employees.

Sr. No.	Name	Designation	Telephone No.		Fax No.	E-mail
			Office	Mobile		
1	Dr. Nita H. Shah	Professor & Head	26301154	9825261816	-	nitahshah@gmail.com
2	Mr. Kaushik V. Thaker	Asso. Prof.	26301154	9825867429	-	kv.thaker23@gmail.com
3	Dr. Narendra P. Shrimali	Asso. Prof.	26301154	9879159776	-	narenp05@yahoo.co.in
4	Dr. Ravi M. Gor	Asso. Prof.	26301154	9825323243	-	ravigor@hotmail.com
5	Mr. R. D. Shah	Head Clerk	26301154	9376144726	-	rohan.aug28@gmail.com

Manual - 10: The Monthly Remuneration Received by Each of its Officers and Employees, Including the System of Compensation as Provided in its Regulations:

Information available on Gujarat University Website

Manual - 11: The Budget Allocated to each of its Agency, Indicating the Particulars of all Plans, Proposed Expenditures and Reports on Disbursement made:

Information available on Gujarat University Website

Manual - 12: The Manner of Execution of Subsidy Programmes, including the amounts allocated & the details of Beneficiaries of such Programmes:

NOT APPLICABLE

Manual - 13: Particulars of recipients of concessions, Permits or Authorizations granted by it.

NOT APPLICABLE

Manual - 14: Details in Respect of the Information, Available to or held by it, Reduced in an Electronic Form:

www.gujaratuniversity.ac.in

Manual - 15: The Particulars of Facilities available to Citizens for Obtaining Information, Including the Working Hours of a Library or Reading Room, if Maintained for Public use.
NOT APPLICABLE

Manual - 16: The Names, Designations and Other Particulars of the Public Information Officers:

Sr. No.	Department/ Organization	Name	Designation	Telephone No.		Fax No.	E-mail
				Office	Mobile		
1	Department of Mathematics	Prof. Nita H. Shah	Head	079-26301154	9825261816	-	nitahshah@gmail.com

Manual - 17: Such Other Information as may be prescribed; and thereafter update these Publications every year:

- Annexure-1 (DST Grant Reports/UC)

No.SR/FST/MSI-097/2014(C)
GOVERNMENT OF INDIA
MINISTRY OF SCIENCE & TECHNOLOGY
DEPARTMENT OF SCIENCE & TECHNOLOGY
(INSPIRE & FIST DIVISION)

ANNEXURE-1

Technology Bhawan,
New Mehrauli Road,
New Delhi -110016.

19th August, 2015

ORDER

Subject: Financial assistance (1st installment) to the Department of Mathematics & Statistics, University School of Science, Gujarat University, Navarangpura, Ahmedabad-380009, (Gujarat) on FIST Program.

Sanction of the President is hereby accorded to the implementation of the aforesaid project at a total cost of **Rs. 51,00,000/- (Rupees Fifty One lakh only)** for 5 years at the Department of Mathematics & Statistics, University School of Science, Gujarat University, Navarangpura, Ahmedabad-380009, (Gujarat). The details of this are given below:

To strengthen the research facilities in the Department

Capital Assets: Rs.48.0L

E+NW-Rs. 23.50L [i)Hardware-Rs. 18.50L (30 Desktop, 2 Printers, 10KVA UPS, Ethernet/switches and networking peripherals) and ii) Software-Rs. 5.0L (Maple: 2 users & Mathematica: 3 users)]

IF-Rs. 24.50 L [Books]

General Components: Rs.3.0L

M- Rs.3.00 L

Total : Rs. 51.00 Lakh

2. The sanction of the President is also accorded to the release of **Rs. 28,50,000/- (Rupees Twenty Eight lakh fifty thousand only)** to the **Registrar, University School of Science, Gujarat University, Navarangpura, Ahmedabad-380009, (Gujarat)** under FIST Program as 1st installment of the grant in 2015-2016 under 'creation of capital assets' head for the maximum cost of the aforesaid Equipment including (9.4%) Custom Duty & other duties under the 'Equipment'. The break-up of the 1st installment grant released now would be '**Equipment**': **Rs. 23.50 lakh for procurement of Equipments mentioned above [Equipments of Foreign Origin to be acquired on FE Terms only] & 'Infrastructure facility'; Rs. 5.0 lakh for Books.**

3. **The Department/College/Institute will appropriately limit the expenditure within the sanctioned amount in case of any expected excess expenditure.** The Department is requested to utilize the released funds in first one year.

4. The Department of Mathematics & Statistics, University School of Science, Gujarat University, Navarangpura, Ahmedabad-380009, (Gujarat) shall implement the aforesaid project on FIST Program with the 'Terms and Conditions' already agreed to by the University. Further, as per Rule 211 of revised GFRs the accounts of this Project Grants at Grantee Organization shall be made available for inspection by the sanctioning authority/ audit where ever the Organization is called upon to do so.

5. **There is no pending SE/UC on this Project as per details in the PFMS also. This is the first release of this project under FIST Program, which has been initiated, in this financial year so no previous UC is attached with this sanction order.**

6. The University/ Institute/College will furnish to the DST, Utilization Certificate and an audited Statement of Expenditure pertaining to the grant immediately after the end of each financial year.

Contd..2/..

7. The grant is being released subject to the 'Terms & Conditions' of the Program being agreed to by the Department of Mathematics & Statistics, University School of Science, Gujarat University, Navarangpura, Ahmedabad-380009, (Gujarat). The University/Institute/College will maintain separate audited accounts and would keep whole of the grant in a bank account earning interest, the interest earned should be reported to the DST. The interest thus earned will be treated as a credit to the Institute to be adjusted towards further installment of the grant.

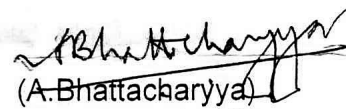
8. The expenditure involved is to be debited to
Demand No. - 86-Department of Science & Technology;
"3425" -Other Scientific Research (Major Head);
60-Others (Sub-Major Head);
60.200-Assistance to other Scientific Bodies (Minor Head);
25-Research & Development Support
25.01-Grants for Research & Development Support
25.01.35-Grants for creation of capital assets for the year 2015-2016(Plan)

The above release is made under 'R&D' Scheme.

9. The amount of **Rs. 28,50,000/- (Rupees Twenty Eight lakh fifty thousand only)** will be disbursed to the **Registrar, University School of Science, Gujarat University, Navarangpura, Ahmedabad-380009, (Gujarat)** in it's A/c No. 10298776261, IFSC Code: SBIN0002651 with State Bank of India, Ahmedabad, Gujarat.

10. The sanction issues under the powers delegated to the Ministries and with the concurrence of the Integrated Finance Division, Department of Science & Technology vide their C.Dy.No. 2190 /IFD/2015-2016 dated. 28.07.2015.

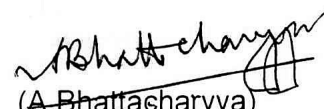
11. The sanction order is entered vide FIST Sl.No. 211 dated. 20.08.2015 in the register of grants.


(A. Bhattacharyya)
Scientist 'D'

Email: a.bhattacharyya@nic.in

Copy forwarded for information and necessary action to:

1. Pay & Accounts Officer, Department of Science & Technology, New Delhi - 110 016.
2. Cash Section (with two spare copies).
3. Registrar, Department of Mathematics & Statistics, University School of Science, Gujarat University, Navarangpura, Ahmedabad-380009, (Gujarat).
4. ✓ Head, Department of Mathematics & Statistics, , Gujarat University, Navarangpura, Ahmedabad-380009, (Gujarat). (Pl. Note the New Project No.) In case the sanctioned amount transferred under this sanction is not received by the P.I within 15 days from the date of issue of the sanction, the PI may intimate the fact with details of the IFD Diary No. & Date to the Joint Secretary and Financial Adviser at the e-mail address fin.adv.dst.dbt@gmail.com for looking into the matter and resolving it.
5. Office of the Director & Audit, Scientific Department, AGCR Bldg., 3rd Floor, IP Estate, New Delhi -110002.
6. Office of Account General, Gujara, Ahmedabad.
7. FIST-Secretariat.
8. CoA / IFD, DST, New Delhi.
9. Head, INSPIRE & FIST, DST New Delhi.
10. Sanction Folder.


(A. Bhattacharyya)
Scientist 'D'

Email: a.bhattacharyya@nic.in

No SR/FST/MSI-097/2014(C)
GOVERNMENT OF INDIA
MINISTRY OF SCIENCE & TECHNOLOGY
DEPARTMENT OF SCIENCE & TECHNOLOGY
R & D (Infrastructure) DIVISION

Technology Bhawan,
New Mehrauli Road,
New Delhi -110016

8th February, 2016

CORRIGENDUM

Subject: Financial assistance (1st installment) to the Department of Mathematics & Statistics, University School of Science, Gujarat University, Navarangpura, Ahmedabad-380009, (Gujarat) on FIST Program.

In partial modification of this Department's sanction letter of even no. dated 19th August, 2015 para no. 1 may please be substituted with:

Sanction of the President is hereby accorded to the implementation of the aforesaid project at a total cost of **Rs. 51,00,000/- (Rupees Fifty One lakh only)** for 5 years at the Department of Mathematics & Statistics, University School of Science, Gujarat University, Navarangpura, Ahmedabad-380009, (Gujarat). The details of this are given below:

To strengthen the research facilities in the Department

Capital Assets: Rs.48.0L

E+NW-Rs. 23.50L [(i)Hardware-Rs. 18.50L (30 Desktop, 2 Printers, 1 Server, 10KVA UPS, Ethernet/switches and networking peripherals) and ii) Software-Rs. 5.0L (Maple: 2 users & Mathematica: 3 users)]

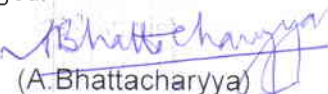
IF-Rs. 24.50 L [Books]

General Components: Rs.3.0L

M- Rs.3.00 L

Total : Rs. 51.00 Lakh

2. The remaining contents of the earlier sanction order would remain unchanged.

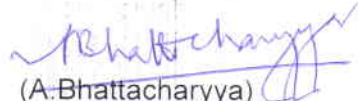

(A. Bhattacharyya)

Scientist 'D'

Email: a.bhattacharyya@nic.in

Copy forwarded for information and necessary action to:

1. Pay & Accounts Officer, Department of Science & Technology, New Delhi - 110 016.
2. Cash Section (with two spare copies).
3. Registrar, Department of Mathematics & Statistics, University School of Science, Gujarat University, Navarangpura, Ahmedabad-380009, (Gujarat).
4. Head, Department of Mathematics & Statistics, Gujarat University, Navarangpura, Ahmedabad-380009, (Gujarat). (Pl. Note the New Project No.) In case the sanctioned amount transferred under this sanction is not received by the P.I within 15 days from the date of issue of the sanction, the PI may intimate the fact with details of the IFD Diary No. & Date to the Joint Secretary and Financial Adviser at the e-mail address fin.adv.dst.dbt@gmail.com for looking into the matter and resolving it.
5. Office of the Director & Audit, Scientific Department, AGCR Bldg., 3rd Floor, IP Estate, New Delhi -110002.
6. Office of Account General, Gujara, Ahmedabad.
7. FIST-Secretariat.
8. CoA / IFD, DST, New Delhi.
9. Head, R&D Infrastructure, DST New Delhi.
10. Sanction Folder.


(A. Bhattacharyya)

Scientist 'D'

Email: a.bhattacharyya@nic.in

FORMAT - 2

Pro-forma for Report for utilization of FIST support

1. Name of Department: Department of Mathematics & Statistics, Gujarat University,
Ahmedabad – 380 009
2. Address for communication
Prof. (Dr.) Nita H. Shah
Department of Mathematics & Statistics,
Gujarat University,
Ahmedabad – 380 009, Gujarat
Email: nitahshah@gmail.com
Telephone: +91 9825261816 (M), 079 26301154 (O)
3. Date and ref. No. of DST Sanction letter: Nov. 21, 2014
Ref.No. SR/FST/MSI-097
4. Details of the Grants:
Total Sanctioned Amount: Rs. 51,00,000/-
Details of First Installment Rs. 28,50,000/-:

Budget Heads	Amount Sanctioned with Date	Amount Received with Date
a. Equipment 1. Desktops (30) 2. Printers (2) 3. UPS 10 kv (1) 4. Server (1) b. Networking	Rs. 18,50,000/-	
c. Infrastructure Books	Rs. 5,00,000/-	
Software Maple (2 users) Mathematica (3 users)	Rs. 5,00,000/-	
d. Maintenance	NA	
e. Total	Rs. 28,50,000	Rs. 28,50,000 Received on March 29, 2016 in A/c DST FIST MATHSTAT

5. Equipment ordered/purchased/installed:

Name (with Model & Make)	Order Date	Installation date	Cost in INR
Hardware:			18,36,573/-
Desktop Computer			
1. I7 (8) Lenovo	Nov. 8, 2016	Nov. 12, 2016	4,31,768/-
2. I5 (22) Lenovo	Nov. 16, 2016	Nov. 19, 2016	10,57,195/-
Printer (2) Brother	March 8, 2016	April 22, 2016	22,772/-
10 KVA Online UPS ADOR HP-1110	March 9, 2016	May 28, 2016	1,87,641/-
Server with Networking:			1,37,197/-
1) Ethernet Switches & Networking Peripheral		Sept 27, 2016	50,000/-
2) Server HP- ML310eG	Nov 4, 2016	Nov 5, 2016	68,460/-
GIL Charges			6014/-
TDS on GIL Charges			123/-
3) 24 Port Switch with Router		Jan 24, 2017	12,600/-
Software:			5,00,000/-
Maple Software (2 Users)	Mar. 10, 2016	March 16, 2016	1,92,967/-
Mathematica (3 Users)	Mar. 30, 2016	April 8, 2016	3,07,033/-
Books:			5,00,303/-

6. Details of Infrastructure developed: [A computer laboratory is developed from the DST-FIST grant.](#)

7. Details of Networking: [Networking with Internet facilities is available to all the students.](#)

8. Utilization of the facilities created under FIST support:

- a. For teaching: list the Classroom use of equipment and new experiments introduced, if any.

[Prof. \(Dr.\) A. K. Desai and Dr. N. P. Shrimali are using Mathematica to explore the concepts of Complex Analysis and Linear Algebra.](#)

[Prof. \(Dr.\) Nita H. Shah is using Maple for optimaization problems in SEM III and SEM IV.](#)

- b. For research: Identify the research programs, including names of groups or individual faculty members, who are using the major equipment (> 5 lakhs) acquired with the FIST support. [N/A](#)

9. Details of full length research publications (in peer-reviewed journals) during the period under report

Year 2015 – 2017

1. Prof. (Dr.) A. K. Desai

- 1) A Finite Difference Formula of Explicit Type for Pure Initial Value Problem of Heat Equation (with Dhruti B. Joshi), International Journal of Mathematics and Soft Computing Vol.7, No.2 (2017), 71 - 78;. ISSN Print : 2249 - 3328 ISSN Online : 2319 – 5215
- 2) Cordial Labeling of Generalized Jahangir Graph (with S.J.Gajjar); International Journal of Mathematics And its Applications; Volume 4, Issue 1–D (2016), 21–33, ISSN: 2347-1557 <http://ijmaa.in/>
- 3) Cordial Labeling of m-Splitting Graph of a Graph International Journal of Mathematics and Soft Computing Vol.7, No.1 (2017), 33 - 42. ISSN Print : 2249 - 3328 ISSN Online : 2319 – 5215
- 4) Optimizing Cipher Text Size for ASCII Based Cryptography Using Matrices International Journal of Multidisciplinary in Cryptology and Information Security Volume 5, No.5, September – October 2016, 8-11. ISSN: 2320-2610 (Paper With Devendra Sanyashi) Online at <http://www.warse.org/IJMCIS/static/pdf/file/ijmcis01552016.pdf>
- 5) Some notes on the solutions of BSM equation International Journal of Mathematics and Soft Computing (IJMSC) Vol.7, No.1 (2017), 51 - 56. ISSN Print : 2249 - 3328 ISSN Online : 2319 - 5215 (Joint Paper With Jigna Panchal)
- 6) Solution of BSM equation using Fourier Transform Method International Journal of Mathematics And its Applications (IJMAA) Volume 4, Issue 2–C (2016), 89–94. ISSN: 2347-1557 Available Online: <http://ijmaa.in/> (Joint Paper With Jigna Panchal)
- 7) Use of Fourier Transform in the Theory of Finance To appear in Vidya (The Research Journal of Gujarat University) (Joint Paper With Jigna Panchal)
- 8) Symmetry in Plane; Ultra Scientist of Physical Sciences 27(1), A, (2015), 49-54: ISSN 2231-346X(Print):

2. Prof. (Dr.) Nita H. Shah

- 1) (With Mrudul Y. Jani & Digesh B. Shah): Economic order quantity model under trade credit and customer returns for price-sensitive quadratic demand. Revista Investigacion Operacional, 36 (3), 240 – 248, 2015. # 398 ISSN: 0257-4306
- 2) (With Bijal Yeolekar & Nehal Shukla): Liquor habit transmission model. Applied Mathematics, 6 (8), 1208 – 1213, 2015. # 408 ISSN: 2152-7393 doi: <http://dx.doi.org/10.4236/1m.2015.68112>
- 3) Three-layered integrated inventory model for deteriorating items with quadratic demand and two level trade credit financing. International Journal of Systems Science: Operations & Logistics. Aug. 11, 2015 # 392 ISSN: 2330 – 2682 <http://dx.doi.org/10.1080/23302674.2015.1075078>

- 4) (With Poonam & Anirbid Sircar): Hydrocarbon production optimization: Theory and Practices. Advances in Petroleum Engineering: Petrochemical – II, 4, 211 – 238, 2015. Studium Press, LLC, USA # 354 ISBN: 1 – 62699 – 043 – 3
- 5) (With Urmila Chaudhari): Optimal policies for three players with fixed life time and two-level trade credit for time and credit dependent demand. Advances in Industrial Engineering, 4 (1), 89 – 100, 2015. # 412 ISSN: 2222-7067 doi:10.7508/aiem.2015.01.009
- 6) (With Digesh Shah & Dushyant Patel): Optimal transfer, ordering and payment policies for joint supplier-buyer inventory model with price-sensitive trapezoidal demand and net credit. International Journal of Systems Science, 46 (10), 1752-1761, 2015. # 331 ISSN: 1464-5319 doi: 10.1080/00207721.2013.835000 IF: 1.579
- 7) (With Bhavin J. Shah & Rohit Kapoor): A simulation- and genetic algorithm-based optimisation of closed-loop multi-echelon inventory system. International Journal of Mathematics in Operational Research, 8 (1), 28 – 59, 2016. # 384 ISSN: 1757-5869
- 8) (With Digesh Shah & Dushyant Patel): EPQ model for imperfect production processes with rework and random preventive machine time for deteriorating items and trended demand. Yugoslav Journal of Operations Research, 25 (3), 425-443, 2015. # 349 ISSN: 2374-6043 doi: 10.2298/YJOR130608019S
- 9) (With Digesh Shah & Dushyant Patel): Optimal credit period and ordering quantity for credit dependent trended demand and deteriorating items with maximum lifetime. Control & Cybernetics, 14 (2), 311 – 320, 2015. # 371 ISSN: 0324-8569
- 10) (With Bijal Yeolekar and Nehal Shukla): SEI - model for social messages. Journal of Basic and Applied Research International, 14 (2), 81 – 89, 2016. # 413 ISSN: 2395-3446
- 11) (With Urmial and Mrudul): Optimal down-stream credit period and replenishment time for a supply chain. Journal of Basic and Applied Research International, 14 (2), 101 – 115, 2016. # 407 ISSN: 2395-3446
- 12) (With Mahesh Yeolekar): Stability analysis for walking of passive dynamic biped robot. Journal of Basic and Applied Research International, 15 (3), 153 – 161, 2016. # 399 ISSN: 2395-3446
- 13) (With Mrudul Jani): Impact of future price increase on ordering policies for deteriorating items under quadratic demand. International Journal of Industrial Engineering Computations, 7 (3), 423 – 436, 2016. ISSN: 1923-2926 doi:10.5267/j.ijec.2015.12.006
- 14) (With Isha and Sarla Pareek): Deteriorating inventory model under permissible delay in payments and fuzzy environment. Chapter 5, Optimal Inventory Control and Management Techniques, 77 – 99, 2016. # 302 ISBN: 978-1-4666-9889-5
- 15) (With Mrudul): Optimal Ordering for Deteriorating Items of Fixed-Life with Quadratic Demand and Two-Level Trade Credit. Chapter 1, Optimal Inventory

Control and Management Techniques, 1 – 16, 2016. # 405 ISBN: 978-1-4666-9889-5

- 16) (With Digesh and Dushyant): Lot Size Model for Reverse Logistics with Quadratic Demand. Chapter 2, Optimal Inventory Control and Management Techniques, 17 – 30, 2016. # 380 ISBN: 978-1-4666-9889-5
- 17) (With Zalak and Bijal): Stability analysis of vertical transmission of HIV with delays in treatment and pre-AIDS. Journal of Basic and Applied Research International, 17 (2), 88 – 102, 2016. # 424 ISSN: 2395 – 3446
- 18) (With Bijal and Zalak): Mathematical Model for Hereditary Transmission of Culture. International Journal of Computer Applications, 142 (5), 29 – 32, 2016. # 435 ISSN: 0975 – 8887
- 19) (with Digesh and Dushyant): Optimal preservation investment, pricing and ordering policies for deteriorating inventory with trapezoidal demand. International Journal of Operational Research, 26 (3), 367–381, 2016. # 353 ISSN: 1745-7653
- 20) (with Bijal Yeolekar): Optimal fish harvesting with deterioration, effort and price-sensitive demand. Journal of Advances in Applied Mathematics, 1 (2), 124 –131, 2016. # 415 ISSN: 2414 – 754; <http://www.isaacpub.org/Archive.aspx?ids=1>
- 21) (With Urmila Chaudhari & Mrudul Jani): An integrated production-inventory model with preservation technology investment for time-varying deteriorating item under time and price sensitive demand. International Journal of Inventory Research, 3 (1), 81 – 98, 2016. # 418 ISSN: 1746-6970
- 22) (With Bijal Yeolekar, Urmila Chaudhari & Jyoti Gupta): Analysis of Effect of Environmental Discharge and Awareness Programs on Japanese Encephalitis Spread using Mathematical Modeling and Simulation. Chapter 4, Models and Methods for Supporting Decision-Making in Human Health and Environment Protection, 2016. # 400 ISBN: 978-1-63485-202-9
- 23) (With Zalak Patel & Bijal Yeolekar): Modeling vertical transmission of hepatitis B virus under treatment and Alcoholic habits. DCDIS – B, 23 (5b), 301 – 329, 2016. # 434 ISSN: 1918-2538
- 24) Retailer's optimal policies for deteriorating items with a fixed life-time under order-linked conditional trade credit. Uncertain Supply Chain Management, 5 (1), 126 – 134, 2017. # 436 ISSN: 2291-6830
- 25) (With Foram Thakkar & Bijal Yeolekar): dynamics of parking habits with punishment: An application of SEIR model. Journal of Basic and Applied Research International, 19 (3), 168 – 174, 2016. # 454 ISSN: 2395-3438
- 26) (With Aziz, Takasar, Umara, Muhammad): Qualitative behavior of pine wilt disease model. Journal of Basic and Applied Research International, 19 (3), 206 – 218, 2016. # 451 ISSN: 2395-3438
- 27) (With Urmila and O. K. Gupta): Two-layered supply chain with quadratic demand and preservation technology investment for time dependent deteriorating item

- with fixed-life. *Advanced Modeling and Optimization: An Electronic International Journal*, 18 (2), 285 – 299, 2016. # 417 ISSN: 1841-4311
- 28) (With Mrudul and Urmila): study of imperfect manufacturing system with preservation technology investment under inflationary environment for quadratic demand: a reverse logistic approach. *Journal of Advanced Manufacturing Systems*, 16 (1), 17 – 34, 2017. # 437 ISSN: 1793-6896 DOI: 10.1142/S0219686717500020
 - 29) Joint Decision for Price Competitive Inventory Model with Time-Price and Credit Period Dependent Demand. *Handbook of Research on Advanced data mining techniques and applications for business intelligence*, Chapter 20, 341 – 352, 2017. # 420 ISSN: 2327 – 3275. Editors: Shrawan Kumar Trivedi et al.
 - 30) (With Chetan): Economic order quantity for deteriorating items under inflation with time and advertisement dependent demand. *OPSEARCH*, 54 (1), 168 – 180, 2017. # 423 ISSN: 0030 – 3887
 - 31) (With Foram & Bijal): Mathematical analysis of optimal control theory on underweight. *Advances in Research*, 8 (5), 1 –11, 2017. # 465 ISSN: 2348 – 0394
 - 32) (With Zalak and Bijal): Preventions and controls on congenital transmissions of Zika: Mathematical analysis, *Applied Mathematics*, 8, 500 – 519, 2017. # 458 ISSN: 2152 -7393
 - 33) Three-layered integrated inventory model for deteriorating items with quadratic demand and two level trade credit financing. *International Journal of Systems Science: Operations Research & Logistics*, 4 (2), 85 – 91, 2017. # 392 ISSN: 2330-2682
 - 34) (With Moksha & Bijal): Optimum control for spread of pollutants through forest resources, *Applied Mathematics*, 8, 607 – 620, 2017. # 481 ISSN: 2152 -7393
 - 35) (with Urmila & Mrudul): Inventory model with expiration date of items and deterioration under two-level trade credit and preservation technology investment for time and price sensitive demand: DCF approach. *International Journal of Logistic Systems and Management*, 27 (4), 420 – 437, 2017. # 432 ISSN: 0974-7206
 - 36) (with Foram & Bijal): Mathematical analysis of a motivated stage artist to be a film artist. *Advances in Dynamical Systems and Applications*, 12 (2), 163 -180, 2017. # 486 ISSN: 0973-5321
 - 37) (with Mrudul & Urmila): Retailer's optimal policies for price-credit dependent trapezoidal demand under two-level trade credit. *International Journal of Operations and Quantitative Management*, 23 (2), 115 – 130, 2017. # 421 ISSN: 1082-1910
 - 38) (with Mahesh Yeolekar): Influence of mass and length of biped robot on its passive walking. *International Journal of Applied Nonlinear Science*, 2 (4), 235 – 246, 2017. # 404 ISSN: 1752-2862

- 39) (with Zalak & Bijal): Threshold for vaccination in measles and its vertical transmission. *International Journal of Dynamical Systems and Differential Equation*, 7 (2), 157 – 168, 2017. # 445 ISSN: 1732-3591
- 40) (with Bijal & Zalak): Epidemics of corruption Using Incidence Function. *Economic Computation and Economic Cybernetics Studies and Research*, 51 (2), 165 – 180, 2017. # 444 ISSN: 1842–3264
- 41) (with Moksha & Bijal): Optimal control on depletion of green belt due to industries. *Advances in Dynamical Systems and Applications*, 12 (3), 217 -232, 2017. # 491 ISSN: 0973-5321
- 42) (with Chetansinh): Retailer's Replenishment and Pricing Decisions for Non-Instantaneous Deterioration and Price-Dependent Demand. *International Journal of Industrial Engineering & Production Research*, 28 (2), 101 – 111, 2017. # 450 ISSN: 2008-4889
- 43) (with Mrudul): Economic Order Quantity Model for Non-Instantaneously Deteriorating Items under Order-Size-Dependent Trade Credit. *Modelling, Measurement and Control Series D. Production Engineering and Management*, 37 (1), 1 – 19, 2016. # 409 ISSN: 1240-4551
3. Dr. N. P. Shrimali
 - 1) Neighborhood-prime labeling of some union graphs (with S K Patel), *International Journal of Mathematics & Soft Computing*; Vol.6, No.1 (2016) 39-47 ISSN 2319-5215

DEPARTMENT OF STATISTICS

1. Prof. (Dr.) R. G. Bhatt
 - 1) Paper entitled “An econometric assessment of water consumption: A case study of New North zone of Surat city” is published in *An International journal for change and development, Voice of Research.* ISSN -2277-7733, Vol .6, Issue 1, June 2017, page No 65-68.
 - 2) The paper entitled “Water Quality Assessment through Water Quality Index: An Application to Purna river in Surat District.” is accepted and will be published in upcoming issue in January 2018 of *SR .Excel's Research Update- A Journal of Multidisciplinary Research* –ISSN: 2319-5258.
2. Prof. (Dr.) M. N. Patel
 - 1) 2016: Neha Bavarva, Puja Khatri, Shruti Parikh, Dhruv Trivedi, M. N. Patel, “Estimation of Stature and sex determination from the foot and /or shoe dimension in youngsters of Ahmedabad city of India”, *Indian Journal of Forensic Medicine and Toxicology*, Vol.10(1), pp 151- 156.
 - 2) 2016: B. S. Trivedi and M. N. Patel. “Estimation of parameters of Misclassified Size – Biased Borel distribution”, *Journal of modern applied statistical methods. (USA)*, Vol. 15(2), pp. 475-494. ISSN: 1538-9472.

- 3) 2016: B. S. Trivedi and M. N. Patel. "Estimation of parameters of Misclassified Size –Biased Discrete Lindley distribution", Communications in Statistics-simulation and Computation, (USA),(Accepted).
 - 4) B. S. Trivedi and M. N. Patel. "Classical Estimation of parameters of Misclassified Size – Biased Poisson Lindley distribution and Its Applications", Journal of Probability and Statistical Science, ISSN: 1726-3328, (Taiwan),Vol.15(1), pp.95-112.Classical Estimation for the Parameters of Misclassified Size-Biased Poisson Lindley Distribution and Its Applications
 - 5) Divya T. Patel and M. N. Patel. "A Bayesian approach to optimal warranty length for a Kumarswamy life time distributed product with general progressive censoring scheme " , International journal of Statistics and Economics, Vol. 18(2), pp. 93-106. ISSN: 0975-556X.
 - 6) Divya T. Patel and M. N. Patel. "A Bayesian approach to optimal warranty length for an exponential life time distributed product with multiply type-II censoring scheme " , International journal of Mathematics and Statistics, Vol. 18(3), pp. 64-81.
 - 7) Divya T. Patel and M. N. Patel. "A Bayesian approach to optimal warranty length for an exponential life time product" , International journal of Statistics and reliability Engineering, Vol. 4(1), pp. 1-9. ISSN(P): 2350-0174.
3. Prof. (Dr.) C. D. Bhavsar
- 1) Predicting Stock Market using Regression Technique (March 2015), Research Journal of Finance and Accounting, ISSN 2222-1697(paper), ISSN 2222-2847 (online), Vol-6, No.3,2015, 27-33. (Mitesh)
 - 2) Truncated two piece bivariate lognormal distribution (2015), Bulletin of Mathematics and Statistics Research, Vol-3, Issue-2, 2015, ISSN: 2348- 0580. (Parag)
 - 3) Comparative study of beneficiaries satisfaction level under IDDP between Banaskantha and Vadodara tribal districts of Gujarat (Feb-2015), Mathematical Sciences, International Research Journal. Vol-4, Issue-1, 198-205. (IMRF Journals; Ratna Prasad Multidisciplinary Research & Educational Society) (Samir).
 - 4) Logistic Regression: A tool for Estimating Still Birth; Indian Journal of Applied Research, Vol-5, Issue-9, September-2015; ISSN – 2249-555X, IMPACT FACTOR- 3.6241, p.45-48.(Dipti)
 - 5) Attribute Based Perceptual Map Using Discriminant Analysis: A Multivariate Tool to Study Bank Sector (August 2015) SAMIKSHA- An International Journal of Multidisciplinary Academic Research- TCC's , Vol-III, Issue-II, Pg: 95-97. ISSN 2320-3420.(Devina Upadhyay).
 - 6) Multiple Regression : A Multivariate Technique to Study Bank Sector (November- 2015), International Journal of Science Engineering and Technology,

Vol-3, Issue6: 2015, ISSN- online: 2348-4098, ISSN-print: 2395-4752, Impact factor-3.25. pg:20-22 .(Devina Upadhyay).

- 7) Factor Analysis: A Multivariate Tool to Study Bank Sector, (2015), International Journal of Management and Social Sciences Research (IJMSSR), ISSN: 2319-4421, Vol-4, No.5, May 2015, 57-61.
 - 8) Gini Coefficient: A Tool For Analysis Of Expected Fire Losses For Insurance Policies (2015) RBTR Vol 12, No 2, 295-304, ISSN 1941-9414. (Review of Business and Technology Research).
 - 9) Forecasting Electricity Price Using Seasonal ARIMA model and Implementing RTP Based Tariff in Smart Grid, (2016) (Hemant Joshi, Dr. Vivek Pandya, Mitesh): WSEAS TRANSACTIONS on POWER SYSTEMS, Volume-11, 2016, E-ISSN 2224-350X, pg:43-51.
 - 10) Age of Onset(initiation) of Daily Tobacco Consumption in Adults of Ahmedabad, 2016 IJSRSET/Volume 2/ issue 2/ Print ISSN: 2395-1990/ Online: 2394-4099 Themed Section: Engineering and Technology (Mamta Patel).
 - 11) Tobacco Consumption Patterns in Labourers of Ahmedabad; International Journal of Sciences and Research (IJSR) : ISSN(Online): 2319-7064, Index Copernicus Value(2013): 6.14/ Impact Factor(2015): 6.391, Volume 5, Issue 4, April 2016
 - 12) Tobacco Abuse in Adolescents And Young Adults of Ahmedabad And Pertinent Epidemiologic Measures, Volume 5, Issue 2, April 2016, Indian Journal of Research, PERIPEX, ISSN: 2250-1991, IF-5.215, IC Value- 77.65
 - 13) Review of Exploratory Factor Analysis: Some Guidelines for Empirical Researchers (Dec-2016), Sankhya Vignan(NSV 12) No.2, pp.46-62. ISSN: 2321-0877 (Stuti Dholikia)
 - 14) An Exploratory Study to Understand the Usage of WhatsApp in India(2017), Asian Journal of Research in Social Sciences and Humanities Vol. 7, No. 5, May 2017, pp. 135-145. ISSN 2249-7315, A Journal Indexed in Indian Citation Index DOI NUMBER: 135 , Asian Research Consortium, www.aijsh.com (Rooshabh Kumar Mehta)
4. Dr. Parvender
- 1) Pravender and Bhavika L. Patel. Balanced bipartite block designs with unequal block sizes. International Journal of statistics and Systems, Vol. 10, Number 2(2015), pp. 269-276.
 - 2) Pravender and Bhavika L. Patel. Construction of balanced bipartite block designs. Res. J. Recent Sci., 5(5), 41-46, (2016).
10. Sponsored research projects in operation during the period under report (please provide name/s of PI/Co-PIs, title of the project, funding agency and total quantum of external support) N/A
11. Utilization of Equipment from outside the Department: N/A

12. SELF-ASSESSMENT OF THE IMPACT OF FIST SUPPORT: Please specify if any of the following activity emerged/ improved as a consequence of the FIST support:

a. New class-room experiments at B.Sc./ M.Sc. or other levels:

Some teachers used Mathematica to demonstrate the analytical answers of certain problems of Complex Analysis course through the graphics.

b. Success of students at national level tests (various PG/Ph.D. entrance tests and tests for JRF etc)

c. Any new research project that emerged on the basis of the FIST support

d. Did the newly created facility lead to betterment of quality of research publications:
Yes. Research students get in-house facility to use software and deduce critical outputs from the research.

e. Any training program/ workshop organized by the department during the period of report, specially those involving the newly created facility)

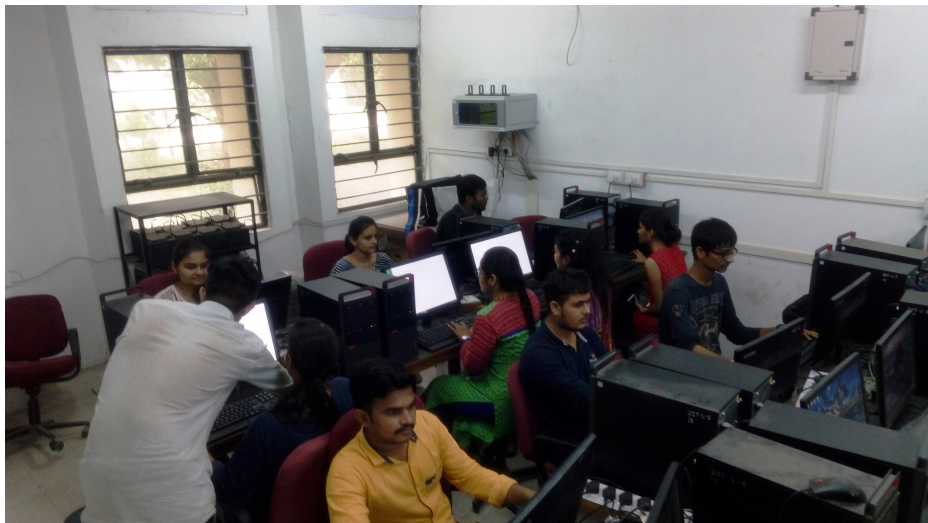
- Department organized Short Term Training Course on TOPICAL TOOLS FOR DOING MATHEMATICS during Sep 24 – 26, 2016.
45 delegates participated in the program.
- Department organized three days Research Meet (FIM) for “Budding Researchers” during April 14-16, 2017.
50 delegates participated in the program.

13. Is any problem faced in utilization of the grant/facilities? No

A report highlighting the research activities of the College during the period under review may also be provided.

Already explained in 12 (e).





28/06/2017

To,

A. Bhattacharya

Scientist 'D'

Department of Science & Technology

(Inspire & FIST Division)

Technology Bhavan,

New Mehrauli Road,

New Delhi-110016

CERTIFICATE

SR NO.	LETTER SANCTION NO. AND DATE	AMT. (Rs.)
--------	------------------------------	------------

1.	SR/FST/MSI-097 / 2014(C) Dated 08/02/2016	28,50,000/-
----	---	-------------

Certified that out of Rs.28,50,000.00 (Rupees Twenty-Eight Lacs Fifty Thousand only) of grants-in-aid sanctioned during the year 2015-16 in favour of Department letter/sanction Number given above, entire grant of Rs.28,50,000 (Rupees Twenty-eight Lacs Fifty Thousands only) remains unutilized at the end of the year 2015-16.

Certified that we have satisfied ourselves that the conditions on which the grants-in-aid was sanctioned have been duly fulfilled/are being fulfilled and that we have exercised the following checks to see that the money was actually utilized for the purpose for which it was sanctioned.

Kinds of checks exercised:

- Examined the record of Grant maintained in Excel
- Examined Bank book
- Sanction letter

Opening Bank Balance before Grant

Add: Grant Received during the year 2015-16

Less: Grant Utilized during the year 2015-16

Add: Interest Credited in Bank

Rs. 397

Rs.28,50,000

Rs. -

Rs. -

Closing Bank Balance as on 31-03-2016

Rs.28,50,397

For & On Behalf of
Lakhia & Co.,
Chartered Accountants,



Ketan Desai

Ketan Desai

(Partner)

Date: 28/06/17

[Signature]
Accounts Officer
Gujarat University,
Ahmedabad-380 009

[Signature]
Registrar
Gujarat University,
Ahmedabad-380 009.

28/06/2017

To,

A. Bhattacharya

Scientist 'D'

Department of Science & Technology

(Inspire & FIST Division)

Technology Bhavan,

New Mehrauli Road,

New Delhi-110016

CERTIFICATE

SR NO.	LETTER SANCTION NO. AND DATE	AMT. (Rs.)
1.	SR/FST/MSI-097 / 2014(C) Dated 08/02/2016	28,50,000/-

Certified that out of Rs.28,50,000.00(Rupees Twenty-Eight Lacs Fifty Thousand only) of grants-in-aid sanctioned during the year 2015-16 in favour of Department letter/sanction Number given above , a sum of Rs.28,36,875 has been utilized to purchase Books, Software and Hardware for the Department of Mathematics, Gujarat University, Ahmedabad for which it was sanctioned.

Interest of Rs.61,619 was earned on the same, So the unspent grant of Rs.13,124 plus Interest of Rs.61,619 amounting to Rs.75,140 remains unspent.

Certified that we have satisfied ourselves that the conditions on which the grants-in-aid was sanctioned have been duly fulfilled/are being fulfilled and that we have exercised the following checks to see that the money was actually utilized for the purpose for which it was sanctioned.

Kinds of checks exercised:

- Examined the record of Grant maintained in Excel
- Examined Vouchers
- Examined Bank book
- Sanction letter

Opening Bank Balance as on 01-04-2016

Rs.28,50,397

Add: Grant Received during the year

Rs. -

Less: Grant Utilized during the year 2016-17

Rs.28,36,876

Add: Interest credited in Bank

Rs. 61,619

Closing Bank Balance as on 31-03-2017

Rs. 75,140

For & On Behalf of
Lakhia & Co.,
Chartered Accountants



Ketan Desai
(Partner)

Accounts Officer
Gujarat University,
Ahmedabad-380 009

Registrar
Gujarat University,
Ahmedabad-380 009.

**GFR 12 – A**

[(See Rule 238 (1))]

**FORM OF UTILIZATION CERTIFICATE
FOR AUTONOMOUS BODIES OF THE GRANTEE ORGANIZATION**

UTILIZATION CERTIFICATE FOR THE YEAR **2017-18** in respect
of recurring/non-recurring
GRANTS-IN-AID/SALARIES/CREATION OF CAPITAL ASSETS

1. Name of the Scheme **DST-FIST**
2. Whether recurring or non-recurring grants **Hardware, Software & Books**
3. Grants position at the beginning of the Financial year
 - (i) Cash in Hand/Bank **Bank: 75,140/-**
 - (ii) Unadjusted advances **Nil**
 - (iii) Total **75,140/-**
4. Details of grants received, expenditure incurred and closing balances: (Actuals)

Unspent Balances of Grants received years [figure as at Sl. No. 3 (iii)]	Interest Earned Thereon	Interest deposited back to the Government	Grant received during the year Total			Total Available funds (1+2- 3+4)	Expenditure Incurred	Closing Balances (5-6)
1	2	3	4			5	6	7
			Sanction No. (i)	Date (ii)	Amount (iii)			
75,140/-	2,799/-	N/A	-	-	-	77,939/-	-	77,939/-

Component wise utilization of grants: **N/A**

Grant-in-aid– General	Grant-in-aid– Salary	Grant-in-aid–creation of capital assets	Total

Details of grants position at the end of the year

- (i) Cash in Hand/Bank : **77,939/-**
- (ii) Unadjusted Advances : **Nil**
- (iii) Total : **77,939/-**



GENERAL FINANCIAL RULES 2017
Ministry of Finance
Department of Expenditure

FORM GFR 12A

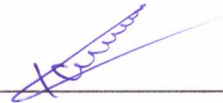
Certified that I have satisfied myself that the conditions on which grants were sanctioned have been duly fulfilled/are being fulfilled and that I have exercised following checks to see that the money has been actually utilized for the purpose for which it was sanctioned:

- (i) The main accounts and other subsidiary accounts and registers (including assets registers) are maintained as prescribed in the relevant Act/Rules/Standing instructions (mention the Act/Rules) and have been duly audited by designated auditors. The figures depicted above tally with the audited figures mentioned in financial statements/accounts.
- (ii) There exist internal controls for safeguarding public funds/assets, watching outcomes and achievements of physical targets against the financial inputs, ensuring quality in asset creation etc. & the periodic evaluation of internal controls is exercised to ensure their effectiveness.
- (iii) To the best of our knowledge and belief, no transactions have been entered that are in violation of relevant Act/Rules/standing instructions and scheme guidelines.
- (iv) The responsibilities among the key functionaries for execution of the scheme have been assigned in clear terms and are not general in nature.
- (v) The benefits were extended to the intended beneficiaries and only such areas/districts were covered where the scheme was intended to operate.
- (vi) The expenditure on various components of the scheme was in the proportions authorized as per the scheme guidelines and terms and conditions of the grants-in-aid.
- (vii) It has been ensured that the physical and financial performance under (name of the scheme has been according to the requirements, as prescribed in the guidelines issued by Govt. of India and the performance/targets achieved statement for the year to which the utilization of the fund resulted in outcomes given at Annexure – I duly enclosed.
- (viii) The utilization of the fund resulted in outcomes given at Annexure – II duly enclosed (to be formulated by the Ministry/Department concerned as per their requirements/specifications.)
- (ix) Details of various schemes executed by the agency through grants-in-aid received from the same Ministry or from other Ministries is enclosed at Annexure –II (to be formulated by the Ministry/Department concerned as per their requirements/specifications).

Date: 31/01/2019

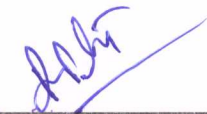
Place: Ahmedabad

Signature



Chief Finance Officer
(Head of the Finance)
Chief Accounts Officer(I/c.)
Gujarat University
Ahmedabad-380 009.

Signature



Head of the Organization
Registrar (I/c.)
Gujarat University
Ahmedabad-380 009.



30/01/2019

To,
A. Bhattacharya
Scientist 'D'
Department of Science & Technology
(Inspire & FIST Division)
Technology Bhavan,
New Mehrauli Road,
New Delhi-110016

CERTIFICATE

SR NO.	LETTER SANCTION NO. AND DATE	AMT. (Rs.)
1.	SR/FST/MSI-097 / 2014(C) Dated 08/02/2016	28,50,000/-

Certified that out of Rs.28,50,000.00(Rupees Twenty-Eight Lacs Fifty Thousand only) of grants-in-aid sanctioned during the year 2015-16 in favour of Department letter/sanction Number given above , a sum of Rs.28,36,875 had been utilized to purchase Books, Software and Hardware for the Department of Mathematics, Gujarat University, Ahmedabad for which it was sanctioned.Unspent grant of Rs. 75,140 was there as on 31.03.2017. Interest of Rs.2,799 was earned on the same, So the unspent grant of Rs.75,140 plus Interest of Rs.2,799 amounting to Rs.77,939 remains unspent.

Certified that we have satisfied ourselves that the conditions on which the grants-in-aid was sanctioned have been duly fulfilled/are being fulfilled and that we have exercised the following checks to see that the money was actually utilized for the purpose for which it was sanctioned.

Kinds of checks exercised:

- Examined the record of Grant maintained in Excel
- Examined Vouchers
- Examined Bank book
- Sanction letter

Opening Bank Balance as on 31-03-2017	Rs.75,140
Add: Grant Received during the year	Rs. -
Less: Grant Utilized during the year 2017-18	Rs. -
Add: Interest credited in Bank	Rs. 2,799
Closing Bank Balance as on 31-03-2018	Rs. 77,939

For & On Behalf of
Lakhia & Co.,
Chartered Accountants,

Ketan Desai

Ketan Desai
(Partner)



No.SR/FST/MSI-097/2014(C)
GOVERNMENT OF INDIA
MINISTRY OF SCIENCE & TECHNOLOGY
DEPARTMENT OF SCIENCE & TECHNOLOGY
R & D (Infrastructure) DIVISION

Technology Bhawan,
New Mehrauli Road,
New Delhi -110016.

18th March, 2019

ORDER

Subject: Financial assistance (2nd and 3rd installment) to the Department of Mathematics & Statistics, University School of Science, Gujarat University, Navarangpura, Ahmedabad-380009, (Gujarat) on FIST Program.

In continuation of this Department's sanction order of even number dated 19.08.2015, sanction of the President is hereby accorded to the payment of **Rs. 9,86,479/- (Rupees Nine lakh eighty six thousand four hundred and seventy nine only)** along with carry forward of unspent balance of Rs. 13,521/- available with the department to the **Registrar, University School of Science, Gujarat University, Navarangpura, Ahmedabad-380009, (Gujarat)** under FIST Program as 2nd and 3rd installment of the grant for creation of Capital Assets in 2018-2019 for [IF (Books)- Rs.9,86,479/-]

2. **The Department/Institute will appropriately limit the expenditure within the sanctioned amount in case of any expected excess expenditure.** The Department is requested to utilize the released funds in first one year from the date of sanction order.

3. This sanction is subject to the condition that the grantee organisation will furnish to the Department of Science & Technology, financial year wise Utilization Certificate (UC) in the proforma prescribed as per GFR 2017 and audited statement of expenditure (SE) along with up to date progress report at the end of each financial year duly reflecting the interest earned / accrued on the grants received under the project. This is also subject to the condition of submission of the final statement of expenditure, utilization certificate and project completion report within one year from the scheduled date of completion of the project.

4. The grantee organisation will have to enter & upload the Utilization Certificate in the PFMS portal besides sending it in physical form to this Division with UC id generated in PFMS Portal. The subsequent/final instalment will be released only after confirmation of the acceptance of the UC by the Division and entry of previous Utilization Certificate in the PFMS.

5. If the grant has been released under Capital head/General through separate sanction order(s) under the same project for purchase of equipment, separate SE/UC has to be furnished for the released Capital head/General grant.

6. The grant-in-aid being released is subject to the condition that:

(a) a transparent procurement procedure in line with the provisions of General Financial Rules 2017 will be followed by the University/Institute under the appropriate rules of the grantee organisation while procuring capital assets sanctioned for the above mentioned project and a certificate to this effect will be submitted by the University/Institute immediately on receipt of the grant, and

(b) while submitting Utilization Certificate/Statement of Expenditure, the University/Institute has to ensure submission of supporting documentary evidences with regard to the purchase of equipment/capital assets as per the provisions of GFR 2017. Subsequent release of grants under the project shall be considered only on receipt of the said documents.

c) Grantee Institute may furnish copy of invoice in respect of equipments worth Rs. 5.0 L and above along with customs clearance certification (in case of imported equipments) after procurement of the equipments.

d) Servers, Desktops, Workstations, Printers etc. may be procured through GeM (Government E-Market) platform.

e) Grantee Institute will furnish copy of bills showing expenditure incur on maintenance of the equipments after warranty period of respective equipments are over.

Contd..2/..

7. There is no pending SE/UC on this Project as per details in the PFMS also. The previous UC as received from the Department is attached with this Sanction Order and uploaded all previous UC's in PFMS.

8. "In terms of Rule 230(8) of GFR 2017, the grantee organization will maintain separate audited account for the project and the entire amount of grant will be kept in an interest bearing bank account. For Grants released during F.Y. 2017-18 and onwards, all interests and other earnings, generated against released Grant shall be remitted to Consolidated Fund of India".

9. DST reserves sole rights on the assets created out of grants. Assets acquired wholly or substantially out of government grants (except those declared as obsolete and unserviceable or condemned in accordance with the procedure laid down in GFR 2017), shall not be disposed of without obtaining the prior approval of DST.

10. "In terms of Rule 230(8) of GFR 2017, the grantee organization will maintain separate audited account for the project and the entire amount of grant will be kept in an interest bearing bank account. For Grants released during F.Y. 2017-18 and onwards, all interests and other earnings, generated against released Grant shall be remitted to Consolidated Fund of India".

11. Due acknowledgement of technical support / financial assistance resulting from this project grant should mandatorily be highlighted by the grantee organisation in bold letters in all publications / media releases as well as in the opening paragraphs of their Annual Reports during and after the completion of the project.

12. Failure to comply with the terms and conditions of the scheme will entail full refund with interest in terms of Rule 231 (2) of GFR 2017.

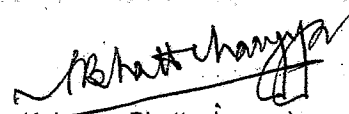
13. The expenditure involved is to be debited to
Demand No. -84 Department of Science & Technology;
"3425" -Other Scientific Research (Major Head);
60-Others (Sub-Major Head);
60.200-Assistance to other Scientific Bodies (Minor Head);
68- Science and Technology Institutional and Human Capacity Building
68.00.35-Grants for creation of capital assets for the year 2018-2019 (Voted)
[Previous: R&D Support: 3425.60.200.25.01:35]
The above release is made under 'R&D' Scheme.

14. The amount of **Rs. 9,86,479/- (Rupees Nine lakh eighty six thousand four hundred and seventy nine only)** will be drawn by the Drawing and Disbursing Officer, DST and will be disbursed to **Registrar, University School of Science, Gujarat University, Navarangpura, Ahmedabad-380009, (Gujarat)**. The bank details for electronic transfer of funds through RTGS are given below:-

1. Name of the Account Holder: **Registrar, University School of Science, Gujarat University**
2. Name of the Bank: **State Bank of India**
3. Bank Account Number: **10298776261**
4. IFSC Code: **SBIN0002651**
5. MICR Code:

15. As per Rule 234 of GFR 2017, this sanction has been entered at S. No.326 in the register of grants maintained in the Division for the scheme (**R&D Support**).

16. This issues with the concurrence of IFD Vide their **Concurrence Dy.No.5966 dated the 15.03.2019.**


(Arindam Bhattacharyya)
Scientist 'E'

Email: a.bhattacharyya@nic.in

Contd...3/-

No.SR/FST/MSI-097/2014(G)
GOVERNMENT OF INDIA
MINISTRY OF SCIENCE & TECHNOLOGY
DEPARTMENT OF SCIENCE & TECHNOLOGY
R & D (Infrastructure) DIVISION

Technology Bhawan,
New Mehrauli Road,
New Delhi -110016.

18th March, 2019

ORDER

Subject: Financial assistance (2nd and 3rd installment) to the Department of Mathematics & Statistics, University School of Science, Gujarat University, Navarangpura, Ahmedabad-380009, (Gujarat) on FIST Program.

In continuation of this Department's sanction order of even number dated 19.08.2015 sanction of the President is hereby accorded to the payment of Rs. 1,00,000/- (Rupees One lakh only) to the Registrar, University School of Science, Gujarat University, Navarangpura, Ahmedabad-380009, (Gujarat) under FIST Program as initial release of the grant for Grants-in-aid General in 2018-2019 for maintenance of equipments.

2. The Department/Institute will appropriately limit the expenditure within the sanctioned amount in case of any expected excess expenditure. The Department is requested to utilize the released funds in first one year from the date of sanction order.

3. This sanction is subject to the condition that the grantee organisation will furnish to the Department of Science & Technology, financial year wise Utilization Certificate (UC) in the proforma prescribed as per GFR 2017 and audited statement of expenditure (SE) along with up to date progress report at the end of each financial year duly reflecting the interest earned / accrued on the grants received under the project. This is also subject to the condition of submission of the final statement of expenditure, utilization certificate and project completion report within one year from the scheduled date of completion of the project.

4. The grantee organisation will have to enter & upload the Utilization Certificate in the PFMS portal besides sending it in physical form to this Division with UC id generated in PFMS Portal. The subsequent/final instalment will be released only after confirmation of the acceptance of the UC by the Division and entry of previous Utilization Certificate in the PFMS.

5. If the grant has been released under Capital head/General through separate sanction order(s) under the same project for purchase of equipment, separate SE/UC has to be furnished for the released Capital head/General grant.

6. The grant-in-aid being released is subject to the condition that:

(a). a transparent procurement procedure in line with the provisions of General Financial Rules 2017 will be followed by the University/Institute under the appropriate rules of the grantee organisation while procuring capital assets sanctioned for the above mentioned project and a certificate to this effect will be submitted by the University/Institute immediately on receipt of the grant, and

(b). while submitting Utilization Certificate/Statement of Expenditure, the University/Institute has to ensure submission of supporting documentary evidences with regard to the purchase of equipment/capital assets as per the provisions of GFR 2017. Subsequent release of grants under the project shall be considered only on receipt of the said documents.

c) Grantee Institute may furnish copy of invoice in respect of equipments worth Rs. 5.0 L and above along with customs clearance certification (in case of imported equipments) after procurement of the equipments.

d) Servers, Desktops, Workstations, Printers etc. may be procured through GeM (Government E-Market) platform.

e) Grantee Institute will furnish copy of bills showing expenditure incur on maintenance of the equipments after warranty period of respective equipments are over.

Contd..2/..

7. There is no pending SE/UC on this Project as per details in the PFMS also. The previous UC as received from the Department is attached with this Sanction Order and uploaded all previous UC's in PFMS.

8. "In terms of Rule 230(8) of GFR 2017, the grantee organization will maintain separate audited account for the project and the entire amount of grant will be kept in an interest bearing bank account. For Grants released during F.Y. 2017-18 and onwards, all interests and other earnings, generated against released Grant shall be remitted to Consolidated Fund of India".

9. DST reserves sole rights on the assets created out of grants. Assets acquired wholly or substantially out of government grants (except those declared as obsolete and unserviceable or condemned in accordance with the procedure laid down in GFR 2017), shall not be disposed of without obtaining the prior approval of DST.

10. "In terms of Rule 230(8) of GFR 2017, the grantee organization will maintain separate audited account for the project and the entire amount of grant will be kept in an interest bearing bank account. For Grants released during F.Y. 2017-18 and onwards, all interests and other earnings, generated against released Grant shall be remitted to Consolidated Fund of India".

11. Due acknowledgement of technical support / financial assistance resulting from this project grant should mandatorily be highlighted by the grantee organisation in bold letters in all publications / media releases as well as in the opening paragraphs of their Annual Reports during and after the completion of the project.

12. Failure to comply with the terms and conditions of the scheme will entail full refund with interest in terms of Rule 231 (2) of GFR 2017.

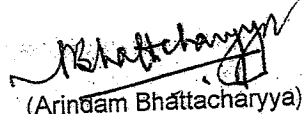
13. The expenditure involved is to be debited to
Demand No. -84 Department of Science & Technology;
"3425" -Other Scientific Research (Major Head);
60-Others (Sub-Major Head);
60.200-Assistance to other Scientific Bodies (Minor Head);
68- Science and Technology Institutional and Human Capacity Building
68.00.31- Grants-in-aid Generals for the year 2018-2019 (Voted)
[Previous: R&D Support: 3425.60.200.25.01.31]
The above release is made under 'R&D' Scheme.

14. The amount of Rs. 1,00,000/- (Rupees One lakh only) will be drawn by the Drawing and Disbursing Officer, DST and will be disbursed to the Registrar, University School of Science, Gujarat University, Navarangpura, Ahmedabad-380009, (Gujarat) The bank details for electronic transfer of funds through RTGS are given below:-

6. Name of the Account Holder: Registrar, University School of Science, Gujarat University
7. Name of the Bank: State Bank of India
8. Bank Account Number: 10298776261
9. IFSC Code: SBIN0002651
10. MICR Code:

15. As per Rule 234 of GFR 2017, this sanction has been entered at S. No.327 in the register of grants maintained in the Division for the scheme (R&D Support).

16. This issues with the concurrence of IFD Vide their Concurrence Dy.No.5965 dated the 15.03.2019.


(Arindam Bhattacharyya)
Scientist 'E'
Email: a.bhattacharyya@nic.in



UTILIZATION CERTIFICATE

It is certified that Dr. Nita H Shah had Opening unspent balance of **Rs. 77,939/-** (Rupees Seventy Seven Thousand Nine Hundred Thirty Nine Only) (as per last Utilization Certificate dated 30/01/2019 provided to us) out of Total Budget of Grant of **Rs. 51,00,000/-** (Rupees Fifty One Lakh Only) For Project name " DST FIST Project" for Project id SR/FST/MSI-097/2014(C) during F.Y. – 2018-19 out of which **Rs. Nil** had been utilized to Purchase Books, Software and Hardware for the Department of Mathematics, Gujarat University, Ahmedabad for which it was sanctioned during F.Y. – 2018-19 they had Available Balance with project initiator is **Rs. 77,939/-** (Rupees Seventy Seven Thousand Nine Hundred Thirty Nine Only) and plus Bank Interest of **Rs. 2,765/-** (Rupees Two Thousand Seven Hundred Sixty Five Only) Being Total Available Balance **Rs. 80,704/-** (Rupees Eighty Thousand Seven Hundred Four Only).

As per the Information and Explanation received from Management, All the Terms and Conditions have been fulfilled by the institution and the grant has been utilized for the purpose for which it was approved.

Place : Ahmedabad
Date : 09/07/2021
UDIN : 21155836AAAAFC9124

For, NSAB & Associates
Chartered Accountants

Arpit Brahmhatt
CA Arpit Brahmhatt (Partner)
M No. : 155836
FRN : 134295W





UTILIZATION CERTIFICATE

It is certified that Dr. Nita H Shah had Opening unspent balance of **Rs. 80,704/-** (Rupees Eighty Thousand Seven Hundred Four Only) (as per last Utilization Certificate dated 09/07/2021 provided to us) and 2nd and 3rd Installment of amount **Rs. 9,86,479/-** (Rupees Nine Lakh Eighty Six Thousand Four Hundred Seventy Nine Only) and **Rs. 1,00,000/-** (Rupees One Lakh Only) Received wide Sanction order no. SR/FST/MSI-097/2014(C) dated 18th March, 2019 out of Total Budget of Grant of **Rs. 51,00,000/-** (Rupees Fifty One Lakh Only) For Project name " DST FIST Project" for Project id SR/FST/MSI-097/2014(C) during F.Y. – 2019-20 out of which **Rs. Nil** had been utilized to Purchase Books, Software and Hardware for the Department of Mathematics, Gujarat University, Ahmedabad for which it was sanctioned during F.Y. – 2019-20 they had Available Balance with project initiator is **Rs. 11,67,183/-** (Rupees Eleven Lakh Sixty Seven Thousand One Hundred Eighty Three Only) and plus Bank Interest of **Rs. 30,962/-** (Rupees Thirty Thousand Nine Hundred Sixty Two Only) Being Total Available Balance **Rs. 11,98,145/-** (Rupees Eleven Lakh Ninety Eight Thousand One Hundred Forty Five Only).

As per the Information and Explanation received from Management, All the Terms and Conditions have been fulfilled by the institution and the grant has been utilized for the purpose for which it was approved.

Place : Ahmedabad
Date : 09/07/2021
UDIN : 21155836AAAFD5903

For, NSAB & Associates
Chartered Accountants



CA Arpit Brahmabhatt (Partner)
M No. : 155836
FRN : 134295W



UTILIZATION CERTIFICATE

It is certified that Dr. Nita H Shah had Opening unspent balance of **Rs. 11,98,145/-** (Rupees Eleven Lakh Ninety Eight Thousand One Hundred Forty Five Only) (as per last Utilization Certificate dated 09/07/2021 provided to us) out of Total Budget of Grant of **Rs. 51,00,000/-** (Rupees Fifty One Lakh Only) For Project name " DST FIST Project" for Project id SR/FST/MSI-097/2014(C) during F.Y. – 2020-21 out of which **Rs. 10,55,883/-** (Rupees Ten Lakhs Fifty Five Thousand Eight Hundred Eighty Three Only) had been utilized to Purchase Books, Software and Hardware for the Department of Mathematics, Gujarat University, Ahmedabad for which it was sanctioned during F.Y. – 2020-21 they had Available Balance with project initiator is **Rs. 1,42,262/-** (Rupees One Lakh Forty Two Thousand Two Hundred Sixty Two Only) and plus Bank Interest of **Rs. 8,624/-** (Rupees Eight Thousand Six Hundred Twenty Four Only) Being Total Available Balance **Rs. 1,50,886/-** (Rupees One Lakh Fifty Thousand Eight Hundred Eighty Six Only).

As per the Information and Explanation received from Management, All the Terms and Conditions have been fulfilled by the institution and the grant has been utilized for the purpose for which it was approved.

Place : Ahmedabad
Date : 09/07/2021
UDIN : 21155836AAAAFE2695

For, NSAB & Associates
Chartered Accountants

Arpit Brahmhatt


CA Arpit Brahmhatt (Partner)
M No. : 155836
FRN : 134295W