



Dayanand Education Society's  
**Dayanand Science College**

Latur, Maharashtra (India)

(UGC - CPE College)

(DST-FIST Sponsored College)

(Best College Award by SRTMU, Nanded)

(Affiliated to - Swami Ramanand Teerth Marathwada University, Nanded)

Establishment : June 1961

Independent : 1967

Re-accredited 'A' Grade

Phone No.: (02382) 221149, 222929

E-mail : daya\_scin1@rediffmail.com

Fax No. : (02382) 221149

Website : www.dsclatur.org

**Laxmiraman Lahoti**

President

**Dr. Jaiprakash Dargad**

Principal

**Ramesh Biyani**

Secretary

Ref. No.

PL/2018-19/ ugr

Date : 10/07/2018

To,

Prof. Ravikumar

The Co-ordinator,

Joint Science Education Pannel

Indian Academy of Sciences, Bangaluru.

Email - ravi@ias.ac.in

Sir,

Please find enclosed herewith the original Bills of expenditure with utilization which have been audited by competent authority Chartered Accountant. Also enclosed C. D. containing the resource materials which is expected from course Director. Two photographs of excursion tour at Chakur also enclosed. A list of Resource Persons with full postal addresses alongwith photographs are enclosed. A list of Participants outstation 16 + Local Participants 10 Total 26. A Report of the course co-ordinator along with xerox copies of photographs wherever required is enclosed herewith. Receipts of Books distributed to participants enclosed.

The total expenditure incurred 7,02,929.00 and the total amount received from you is 6,64,130.00. Now the balance amount 38,799.00 is due from Indian academy of Sciences. Please pay the balance amount at the earliest.

Thanking you.

Co-ordinator

R. H. Ladda

Ex. Principal

(Mobile No.9420436904)

(rhladda@gmail.com)

Convener

Dr. J. S. Dargad

Principal

Dayanand Science College, Latur

(Mobile No.9403970550)

# SCIENCE ACADEMIES' EDUCATION PROGRAMME

SEP/RC/June/2018

16 February 2018

## JOINT SCIENCE EDUCATION PANEL

### Indian Academy of Sciences

Murthy, M.R.N.

(Chairman)

Kanharem D.G.

(Co-Chairman)

Arunan, E.

Bachhawat, A. K.

Balakrishnan, V.

Chattopadhyay, Nitin

Dhar, Deepak

Mukunda, N.

Radhakrishnan, T. P.

Rangarajan, Govindan

Saidapur, S.K.

Sankaran, P.

Satheesh, S.K.

Sebastian, K. L.

Sengupta, Pulak

Subramaniam,

Annapurni

### Indian National Science Academy

Chattaraj, P. K.

Chaudhuri, Probal

Ghosh, Amit

Goswami, J.N.

### The National Academy of Sciences, India

Dimri, V.P.

Khurana, Paramjit

Misra, Gadadhar

Mittal, J.P.

### Contact Address

Ravikumar, C.S.

Coordinator

Science Education

Programme

Indian Academy of

Sciences

P.B. No. 8005

C.V. Raman Avenue

Sadashivanagar P.O.

Bengaluru 560 080

India

### Telephone:

91-80-2266 1210

91-80-2266 1207

Fax:

91-80-2361 6094

Dr R.H. Ladda  
Ex Principal  
3, Bhagya Nagar  
Old AUSA Road  
Latur 413 512

Sub: Refresher Course on "Mathematics" at Dayananda Science College, Latur during 11-25 June 2018.

Dear Dr Ladda,

This has reference to your letter forwarding a proposal and budget for organizing a Refresher Course in Dayananda Science College, Latur. The Joint Science Education Panel of the three Academies will be happy to sponsor and support the Refresher Course. We note that Prof. Mythily Ramaswamy (TIFR-CAM, Bengaluru) will be the Course Director and you will be the Course Co-ordinator.

- (a) Your budget of Rs 8,85,500/- for 35 participants (inclusive of **travel expenses/ boarding and lodging** for Resource Persons has been approved by the Science Education Panel. **Please note that extra expenditure from the sanctioned budget heads to be met by the host institution.**
- (b) Please note that only the names of Convener and Coordinator of the Workshop should be included in brochure/invitation etc. Names of members of the management, organizing committees, patrons etc should be strictly avoided.
- (c) As the Refresher Course is an all India one, it has to be advertised in our journals **RESONANCE** and **CURRENT SCIENCE** (copy of a typical announcement is attached). Please send us a draft of your announcement.
- (d) Applications should be submitted online through a link which will be available in our website. The Course Director and Coordinator will be provided a user-id/password to enable them to view the applications and make the selections.
- (e) Refresher Courses are sponsored and supported by the three National Science Academies - IASc, INSA and NASI. The names of INDIAN ACADEMY OF SCIENCES (BANGALORE), INDIAN NATIONAL SCIENCE ACADEMY (NEW DELHI) and THE NATIONAL ACADEMY OF SCIENCES, INDIA (ALLAHABAD) should therefore be mentioned in all publicity material such as programme sheet, invitation cards, etc.



(f) The Course should be called "Science Academies' Refresher Course in "Mathematics".

(g) Please send 4-5 copies of the printed programme when ready.

(n) Funds for organizing the Course can be sent as an advance by electronic transfer. This can be sent after a bank account is opened and the following details are provided to us:

1. Name of the Bank:
2. Name of the Branch:
3. Account No.:
4. Name of the Account Holder  
(in the name of Refresher Course);
5. IFSC - code (for Non-SBI accounts)

If necessary, an authorization letter from the Academy to the bank to open the Savings Bank account can be sent to you after we hear from you.

(i) The audited expenditure statement/utilization certificate duly signed by competent authority (CA or Financial Controller) to be sent along with the report, once the Course is over. This is required for the Audit compliance.

(j) A CD containing the resource materials has to be made available at the Academy website. The Academy would like to make the educational material made for the course available to a large audience at its website, Hence a CD containing the material (without infringement on the copyright issues) has to be made available by the course director to the Academy.

Please go ahead with organizing the Course in consultation with Prof. Mythily Ramaswamy and keep in touch with the Academy about the progress.

Best wishes,

Yours sincerely,



C.S. Ravi Kumar

Coordinator, Science Education Programme

**:: UTILISATION CERTIFICATE ::**

THIS IS TO CERTIFY THAT DAYANAND SCIENCE COLLEGE, LATUR'S

**REFRESHER COURSE IN MATHMATICS**

HAD RECEIVED **RS. 6,64,130/-** (RUPEES SIX LAKHS SIXTY FOUR THOUSAND ONE HUNDRED THIRTY ONLY) FOR THE PERIOD FROM 11/06/2018 TO 25/06/2018 AS A GRANT IN AID FROM **INDIAN ACADEMY OF SCIENCES, BANGALORE.**

AMOUNT RECEIVED AS A GRANT IS AID WAS UTILISED FOR THE

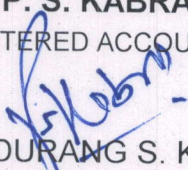
**ABOVE COURSE AND TOTAL EXPENDITURE IS RS. : 7,02,929/-**

AND AMOUNT UNUTILISED FROM THE GRANT IN AID IS **RS. : NIL.**

(BALANCE GRANT IN AID RECEIVABLE IS RS. : 38,799/-.)

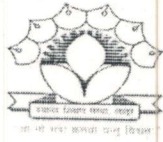
HENCE CERTIFIED.

**FOR P. S. KABRA & CO.**  
CHARTERED ACCOUNTANTS

  
PANDURANG S. KABRA  
M. NO. : 104740  
FRN : 118323W.  
PLACE : LATUR



DATE : 07-07-2018.



## Dayanand Science College, Latur

### Refresher Courses In Mathematics Expenditure

Dates- 11<sup>th</sup> to 25<sup>th</sup> June, 2018

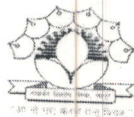
Sr. No.	Name of the Firms	Amount
1	Publicity: Rs _____ Banner, circular, registration forms, programme cards invitation cards, letter of attendance, etc	5940.00
2	Registration & stationery: Rs _____ (Bag, pad, pen, pencil, photostat copies etc)	12600.00
3	TA for outstation participants: Rs _____ (copies of tickets to be included with the TA form)	47835.00
4	Lodging, Boarding, Food Expenses for 25 outstation participants: Rs _____	309750.00
5	a. Lodging/Boarding for resource persons b. Local transport	50759.00
6	Travel expenses for resource persons	33175.00
7	a. Honorarium for resource persons (at Rs. 2000/- per lecture) b. Honorarium for Course Director/co-ordinator (Rs 4000/ Rs 3000) c. Honorarium for supporting staff (not to exceed overall Rs. 7000/-)	150000.00
8	Books for participants @ Rs 1250/- per participant (only for theoretical courses): Rs _____	42132.00
9	Contingency Photographs, excursion, certificates, special dinner, postage, batteries etc. (not to exceed 5% of total expenditure )	50738.00
	<b>Grand Total</b>	<b>702929.00</b>



*[Handwritten Signature]*

*[Handwritten Signature]*

Principal  
**PRINCIPAL**  
Dayanand Science College  
**LATUR**



## Dayanand Science College, Latur

### Format for sending Statement of Expenditure for Refresher Courses

#### Refresher Course in Mathematics

Dates- 11<sup>th</sup> to 25<sup>th</sup> June, 2018

Total participants approved by IAS :- 35 No. actually participated - 26  
(Students: 2 ; Teachers: 24; Resource Persons: 6 ; Supporting Staff: 4)

Sl. No.	Budget head / amount sanctioned (Rs)	Bill No. & Date	Particulars (name of payee/item)	Amount spent
1	Publicity: Rs _____ Banner, circular, registration forms, programme cards invitation cards, letter of attendance, etc	995	a. M/s Sayali Graphics & Printers, Latur for Brouchers 400 Nos.	5000
		1606	b. M/s Kirti Offset Printers, Latur for Banner Print	500
		1611	c. M/s Kirti Offset Printers, Latur for Banner Print	240
		1608	d. M/s Kirti Offset Printers, Latur for Banner Print	200
		08.06.2018	<b>Total</b>	<b>5940</b>
2	Registration & stationery: Rs _____ (Bag, pad, pen, pencil, photostat copies etc)	1797	a. M/s Yogeshwari Bag, Latur for Office Bag 45 Nos.	9000
		1154	b. M/s Latur Genral Stores, Latur for A/4 Reg. 224Pgs. Reg. 45 Nos. and Ball Pen 45 Nos.	3600
		04.06.2018	<b>Total</b>	<b>12600</b>
3	TA for outstation participants: Rs _____ (copies of tickets to be included with the TA form)	23.06.2018	a. Rs 4650 for Dr. Prasenjit Mondal	4950
		23.06.2018	b. Rs. 2390 for Vijay Bhika Patil	2390
		23.06.2018	c. Rs 2390 Narendrakumar Dasre	2390
		24.06.2018	d. Rs 1910 for Naveen Kumar Mani	1910
		22.06.2018	e. Rs 2505 for Ashok Bingi	2505
		23.06.2018	f. Rs 1620 for Keshav Kumar K.	1620
		23.06.2018	g. Rs 2430 for Suryawanshi Ravi Dhondiba	2430
		23.06.2018	h. Rs 1050 for Phad Prasad Sampatrao	1050
		23.06.2018	i. Rs 400 for Dr. Ashok Achut Kumbhakarna	400
		23.06.2018	j. Rs 1962 for Girish Shelake	1962
		23.06.2018	k. Rs 1780 for Dr. Vivek Satish Sharma	1780
		24.06.2018	l. Rs 637 for Akash J. Waghmare	637
		25.06.2018	m. Rs 4180 for Rajender Kumar	4180
		24.06.2018	n. Rs 2730 for Amol Vasantrao Sonwane	2730
		25.06.2018	o. Rs 2641 for Rajender Kumar	2641

		25.06.2018	750 for Damkondwar Arun Baburao	760
		25.06.2018	q. Dr. S. S. Bellale T. A. for 15 dyas x 100	1500
		25.06.2018	r. Pail Nagini Annasaheb T. A. for 15 dyasx100	1500
		25.06.2018	s. Pimple Nishank T. A. for 15 dyas x 100	1500
		25.06.2018	t. Shivprasad Birajdar T. A. for 15 dyas x 100	1500
		25.06.2018	u. Baldawa Radhika T. A. for 15 dyas x 100	1500
		25.06.2018	v. Mahesh Wavare T. A. for 15 dyas x 100	1500
		25.06.2018	w. Ashvini Herkar T. A. for 15 dyas x 100	1500
		25.06.2018	x. Ashvini Kale T. A. for 15 dyas x 100	1500
		25.06.2018	y. Kumbhare Kalyni A. T. A. for 15 dyas x 100	1500
			<b>Total</b>	<b>47835</b>
4	Lodging, Boarding, Food Expenses for 25 outstation participants: Rs _____	1976	a. M/s Latur Guest House, Latur for Breakfast and Dinner 25 x 250 x 15 days	93750
		26.06.2018	b. M/s Latur Guest House, Latur for Dr. V. B. Patil, Dr. N. R. Dasre, Dr. N. K. Mani, Dr. P. Mondal, Keshav kumar, Rajender Kumar, Phad Prasad Sampatrao, Akash J. Waghmare, Amol Vasant Rao Sonwane, B. S. Potdar, Girish Shelake, Suryawanshi Ravi Dhondiba, A. V. Bingi, Damkondwar Arun Baburao, Dr. Vivek Satish Sharma and Dr. Ashok Achut Kumbhakarna 15 days 400x15 = 6000	96000
		25.06.2018	c. M/s Jay Jagdish Ketars, Latur. For Working Lunch for 40 persons 40x200x15 day's Perrons Breakfast and Dinner 200 x 15 days	120,000
		26.06.2018		
			<b>Total</b>	<b>309750</b>
5	a. Lodging/Boarding for resource persons	2143	a. M/s Hotel Shantai, Latur for Prof. Dr. V. N. Mishra 17.06.2018 to 25.06.2018	14316
		25.06.2018	b. M/s Hotel Shantai, Latur for Prof. Dr. R. B. Misra 18.06.2018 to 20.06.2018	4339
		21.06.2018	c. M/s Hotel Shantai, Latur for Prof. Dr. Deepmala 17.06.2018 to 18.06.2018	3351
		18.06.2018	d. M/s Hotel Shantai, Latur for Prof. Dr. V. Kannan 15.06.2018 to 16.06.2018	3226
		17.06.2018	e. M/s Hotel Shantai, Latur for Prof. Dr. Sharad Sane 12.06.2018 to 16.06.2018	6603
		2045	f. M/s Hotel Shantai, Latur for Prof. Dr. Mithily Ramaswamy 10.06.2018 to 13.06.2018	5740
		16.06.2018	g. M/s Hotel Manas, Latur for Prof. Dr. R. B. Misra 21.06.2018 to 26.06.2018	3000
		2024	h. M/s Hotel Shantai, Latur for Prof. Dr. R. B. Misra 21.06.2018 to 26.06.2018 food bill	144
		14.06.2018		
		1744		
		26.06.2018		
		1810		
		26.06.2018		

5	b. Local transport	04.06.2018	a. M/s A. C. Kshirsagar Auto Charges	40
		26.06.2018	b. M/s OM Tours & Travels MH-24-AF-0212	10000
		<b>Total</b>		
6	Travel expenses for resource persons	16.06.2018	a. Prof. Dr. V. Kannan	6930
		22.06.2018	b. Dr Vishnu Narayan Mishra	9550
		18.06.2018	c. Dr Dr. Deepmala Rai	5010
		12.06.2018	d. Dr. Mythily Ramaswamy	3435
		16.06.2018	e. Dr Sharad Sane	2770
		25.06.2018	f. Dr Ram Bilas Misra	5480
		<b>Total</b>		
7	a. Honorarium for resource persons (at Rs. 2000/- per lecture)	14.06.2018	a. Prof. Dr. Mythily Ramaswamy	20000
		16.06.2018	b. Prof. Dr. Sharad Sane	24000
		17.06.2018	c. Prof. Dr. Kanan V.	14000
		18.06.2018	d. Prof. Dr. Deepmala Rai	14000
		25.06.2018	e. Prof. Dr. Ram Bilas Misra	24000
		25.06.2018	f. Prof. Dr. Vishnu Narayan Mishra	40000
	b. Honorarium for Course Director/co-ordinator (Rs 4000/ Rs 3000)	14.06.2018	a. Prof. Dr. Mythily Ramaswamy	4000
		26.06.2018	b. Dr. R. H. Ladda	3000
	c. Honorarium for supporting staff (not to exceed overall Rs. 7000/-)	25.06.2018	a. Dr. S. S. Bellale	1750
		26.06.2018	b. Shri. Amol Kshirsagar	1750
		26.06.2018	c. Shri. Shaikh M. S.	1750
		26.06.2018	d. Shri. Naikwade V. A.	1750
	<b>Total</b>			<b>150000</b>
8	Books for participants @ Rs 1250/- per participant  (only for theoretical courses):  Rs _____	201 06.06.2018	a. M/s Vivek Book Center, Latur P.Dechaumphai - Calculus & Differential equations with Mathematica - 35 Nos. Q.H.Ansri - Metric Spaces - 35 Nos. K.B.M. Nambudiripad - LATEX for Beginners - 35 Nos.	28613
		210 19.06.2018	b. M/s Vivek Book Center, Latur Oleg Bogopolski - Indroduction to group theory - 35 Nos. Doaud Sarason - Coplex function theory - 35 Nos.	13519
		<b>Total</b>		

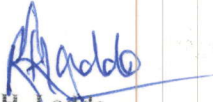


9	Contingency & Misenious Photographs, excursion, certificates, special dinner, postage, batteries etc. (not to exceed 5% of total expenditure )	880	a. M/s Rahul Digital Photo Studio, Latur Photo - 35	2100
		22.06.2018	18x12 size	
		756	b. M/s Sayali Graphics and Printers, Latur for Certificate Plain and Cerificate with Name	625
		14.06.2018		
		12251	c. M/s Uday Atomotive Services, Latur Petrol	200
		06.06.2018		
		13251	d. M/s Uday Atomotive Services, Latur Petrol	300
		24.06.2018		
		85	e. M/s Mali Bhojanguha, Latur. For Working Special dinner for 4 Nos. 45x325	14625
		24.06.2018		
		2274	f. M/s Vrandavan Restarrant, Latur for Tea	191
		24.06.2018		
		2275	g. M/s Vrandavan Restarrant, Latur for Tea	153
		24.06.2018		
		10.06.2018	h. M/s Shivshaktti Masale & Drifruits, Latur Agarbatti, Oil, Mainbatti, Kapur, Dorwat	130
		18890053054	i. M/s Vishwa Super Bazar Pvt. Ltc, Latur	45
		13.06.2018		
		25.06.2018	j. M/s Prof Dr. Ram Bilas Mishra	700
			k. M/s New Ugile Xerox Center, Latur for Notes, Time-table, Feedback Form, Pages	
		98	l. M/s Riyalink Travels, Latur 1.00 p.m. to 7.30 p.m. Latur to Chakur and Chakur to latur MH-24 AB 7992	14000
		10.06.2018		
		18.04.2018	m. M/s Amol Kshirsagar	150
		001411-	n. M/s Dr. S. S. Bellale for Postage Latur	1,750
		001438	o. M/s Vrandavan Amujment and Water Park, Latur Entry Fees	2,520
		005497-	p.M/s Vrandavan Amujment and Water Park, Latur Parking Charges	850
		005513		
		25.06.2018		
25.06.2018	q. M/s Principal, D.S.C., Latur Bukke 8 Nos.	400		
-	r. M/s Dinesh Flower Stall, Latur Bukke, Shevanti Har, Har	340		
12281	s. M.S. Anand Milk Agencys, Latur Bislery Bottle	40		
10.06.2018				
745	t. M/s Sayali Graphics & Printers, Latur for Invitation Colour Print 50 Nos and Pocket 50 Nos	820		
06.06.2018				
1546	u. M/s Latur Xerox and Computer Zobwork, Latur for Xerox Notes	5264		
22.06.2018				
26.06.2018	v. M/s Dr. S. S. Bellale, D.S.C.Latur for Marker Pen, Ink etc.	900		
1440	w. M/s Latur Genral Stores, Latur for Drawpin-27	60		
10.06.2018				
55	x. M/s Gajanan Genral & Book Center, Latur for Type - 1 Nos.	25		
881	y. M/s Rahul Photo Studio, Latur 70 copies	1050		
26.06.2018				
247	z. Hariom Internet Cafè, Latur Colour Print 50 Nos.	500		
07.07.2018				
509	aa. M/s Audit & Utilization Fees	3000		
07.07.2018				
			<b>Total</b>	<b>50738</b>
<b>Total:</b>				<b>702929</b>

1) Expenditure Amount	702925.00
2) Received Amount	664130.00
3) Reimbursed Amount (1-2) =	38799.00

Amount to be-refunded/ reimbursed (whichever is appropriate) : Rs. 38799/-

(Rs. Thirty Eight thousand Seven hundred Nintynine only)



Shri. R. H. Ladda  
Coordinator

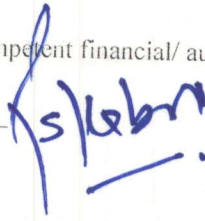


Dr. J. S. Dargad  
Principal & Course Convener

**PRINCIPAL**  
**Dayanand Science College**  
**LATUR**

Signature of Competent financial/ audit authority  
(with seal)

Date: \_\_\_\_\_





## Science Academies' Refresher Course in Mathematics

Dayanand Science College, Latur (Maharashtra)

11<sup>th</sup> June to 25<sup>th</sup> June, 2018

Sponsored by Indian Academy Of Sciences, Bangalore

Indian National Science Academy, New Delhi The National Academy of Science, India,  
Allahabad In Collaboration with Dayanand Science College, Latur (Maharashtra)

## REPORT

**Registration:** - On 11<sup>th</sup> June, 2018 at 9.00 a.m. Registration of the participants started by giving Bags, Pen, Register and Time-table, Broucher etc. were issued to all the registered participants in all 26. After the Breakfast self introduction was given by all the participants in the Seminar Hall of Dayanand Science college, Latur (Maharashtra).

All India Science Academies Two Week's Refresher course in Mathematics was held in the same Hall. This Refresher Course was inaugurated by course Director Dr. Mythily Ramasawmay Department of mathematics, Tata Institute of Applicable Mathematics, Benguluru and Convener of the course and Principal of Dayanand Science College, Latur Dr. J. S. Dargad, Vice-Principal and Head of the Department of Mathematics Dr. Bellale were present.

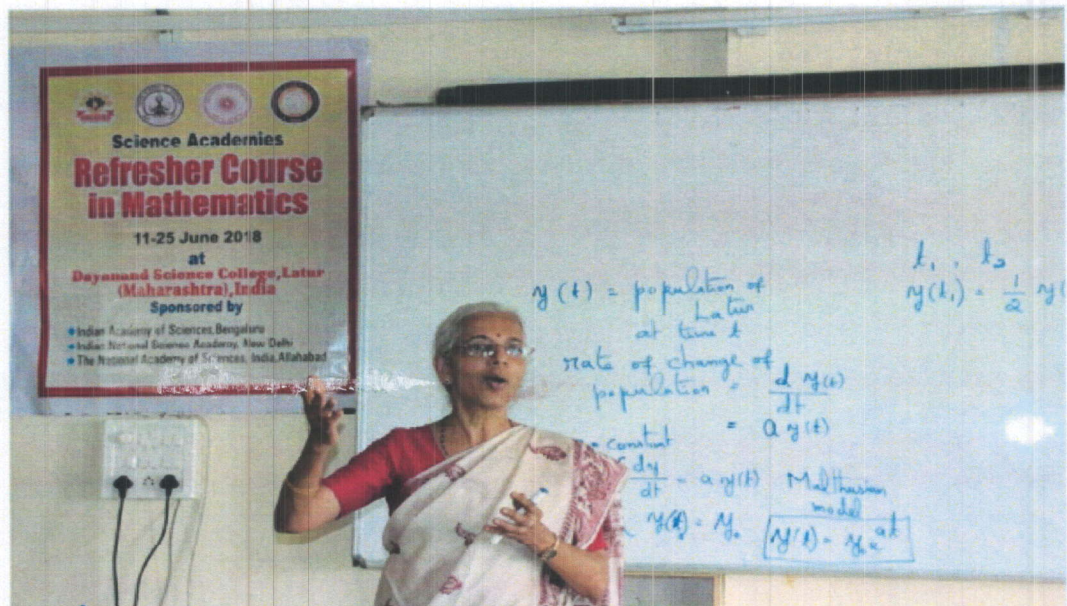
Dr. MythilyRamasawamy has expressed the importance of the Refresher Course and the Subject matter in this Refresher Course how it is useful for the undergraduate Teachers. Principal Dr. J. S. Dargad has expressed his views stating that Two weeks Refresher Courses form an important segment of Science Academies Program. Also stated that the primary focus is to enhance the quality of Science Education at undergraduate and graduate levels and the college organize all such academic Programs and mentioned that this is the Third Refresher Course. Dr. S. S. Bellale has given vote of thanks.

## Photograph of Lightning of Lamps



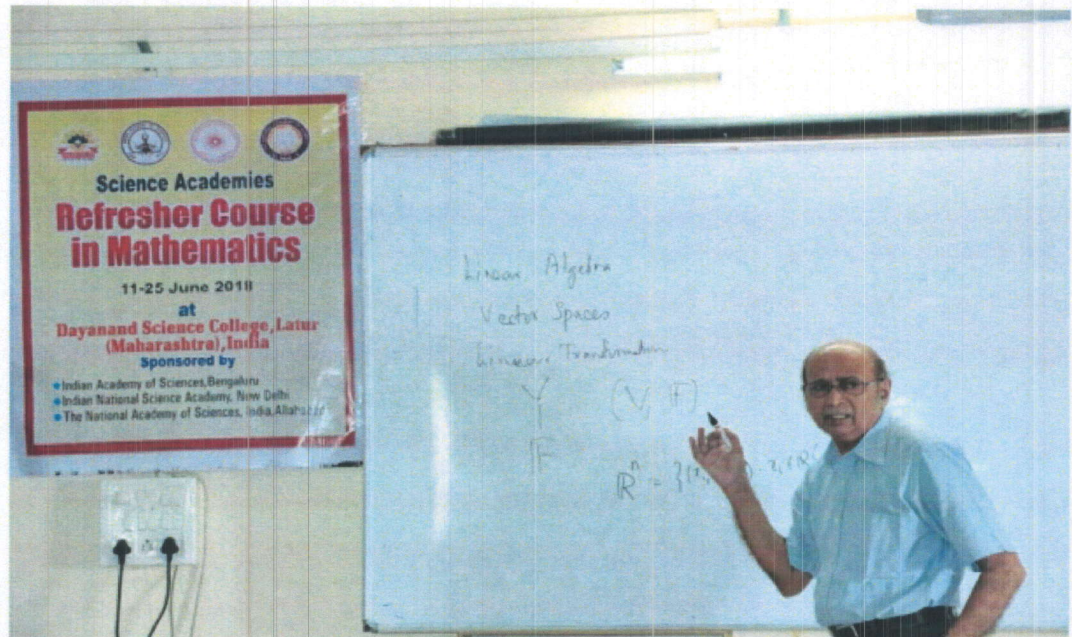
## Academic Programme

1. After the lunch in the afternoon Dr. Mythily Ramaswamy as one of the Resource Persons also has delivered Two lectures on multivariable and calculus up to 5.30 P.M.

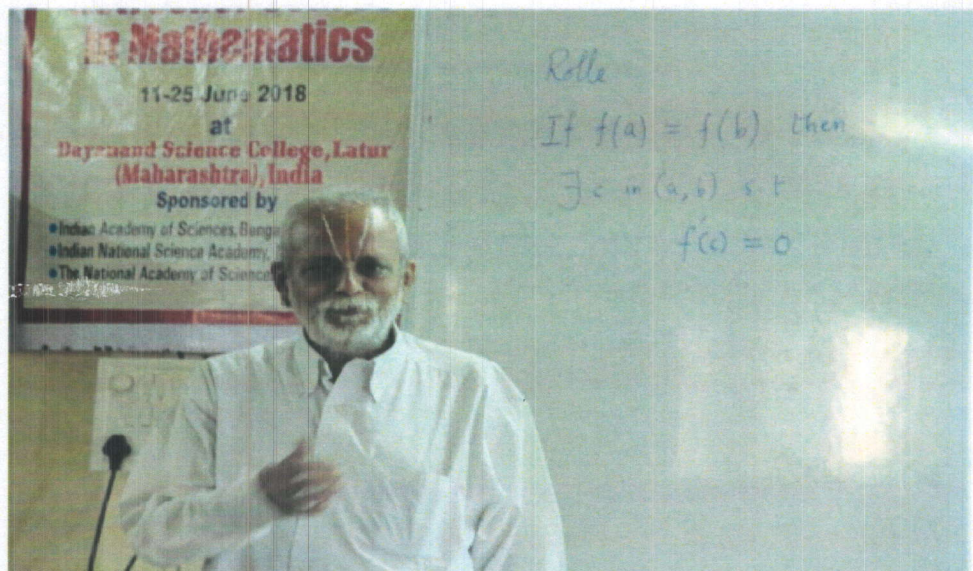


Totally she has engaged 10 Periods during 11.06.2018 to 14.06.2018

2. From 12.06.2018 Dr. Sharad Sane from I.I.T. Powai, Mumbai has engaged 12 Periods on the Topic of Linear Algebra as per the given syllabus he has completed all the Topics in Linear algebra giving some problems and solving it in the class-room.



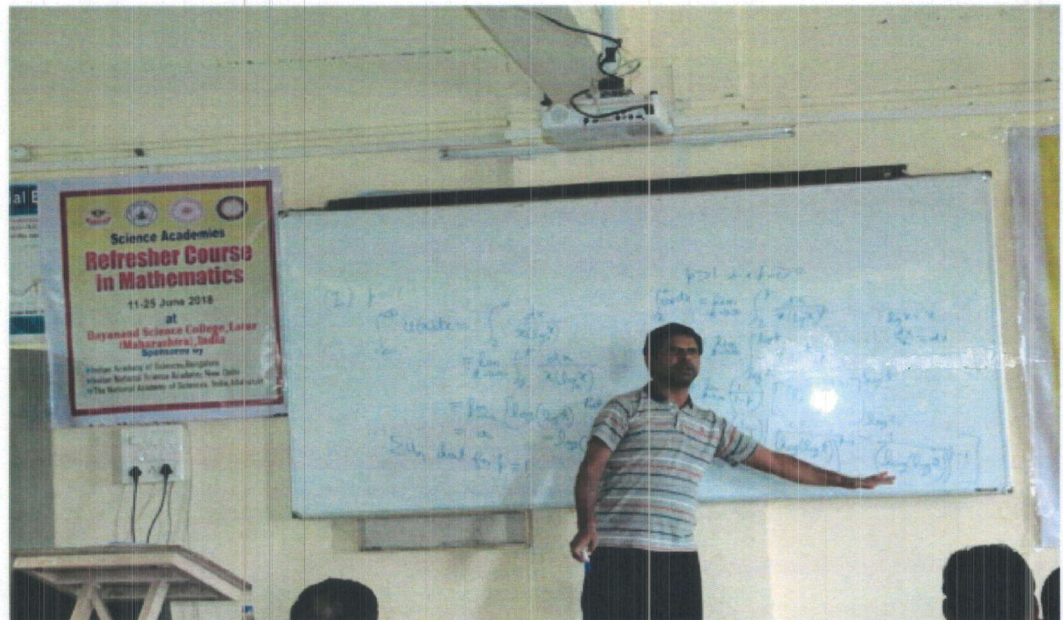
3. Next comes Dr. V. Kannan from University of Hyderabad. He has engaged his periods from 15.06.2018 to 17.06.2018. He has engaged 7 Periods during his stay and he has completed all the topics in Real Analysis allotted to him.



4. Deepmala Rai has engaged 7 Periods in Two days i.e. 17.06.2018 and 18.06.2018. She has demonstrated LATEX, Mathematica and Computer Modeling etc.



5. Dr. Vishnu Narayan Misra from Department of Mathematics, Indira Gandhi National Tribal University has delivered 20 Lectures from 18.06.2018 to 25.06.2018 on different Topics as Differentiability, Increasing and Decreasing functions etc. as per given syllabus.



6. Dr. Ram-Bilas Mishra Ex-vice-Chancellor of Avadh University Faizabad. He has delivered 12 lectures during his stay from 19.06.2018 to 25.06.2018 and he has given lectures on Applied Mathematics and has shared his experiences in different countries. Xerox copies of his book on Applied Mathematics were given to all participant teachers.



In all 122 applications were received out of which 12 were Local Participants. From this list 25 out-station Participant and 10 Local participants were invited . Few of them has refused and again from the waiting list the quota of total 35 was completed. After few days again many of them have refused and hence almost all the list was exhausted except students from out-station were not invited, because it was high time to invite them. Thus only 26 participants have joined finally this course.

The only reason may be that this is Two weeks Refresher Course which may not be allowed for their CAS Promotion and Family difficulties my be the other reason because of which 35 participants could join the course.

**(Enclosed Copy of Time – Table)**

## Non Academic Report

The Bags were also given to the resource persons also a wide publicity was given for this Refresher course by printing Brouchers (400) and sent by post to different 350 colleges and as usual also the announcement was published in Science Academis monthly magzins mirror and Resonance and putting it on Whats-app also samples of Boucher's, Invitation cards, Photographs are enclosed herewith. Also C. D. Containing PPT of all the material taught in the class is enclosed.

**Excursion Tour was arranged on 24.06.2018 to NandanvanChakur.**





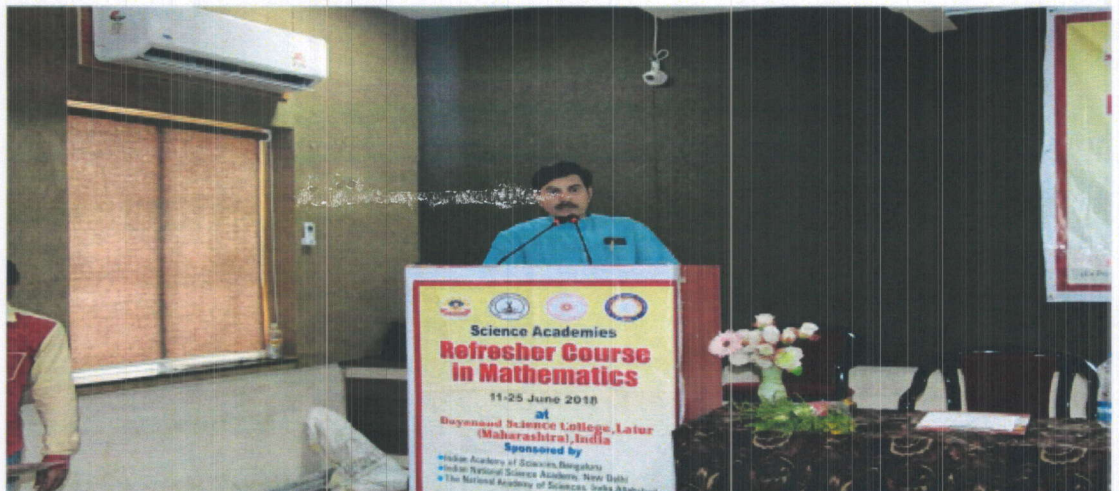


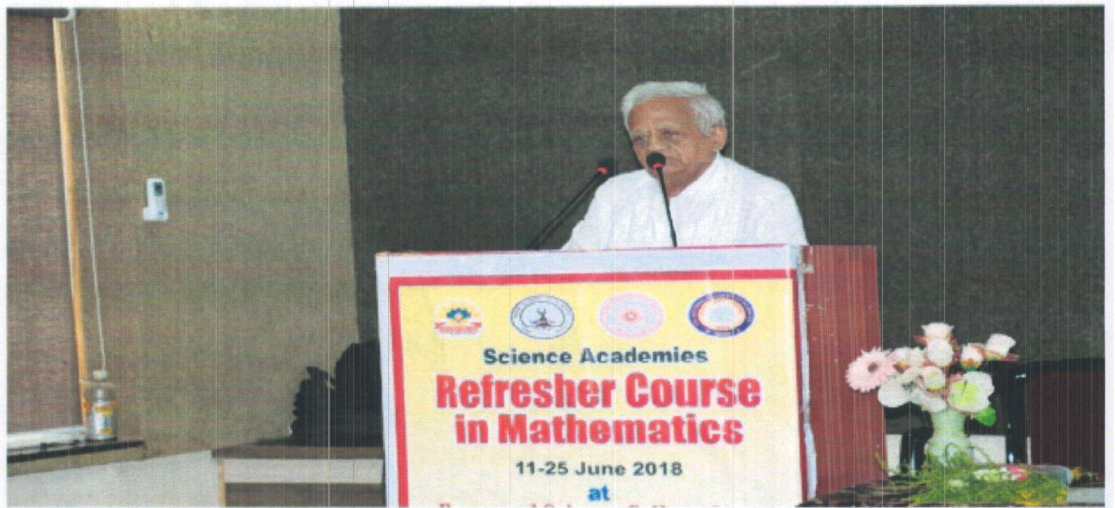
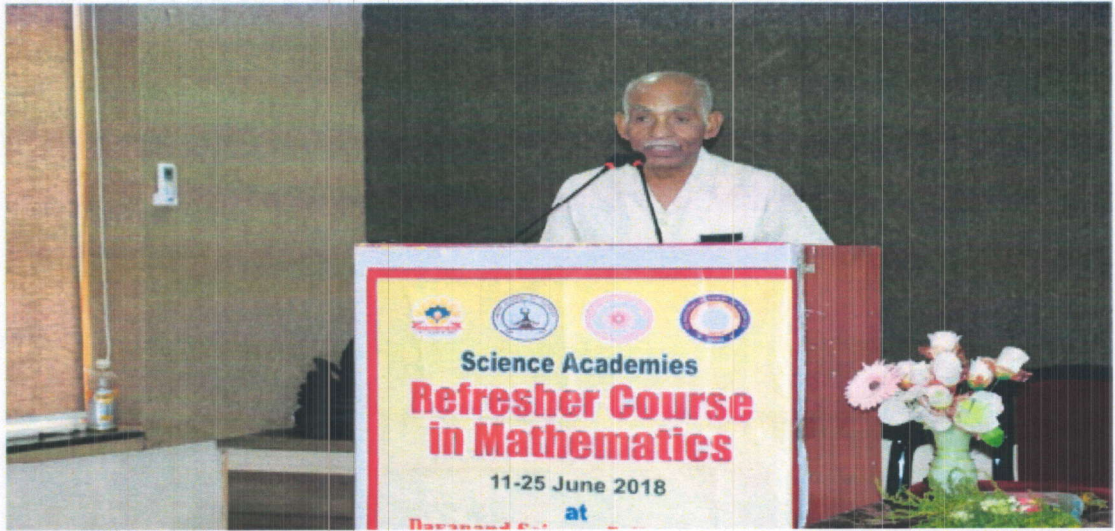
Valedictory function the Chief Guest Ram-Bilas Mishra, Secretary of Dayanand Education Society RameshjiBiyani and Principal Dr. J. S. Dargad were present with the auspicious hands of these persons.

Common Photo and Certificate were distributed to all the participants. Three Participants have expressed their views about this Refresher Course. This Science Academies Refresher Course helped the Teachers add value to their Teaching in the class room. There was interaction during Teaching with all the 6 Resource Persons. Which has much better effect on the Teachers.









ROW FIRST (L TO R) 1) Dr. UDAY BIKRA PATHI 2) Dr. HANMENDRANUNNAN BANSKANDHRA DASRE 3) Dr. S. S. BELLALE 4) Dr. ANITHY RAMASWAMY 5) Dr. I. S. Durgesh 6) Dr. SHARAD SANE  
 7) Dr. K. B. LADHA 8) Dr. VIKRANTHAKA SENGUWANE 9) SHREESH SURESHWAR MOHANTY  
 10) SHARAD KUTUMBIKAR 11) POFDAR BHARAT SIVARAM 12) SHILPAKI GURISH CHENDEKAMA 13) SARAYAWANDE RAU SHREEDHRA 14) SUDH ANISH VITHAL  
 15) SHANMUGASUBRAMANIAM PRADIPU SURESHWAR 16) MALEGAONKAR SURAPPA SHYAM 17) DAMODHARAN ARUN BABARAJU  
 18) PATHI ANANDH SURESHWAR 19) KOLKUNDRA SURESHWAR SURESHWAR 20) PATEL ANANDH LINGARAO 21) KALE ANANDH BALAJIRAO 22) KUNDHARA KALYAN ANIL  
 23) SUDH ANISH SURESHWAR 24) SHANMUGASUBRAMANIAM SURESHWAR 25) SHARAD KUTUMBIKAR 26) Dr. RAJESH SURESHWAR 27) Dr. RAJESH SURESHWAR 28) Dr. RAJESH SURESHWAR  
 29) KESAVAN SURESHWAR 30) RAJESH SURESHWAR



**This refresher course has good impact on the Participants -**


**List of Participants :-**


Sr. No.	Candidates Names	Place and Address	Email ID	Mobile No.
1	DR. PRASENJIT MONDAL	ARAMBAG	<a href="mailto:prasenjit1044@yahoo.com">prasenjit1044@yahoo.com</a>	9903245785
2	RAJENDER KUMAR	New Delhi	<a href="mailto:rkumar@db.du.ac.in">rkumar@db.du.ac.in</a>	9716989179
3	KESHAV KUMAR .K.	Telangana	<a href="mailto:keshav.mphil@gmail.com">keshav.mphil@gmail.com</a>	9492529180
4	AMOL VASANTRAO SONAWANE	Mumbai	<a href="mailto:amolvson@gmail.com">amolvson@gmail.com</a>	9420000166
5	RAVI SURYAWANSHI	NAVI MUMBAI	<a href="mailto:rv.suryawanshi@gmail.com">rv.suryawanshi@gmail.com</a>	9323646423
6	VIJAY PATIL	Navi Mumbai	<a href="mailto:patilvijay.95@gmail.com">patilvijay.95@gmail.com</a>	9096127012
7	NARENDRAKUMAR DASRE	PANVEL, NAVI MUMBAI	<a href="mailto:narendasre@rediffmail.com">narendasre@rediffmail.com</a>	9869756853
8	DR. NAVEEN KUMAR MANI	NASHIK	<a href="mailto:naveenmani81@gmail.com">naveenmani81@gmail.com</a>	8059766660
9	GIRISH SHELAKHE	SANGLI	<a href="mailto:shelakegd@gmail.com">shelakegd@gmail.com</a>	9860985057
10	BHARAT POTDAR	Chiplun	<a href="mailto:bspotdar@git-india.edu.in">bspotdar@git-india.edu.in</a>	8308322581
11	DR. ASHOK BINGI	Mumbai	<a href="mailto:ashok.bingi@xaviers.edu">ashok.bingi@xaviers.edu</a>	7738156711
12	VIVEK SHARMA	Jalna	<a href="mailto:vivek.sharma.math@gmail.com">vivek.sharma.math@gmail.com</a>	9673560182
13	AKASH J. WAGHMARE	Nanded	<a href="mailto:akashwaghmare42@yahoo.in">akashwaghmare42@yahoo.in</a>	9860898113
14	PRASAD PHAD	Pune	<a href="mailto:phadprasad2020@gmail.com">phadprasad2020@gmail.com</a>	8698974837
15	ARUN DAMKONDWAR	NANDED	<a href="mailto:arun.damkondwar@gov.in">arun.damkondwar@gov.in</a>	9921522251
16	ASHOK KUMBHAKARANA	Kalamb	<a href="mailto:kashoka2112@gmail.com">kashoka2112@gmail.com</a>	9403577873

17	Patil NAGINI ANNASAHEB	Latur	<a href="mailto:nagini_patil@rediffmail.com">nagini_patil@rediffmail.com</a>	9404957428
18	NISHANK PIMPLE	Latur	<a href="mailto:pinishank@gmail.com">pinishank@gmail.com</a>	9922717106
19	SIDHESHWAR BELLALE	Latur	<a href="mailto:sidhesh.bellale@gmail.com">sidhesh.bellale@gmail.com</a>	9405020007
20	SHIVPRASAD BIRAJDAR	Latur	<a href="mailto:shivprasadb28@gmail.com">shivprasadb28@gmail.com</a>	9421500515
21	SWAPNIL MALEGAONKAR	Latur	<a href="mailto:swapnilm333@gmail.com">swapnilm333@gmail.com</a>	9923924610
22	RADHIKA HARIPRASAD BALDAWA	Latur	<a href="mailto:baldawaradhika361@gmail.com">baldawaradhika361@gmail.com</a>	9860178875
23	MAHESH WAVARE	Latur	<a href="mailto:maheshwavare@gmail.com">maheshwavare@gmail.com</a>	9403696434
24	ASHVINI HERKAR	Latur	<a href="mailto:ashvini.herkar@gmail.com">ashvini.herkar@gmail.com</a>	8408083478
25	ASHVINI KALE	Latur	<a href="mailto:kaleashwini691@yahoo.in">kaleashwini691@yahoo.in</a>	7387399093
26	KUMBHARE K. A.	Paranda	<a href="mailto:kalyanikumbhare17@gmail.com">kalyanikumbhare17@gmail.com</a>	8975688215

**Acknowledgement :-**

I must express my vote of thanks to the Coordinator of the Academy Ravi kumar and Science Education Pannel also special thanks to Dr. Geetha Madam. Thanks to Indian Academy of Sciences, Bengaluru for providing the funds.

  
**PRINCIPAL**  
 Dayanand Science College  
 LATUR

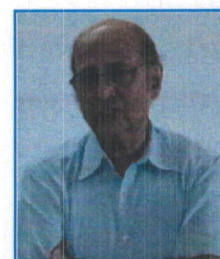
  
**R. H. Ladda**  
 Ex. Principal  
 Coordinator of Research Course

## Name and Addresses of Mentors

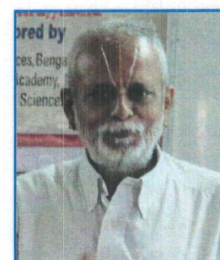
- 1) **Name** : Prof. Dr. Mythily Ramaswamy  
T.I.F.R.  
FNASc,
- Qualification** : M.Sc., Ph.D.
- Address** : T.I.F.R. Center for Applicable Mathematics  
Bangalore - 65
- Residential Address** : HIMAGIRI Apartments NO.77, 4th Main Road,  
Malleswaram, Bangalore - 560055
- Mobile No.** : 9845335387
- E-mail Address** : mythily\_ram@yahoo.com



- 2) **Name** : Prof. Dr. Sharad Sane  
FASc  
Emeritus Fellow
- Qualification** : M.Sc., Ph.D.
- Address** : Dept. of Mathematics,  
I.I.T. Bombay, Pawai, Mumbai - 400076
- Residential Address** : C-136 Bidg. TR -20  
I.I.T. Bombay, Pawai, Mumbai - 400076
- Mobile No.** : 9969560519
- E-mail Address** : sharadsane@gmail.com



- 3) **Name** : Prof. Dr. V. Kannan  
FASc  
Emeritus Fellow
- Qualification** : M.Sc., Ph.D.
- Address** : School of Mathematics and Statistics,  
University of Hyderabad
- Residential Address** : 195, Doyens Township, Serilingampally,  
Hyderabad - 500019
- Mobile No.** : 9949193737
- E-mail Address** : vksm@uohyd.ernet.in





## Name and Addresses of Mentors

- 4) **Name** : Prof. Dr. Deepmala Rai
- Qualification** : M.Sc. Ph.D. (Mathematics)
- Address** : PDPM Indian Institute of Information  
Technology, Design 2 , Manufacturing,  
Jabalpur.
- Residential Address** : ACC Jamul, Bhilai, Dist - Durg (C.G.) - 490024
- Mobile No.** : 9424083157, 9302313091
- E-mail Address** : dmrai23@gamil.com, deepmaladm23@gmail.com



- 5) **Name** : Prof. Dr. Vishnu Narayan Mishra  
Gold Medalist  
YSA,
- Qualification** : M.Sc. Ph.D. (Mathematics)
- Address** : Assoc. Prof. of Mathematics,  
I.G.N.T.U. Lalpur, Amarkantak - 484887,  
M.P., India
- Residential Address** : L. 1627 Awadh Puri Colony, Beniganj, (Phase-III), Opp.-I.T.I.,  
Faizabad - 224001, Uttar Pradesh, India
- Mobile No.** : 09913387604, 08511840947
- E-mail Address** : vishnunarayanmishra@gmail.com,  
vishnu\_narayanmishra@yahoo.co.in



- 6) **Name** : Prof. Dr. Ram Bilas Misra  
Ex- Vice Chancellor
- Qualification** : M.Sc., M.Phil  
DAAD-Fellow
- Address** : 380 A, Gomti Nagar Extra Sector,  
Behind New C.M.S., Lucknow-226010, U.P.
- Residential Address** : -
- Mobile No.** : (0)9454-544-926
- E-mail Address** : rambilas.misra@gmail.com  
misrarb1@rediffmail.com





Science Academies  
**Refresher Course in Mathematics**  
1-25 June 2018  
Sponsored by  
Indian Academy of Sciences, Bengaluru  
Indian National Science Academy, New Delhi The National Academy of Sciences, India Allahabad  
at  
Sriyanand Education Society's  
**Anand Science College, Aur (Maharashtra), India**  
Inauguration Ceremony

Society's



## Science Academies

### Refresher Course on Mathematics - 2018

Dayanand Science College, Latur. (M.S.)

#### Time-Table

Day & Date	Period - I	Period - II	12 to 12.15	Period - III	1.30 to 2.30	Period - IV	3.45 to 4.15	Period - V	
Time	9.30 - 10.45	10.45 - 12		12.15 - 1.30		2.30 - 3.45		4.15 - 5.30	
11/06/2018 Monday	Registration Inaugural Function & Photo session and self introduction					Multivariable Calculus		Derivatives	
						Mythily Ramaswamy T.I.F.R FNASc, Centre for Applicable Mathematics, Bangalore		Mythily Ramaswamy T.I.F.R FNASc, Centre for Applicable Mathematics, Bangalore	
12/06/2018 Tuesday	Ordinary differential equation	Linear algebra	Interval	Ordinary Differential equation	Lunch Break	Diagonalizability	Tea Break	Derivatives Integration	
	Prof. Dr. Mythily Ramaswamy T.I.F.R FNASc, Centre for Applicable Mathematics, Bangalore	Prof. Dr. Sharad Sane FASc Emeritus Fellow Department of Mathematics I.I.T. Bombay Mumbai 400076		Prof. Dr. Mythily Ramaswamy T.I.F.R FNASc, Centre for Applicable Mathematics, Bangalore		Prof. Dr. Sharad Sane FASc Emeritus Fellow Department of Mathematics I.I.T. Bombay Mumbai 400076		Prof. Dr. Mythily Ramaswamy T.I.F.R FNASc, Centre for Applicable Mathematics, Bangalore	
13/06/2018 Wednesday	Minimal Polynomial of a Linear Transformation	Partial Differential Equations		Partial Differential Equations		Prof. Dr. Sharad Sane FASc Emeritus Fellow Department of Mathematics I.I.T. Bombay Mumbai 400076		Cayley–Hamilton theorem	Prof. Dr. Mythily Ramaswamy T.I.F.R FNASc, Centre for Applicable Mathematics, Bangalore
	Prof. Dr. Sharad Sane FASc Emeritus Fellow Department of Mathematics I.I.T. Bombay Mumbai 400076	Prof. Dr. Mythily Ramaswamy T.I.F.R FNASc, Centre for Applicable Mathematics, Bangalore		Prof. Dr. Sharad Sane FASc Emeritus Fellow Department of Mathematics I.I.T. Bombay Mumbai 400076		Prof. Dr. Sharad Sane FASc Emeritus Fellow Department of Mathematics I.I.T. Bombay Mumbai 400076		First order differential equations	
14/06/2018 Thursday	Partial Differential Equations	Partial Differential Equations		Discussion & Problem Solving		Invariant subspaces		Direct-sum decompositions	
	Prof. Dr. Mythily Ramaswamy T.I.F.R FNASc, Centre for Applicable Mathematics, Bangalore	Prof. Dr. Mythily Ramaswamy T.I.F.R FNASc, Centre for Applicable Mathematics, Bangalore		Prof. Dr. Mythily Ramaswamy T.I.F.R FNASc, Centre for Applicable Mathematics, Bangalore		Prof. Dr. Sharad Sane FASc Emeritus Fellow Department of Mathematics I.I.T. Bombay Mumbai 400076		Prof. Dr. Sharad Sane FASc Emeritus Fellow Department of Mathematics I.I.T. Bombay Mumbai 400076	

Day & Date	Period - I	Period - II	12 to 12.15	Period - III	1.30 to 2.30	Period - IV	3.45 to 4.15	Period - V
Time	9.30 - 10.45	10.45 - 12		12.15 - 1.30		2.30 - 3.45		4.15 - 5.30
15/06/2018	Invariant Direct Sums	The primary decomposition theorem	Interval	Cyclic subspaces and annihilators	Lunch Break	Real Analysis	Tea Break	Metric Spaces
Friday	Prof. Dr. Sharad Sane FASc Emeritus Fellow Department of Mathematics I.I.T. Bombay Mumbai 400076	Prof. Dr. Sharad Sane FASc Emeritus Fellow Department of Mathematics I.I.T. Bombay Mumbai 400076		Prof. Dr. Sharad Sane FASc Emeritus Fellow Department of Mathematics I.I.T. Bombay Mumbai 400076		Prof. Dr. Kanan V. FNA, FNASc School of Mathematics and Computer Sciences University of Hyderabad		Prof. Dr. Kanan V. FNA, FNASc School of Mathematics and Computer Sciences University of Hyderabad
16/06/2018	Cyclic decomposition	Sequences of functions		Continuous and differentiable functions		Rational, Jordan forms		Real Analysis
Saturday	Prof. Dr. Sharad Sane FASc Emeritus Fellow Department of Mathematics I.I.T. Bombay Mumbai 400076	Prof. Dr. Kanan V. FNA, FNASc School of Mathematics and Computer Sciences University of Hyderabad		Prof. Dr. Kanan V. FNA, FNASc School of Mathematics and Computer Sciences University of Hyderabad		Prof. Dr. Sharad Sane FASc Emeritus Fellow Department of Mathematics I.I.T. Bombay Mumbai 400076		Prof. Dr. Kanan V. FNA, FNASc School of Mathematics and Computer Sciences University of Hyderabad
17/06/2018	MATHEMATICA	Mathematical Softwares		LATEX		Continuous and differentiable functions		Sequences of functions
Sunday	Prof. Dr. Deepmala Rai Assistant Professor PDPM-Indian Institute of Information Technology, Design and Manufacturing Jabalpur	Prof. Dr. Deepmala Rai Assistant Professor PDPM-Indian Institute of Information Technology, Design and Manufacturing Jabalpur		Prof. Dr. Deepmala Rai Assistant Professor PDPM-Indian Institute of Information Technology, Design and Manufacturing Jabalpur		Prof. Dr. Kanan V. FNA, FNASc School of Mathematics and Computer Sciences University of Hyderabad		Prof. Dr. Kanan V. FNA, FNASc School of Mathematics and Computer Sciences University of Hyderabad
18/06/2018	Computer Modelling	Tutorial & Discussion Problem solving		SCILAB		Practical Demonstration		Practical Demonstration
Monday	Prof. Dr. Deepmala Rai Assistant Professor PDPM-Indian Institute of Information Technology, Design and Manufacturing Jabalpur	Prof. Dr. Vishnu Narayan Mishra Gold Medalist YSA, Indira Gandhi National Tirbal University, Lalpur, Amarkantak, Anuppur,		Prof. Dr. Deepmala Rai Assistant Professor PDPM-Indian Institute of Information Technology, Design and Manufacturing Jabalpur		Prof. Dr. Deepmala Rai Assistant Professor PDPM-Indian Institute of Information Technology, Design and Manufacturing Jabalpur		Prof. Dr. Deepmala Rai Assistant Professor PDPM-Indian Institute of Information Technology, Design and Manufacturing Jabalpur
19/06/2018	Limit Continuity	Applied Maths		Differentiability		Mobius transformations		Increasing & Decreasing functions
Tuesday	Prof. Dr. Vishnu Narayan Mishra Gold Medalist YSA, Indira Gandhi National Tirbal University, Lalpur, Amarkantak, Anuppur, Madhya Pradesh	Prof. Dr. Ram Bilas Misra Ex- Vice Chancellor , Avadh University, Faizabad/Ayodhya, U.P. (India)		Prof. Dr. Vishnu Narayan Mishra Gold Medalist YSA, Indira Gandhi National Tirbal University, Lalpur, Amarkantak, Anuppur, Madhya Pradesh		Prof. Dr. Ram Bilas Misra Ex- Vice Chancellor , Avadh University, Faizabad/Ayodhya, U.P. (India)		Prof. Dr. Vishnu Narayan Mishra Gold Medalist YSA, Indira Gandhi National Tirbal University, Lalpur, Amarkantak, Anuppur, Madhya Pradesh

Day & Date	Period - I	Period - II	12 to 12.15	Period - III	1.30 to 2.30	Period - IV	3.45 to 4.15	Period - V
Time	9.30 - 10.45	10.45 - 12		12.15 - 1.30		2.30 - 3.45		4.15 - 5.30
20/06/2018  Wednesday	Series & Summability Analysis	Multivalued Functions	Interval	Cauchy Sequence	Lunch Break	Integral Representation	Tea Break	Pointwise Convergence
	Prof. Dr. Vishnu Narayan Mishra Gold Medalist YSA, Indira Gandhi National Tirbal University, Lalpur, Amarkantak, Anuppur, Madhya Pradesh	Prof. Dr. Ram Bilas Misra Ex-Vice Chancellor Lucknow		Prof. Dr. Vishnu Narayan Mishra Gold Medalist YSA, Indira Gandhi National Tirbal University, Lalpur, Amarkantak, Anuppur, Madhya Pradesh		Prof. Dr. Vishnu Narayan Mishra Gold Medalist YSA, Indira Gandhi National Tirbal University, Lalpur, Amarkantak, Anuppur, Madhya Pradesh		Prof. Dr. Ram Bilas Misra Ex-Vice Chancellor Lucknow
21/06/2018  Thursday	Laplace Transform	Uniform Convergence		LP Space		Fourier Transformations		Holder & Mikowski inequality
	Prof. Dr. Ram Bilas Misra Ex-Vice Chancellor , Avadh University, Faizabad/Ayodhya, U.P. (India)	Prof. Dr. Vishnu Narayan Mishra Gold Medalist YSA, Indira Gandhi National Tirbal University, Lalpur, Amarkantak, Anuppur, Madhya Pradesh		Prof. Dr. Vishnu Narayan Mishra Gold Medalist YSA, Indira Gandhi National Tirbal University, Lalpur, Amarkantak, Anuppur, Madhya Pradesh		Prof. Dr. Ram Bilas Misra Ex-Vice Chancellor , Avadh University, Faizabad/Ayodhya, U.P. (India)		Prof. Dr. Vishnu Narayan Mishra Gold Medalist YSA, Indira Gandhi National Tirbal University, Lalpur, Amarkantak, Anuppur, Madhya Pradesh
22/06/2018  Friday	Fundamental Green function for the Laplacian operator	Sequences Space		matrix transformation		The Diffusion equation		Fourier Analysis
	Prof. Dr. Ram Bilas Misra Ex-Vice Chancellor , Avadh University, Faizabad/Ayodhya, U.P. (India)	Prof. Dr. Vishnu Narayan Mishra Gold Medalist YSA, Indira Gandhi National Tirbal University, Lalpur, Amarkantak, Anuppur, Madhya Pradesh		Prof. Dr. Vishnu Narayan Mishra Gold Medalist YSA, Indira Gandhi National Tirbal University, Lalpur, Amarkantak, Anuppur, Madhya Pradesh		Prof. Dr. Ram Bilas Misra Ex-Vice Chancellor , Avadh University, Faizabad/Ayodhya, U.P. (India)		Prof. Dr. Vishnu Narayan Mishra Gold Medalist YSA, Indira Gandhi National Tirbal University, Lalpur, Amarkantak, Anuppur, Madhya Pradesh
23/06/2018  Saturday	Green function for the Helmholtz operator	Carlson-Hunt Theorem		Linear Positive Operators		Non relativistic Scattering		Bernstein polynomial
	Prof. Dr. Ram Bilas Misra Ex-Vice Chancellor , Avadh University, Faizabad/Ayodhya, U.P. (India)	Prof. Dr. Vishnu Narayan Mishra Gold Medalist YSA, Indira Gandhi National Tirbal University, Lalpur, Amarkantak, Anuppur, Madhya Pradesh		Prof. Dr. Vishnu Narayan Mishra Gold Medalist YSA, Indira Gandhi National Tirbal University, Lalpur, Amarkantak, Anuppur, Madhya Pradesh		Prof. Dr. Ram Bilas Misra Ex-Vice Chancellor , Avadh University, Faizabad/Ayodhya, U.P. (India)		Prof. Dr. Vishnu Narayan Mishra Gold Medalist YSA, Indira Gandhi National Tirbal University, Lalpur, Amarkantak, Anuppur, Madhya Pradesh

Day & Date	Period - I	Period - II	12 to 12.15	Period - III	1.30 to 2.30	Period - IV	3.45 to 4.15	Period - V
Time	9.30 - 10.45	10.45 - 12		12.15 - 1.30		2.30 - 3.45		4.15 - 5.30
24/06/2018	Weierstrass approximation Theorem	The Wave equation		Modulus of Continuity with their properties		Excursion Tour		
Sunday	Prof. Dr. Vishnu Narayan Mishra Gold Medalist YSA, Indira Gandhi National Tirbal University, Lalpur, Amarkantak, Anuppur, Madhya Pradesh	Prof. Dr. Ram Bilas Misra Ex- Vice Chancellor , Avadh University, Faizabad/Ayodhya, U.P. (India)		Prof. Dr. Vishnu Narayan Mishra Gold Medalist YSA, Indira Gandhi National Tirbal University, Lalpur, Amarkantak, Anuppur, Madhya Pradesh				
25/06/2018	Lipselita Class of function	The Rotation Group		Product Summability transform		Validectory function  Prof. Dr. Ram Bilas Misra Ex- Vice Chancellor Avadh Univ., Faizabad / Ayodhya, U.P. (India) Worked At Ethiopia, Itly, Poland, Hungary, Iraq, Nigeria.		
Monday	Prof. Dr. Vishnu Narayan Mishra Gold Medalist YSA, Indira Gandhi National Tirbal University, Lalpur, Amarkantak, Anuppur, Madhya Pradesh	Prof. Dr. Ram Bilas Misra Ex- Vice Chancellor , Avadh University, Faizabad/Ayodhya, U.P. (India)		Prof. Dr. Vishnu Narayan Mishra Gold Medalist YSA, Indira Gandhi National Tirbal University, Lalpur, Amarkantak, Anuppur, Madhya Pradesh				

  
Principal

  
Co-ordinator