Annual Exhibition

Sports and Education: An Interdisciplinary Approach



January 29th & 30th, 2019

Organized by



NETAJI NAGAR DAY COLLEGE

(Under Graduate & Post Graduate Institution) Affiliated to University of Calcutta • Accredited by NAAC (B++) 170/436, N.S.C Bose Road, Regent Estate, Kolkata – 700092



















































NETAJI NAGAR DAY COLLEGE

(Under Graduate & Post Graduate Institution) Affiliated to University of Calcutta Accredited by NAAC (B⁺⁺) 170/436, N.S.C. BOSE ROAD REGENT ESTATE – KOLKATA - 700092

Ref. No.....

Date: 22.01.2019

Invitation Letter

To, Mr. Kanu Majumdar Secretary West Bengal Body Building Association Kolkata.

Dear Sir,

It is our pleasure to inform you that we are organizing the Annual Exhibition on 29th and 30th January, 2019 at our college campus. The theme of the exhibition is **"Sports and Education: An Interdisciplinary Approach"**.

We look forward to your gracious presence on this occasion.

With regards,

Yours truly,

Abjash Dr. Sonali Banerjee Jash Principal Netaji Nagar Day College

Principal Netaji Nagar Day College Kolkata - 700 092

Annual Exhibition on Sports and Education: An Interdisciplinary Approach January 29th & 30th, 2019 Organized by

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SCHEDULE OF THE EXHIBITION DAY 1 29.01.2019 (TUESDAY)

11:00 am to 12.15 pm: **Inaugural Session**

Speakers:

- 1. Dr. Samir Kumar Saha, Ex-Professor and Head ,Mechanical Engineering Department ,Jadavpur University
- 2. Mr. Kanu Majumdar, Secretary, West Bengal Body-Building and Welfare Association
- 3. Mr. Samir Ghosh, Mr. Universe 2008 and Fitness Mentor, Kolkata

12.15 pm to 12.30 pm: Tea Break

12.30 pm to 5 pm: Exhibition Hour (Open to all)

Day 2 30.01.2019 (WEDNESDAY)

11:00 am to 3 pm:	Exhibition Hour (Open to all)
3 pm to 3.30 pm:	Tea Break
3:30 pm:	Valedictory Session

Session Chair

Dr. Abhijit Majumdar, Department of Physics, IIEST Shibpur Howrah & President, Governing Body, Netaji Nagar Day College.

Conclusive Remarks by

Dr. Soumya Sen, Assistant Professor, A.K. Choudhury School of Information Technology, University of Calcutta

Venue:	
Inaugural Session:	Room No. MB - 8
Exhibition:	Room No. A2 & Room no.25 (New Building)
Valedictory Session:	Room No. MB – 8

Annual Exhibition-2019 "Sports and Education: An Interdisciplinary Approach" January 29th & 30th, 2019

REPORT

Organized by

Netaji Nagar Day College 170/436, N.S.C. Bose Road Regent Estate, Kolkata - 700092

Report of the Annual Exhibition on Sports and Education: An Interdisciplinary Approach organized by Netaji Nagar Day College during January 29th & 30th, 2019

The Annual Science Exhibition 2019 for Netaji Nagar Day College was held on 29th & 30th January, 2019 in the college campus with high grandeur. The theme of the exhibition for this year was "**Sports and Education: An Interdisciplinary Approach**". Seventy three Students in 24 exhibitor groups from different Departments of Science, Arts and Commerce participated with great enthusiasm.

An exhibition organizing committee had been formed with the following members:

Dr. Chanchal Guha Roy, Dr. Surajit De, Dr. Sucharita Mitra(Sarkar), Dr. Krishna Gangopadhyay, Smt Malabi Chakraborty, Dr. Barnali Dutta, Sri Probhas Mondal, Smt. Sanjukta Pan, Dr. Sayantani Das, Sri Pitambar Das, Smt Mita Karmakar, Smt Ivy Siddhanta, Sri Suman Patra, Smt Ishita Nag, Dr Shantanu Ganguly, Dr. Ujjwal Kr. Pahari, Sri Nadim Haider, Dr. Bhumika Pradhan, Dr Jayeeta Paul, Mousumi Pramanick, Smt Mitra Tithi Dey, Sri Santanu Pan, Sri Puspendu Roy, Dr. Sujay Kr Nayek and Dr. Satarupa Sarkar (Joint Conveners).

Staff members: Sri Biplab Das, Sri Amar Chatui, Smt Baishali Mukherjee, Sri Ratan P. Harijan, Sri Ajoy Kr. Chowrasia, Sri Tarak Das, Sri Dilip Adhikary. Student member: Sri Surya Kanta Chowdhury (G.S.).

The participation level of students in this year's exhibition had been phenomenal. Several interesting models and posters were presented by students in groups. Some of them carried innovative ideas and vision, widely appreciated by the viewers. Prizes were awarded to top performer groups in three categories. There was an arrangement of two special prizes also. The audience of the show not only comprised of college students, but even students from adjacent schools and locality were drawn into the event out of interest.

On other hand, it was our privilege to have honorable Dr. Samir Kumar Saha (Ex-Professor & Head, Mechanical Engineering Department, Jadavpur University) rendering the inaugural speech on this auspicious occasion. Special guests of this event were Mr. Kanu Majumdar, Secretary, West Bengal Body Building Association, Kolkata and Mr. Samir Ghosh, Mr. Universe 2008 and Fitness Mentor, Kolkata. They shared their life story, achievements and also gave valuable ideas and information about how to care physical as well as mental health in our daily busy lives. Each of the dignitaries visited the exhibition stalls and encouraged the students in coming out with new ideas and presentation of the same through the models. This indeed boosted the enthusiasm of the participants to a significant level.

In the valedictory session, Dr. Soumya Sen, Assistant Professor, A.K. Choudhury School of Information Technology, C. U., Kolkata gave some important suggestions to the participants so that they can improve their performances in the next year and also congratulated the organizers of the event and wished them grand success in the years to come. The event was concluded with a perfect feeling of cooperation and harmony among students, teacher and office staffs. The essence behind success of this event was the work distribution, planning and organization aided by students, faculty members, non teaching staffs & student union members with a perfect coherence between each unit. Last but not the least, the guidance cooperation and inspiration from our Principal deserves a special note of appreciation.

Singary Dr. Nayen Satarupa Servicar

Dr. Sujay Kr. Nayek & Dr. Satarupa Sarkar

Joint Convener(s)

Annual Exhibition on Sports and Education: An Interdisciplinary Approach January 29th & 30th, 2019

To The Principal Netaji Nagar Day College 170/436, N.S.C Bose Road Regent Estate, Kolkata-700092 Dated: 07.11.2019

Subject: Submission of the adjustment voucher against an advance of Rs.50,000.00 drawn for conducting the above mentioned annual exhibition.

Dear Madam:

Enclosed please find the adjustment voucher, supported by bills, against an advance of Rs.50,000.00 (Rupees Fifty Thousand Only) drawn for conducting the Annual Exhibition on "Sports and Education: An Interdisciplinary Approach" during January 29th & 30th, 2019 in our college premises.

With regards,

Yours sincerely,

Satarupa Sarkar

Smary Dr. Nayen (Dr. Sujay Kr. Nayek & Dr. Satarupa Sarakar) Joint Convener(s), Annual Exhibition 2019 Netaji Nagar Day College Kolkata 700092

Encls:

1. Original bills (V1 to V50)

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SI. No.	Bill No.	Items/Goods	Amount (Rs.)
1	V1 - V5	Honourium for the Guests	5000.00
2	V6	Mementos	2940.00
3	V7, V8	Ratan Da (To Arrange Benches)	3200.00
4	V9, V10	Room Decoration & Metals	8500.00
5	V11	Flower Sticks	600.00
6	V12 - V14	Prizes (Books)	2538.00
7	V15, V15a, V16, V16a	Flex, Certificates and Stickers Print	3086.00
8	V17 – V25, V19a	Tea, Tiffin, Chocolates and Cakes	11316.00
9	V26 – V43	Bills of Exhibitors Groups	10444.00
11	V44 – V49a	Xerox, Pictures Print & Album	2177.00
12	V50	Others	199.00
		Total Expenditure:	50,000.00

The adjustment voucher against an advance of Rs.50,000.00 drawn for conducting the above mentioned annual exhibition.

Sing any Dr. Nayer Satarupa Saruar

(Dr. Sujay Kr. Nayek & Dr. Satarupa Sarakar) Joint Convener(s), Annual Exhibition 2019 Netaji Nagar Day College Kolkata 700092

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REPORT ANNUAL EXHIBITION-2019 (January 29th & 30th), NETAJI NAGAR DAY COLLEGE, KOLKATA

Theme of Annual Exhibition-2019: SPORTS AND EDUCATION: AN INTERDISCIPLINARY APPROACH

Joint Convener (s): Dr. Sujay Kr. Nayek & Dr. Satarupa Sarkar Total amount drawn in advance: Rs. 50000/-Total Number of Under Graduate Departments in NNDC: 18 Number of P.G. Departments in NNDC: 01 Total Number of Exhibitor Groups participated: 24 Total Number of Participants: 73 Fund amount allotted per Group: Rs. 500/- (Maximum) Name of the Judges:

- (i) Prof Samir Saha, Retd. Professor and Head, Mechanical Engineering Department, Jadavpur University, Kolkata
- (ii) Dr. Soumya Sen, Assistant Professor, A.K. Choudhury School of Information Technology, C. U., Kolkata

Special Guests:

- (i) Mr. Kanu Majumdar, Secretary, West Bengal Body Building Association, Kolkata.
- (ii) Mr. Samir Ghosh, Mr. Universe 2008 and Fitness Mentor, Kolkata.

Following departments took part in this Exhibition: (Thirteen)

Bengali (1 group), Botany (2 groups), Chemistry (2groups), Commerce (3 groups), Computer Science (1 group), Electronics (1 group), English (1 group), Mathematics (2 groups), Physics (3 groups), Physiology (2 groups), Political Science (2 groups), Geography (2 groups), Zoology (2 groups).

Following departments did not take part in this Exhibition: (Five)

Economics, Education, Environmental Studies, History, Philosophy. **WINNERS:**

1st Prize: Botany (Group 3) "Nanotechnology In Sports Equipments That Helps In Prevention Of Cancer" Name of the Exhibitors: HRIDAY Home CHOWDHURY (2nd Sem), SHREYOSI DAS (2nd Sem), DEBAYAN CHAKRABORTY (2nd Sem).

2nd Prize: **Physiology** (Group 15) "Sports for All"

Name of the Exhibitors: SAYAN SAMADDAR (2nd Yr), SAYANI MITRA (2nd Yr),

NILANJANA KARMAKAR (2nd Yr).

3rd Prizes: (i) Chemistry (Group 4) "The Chemistry Of A Football Shirt"

Name of the Exhibitors: SAYANTIK SAHA (2nd Yr), SOURAV SARDAR (2nd Yr), BALARAM GAYEN (2nd Yr).

(ii) **Mathematics** (Group 11) "The Effects of Wind and Altitude In The 400m Sprint With Various IAAF Track Geometries"

Name of the Exhibitors: SAIKAT SAMANTA (2nd Yr), AYAN KARMAKAR (2nd

Yr), ANKIT HAZRA (2nd Yr).

(iii) Physics (Group 12) "Mobile Game"

Name of the Exhibitors: DEBASMITA BAG (2nd Yr), NABIN BISWAS (2nd Yr).

Special Prizes: (i) English (Group 22) "Sports In Literature"

Name of the Exhibitors: SNEHA MAITY (2nd Sem), TRINA CHAKROBORTY (2nd Sem), PRAGATI RAY (2nd Sem).

(ii) M.Com (Group 6) "Strategic Management of Sports Organisation"

Name of the Exhibitors: RESMI DAS (M.Com), ADITI BISWAS (M.Com).

Curriculum Vitae

I, Kanu Majumdar, would like to introduce myself to you as a former Senior National champion'84 and international sports person in powerlifting, strength lifting and bodybuilding. Currently I am holding the position of Hony. General Secretary of West Bengal Body Building & Welfare Association and National judge of Indian Body Building Federation since 1994.

I would like to present my sports achievements before you as part of my humble request.

Arena	Award	Event	Year
International	Bronze medal	Asian powerlifting championship,	1984
		Bandung, Indonesia	
International	Participated	World arm-wrestling championship, London, UK	1987
International	Silver medal	Asia-Oceania powerlifting championship, Melbourne, Australia	1990
International	Silver medal	Asia-Oceania powerlifting championship, Auckland, NZ	1991
International	Coach – India team	Mr. Universe Body building championship	2003 – Mumbai; 2008 – Miami, USA.
National	Gold medal	Sr. National powerlifting championship	1984
National	Gold medal	Sr. National strength-lifting championship	1986, 1987, 1988
Eastern India	Gold medal	Eastern India powerlifting championship	1980, 1982-85
Bengal	Gold medal	West Bengal powerlifting championship	1980, 1982-92

National Refree/Judge – Indian powerlifting federation (1981-92), Indian body building federation (1994-till date).

Secretary, Organizing Committee – 36^{th} Sr. National body building championship (1996), 2^{nd} Commonwealth body building championship (2002).

I have completed by B.Com from Shyamaprasad College under C.U. in the year 1981 and represented Ashutosh College-Shyamaprasad gymnasium in various state & national championships during 1976-81 and earned numerous laurels.

Sincerely, Kanu Majumdar +91 9432094391 Kanumajumdar@yahoo.co.in

SRI SAMIR GHOSH, MR. UNIVERSE 2008





With Mr. Luis Zuwik, President, Muscle Mania Universe and Samir Ghosh won the 1st place in his bwt class, Miami,USA ,June 2008



His Sir Kamal Bhandari , 5times MR. INDIA



Mr. Samir Ghosh is one of the leading Fitness Trainers in India. He is one of the top bodybuilders in Bengal. He represented India in many fitness championships. In the year 2008, he has won the prestigious Mr Universe Championship, 66-kg category in Miami.



He also won the title 'Mr. India' for three times, and the years are 1999, 2004 and 2008. He also achieved second position in Mr. Asia Championship in 1999 which was held in Taiwan.



He is associated with many renowned fitness studios like Adrenaline Rush Gym and Fitness Kolkata, Gold's Gym Kolkata and many more.











He is the trainer of

Ranjit Mandal, Jr Mr. India, Bhutto Khan, Sr Mr. India, Afroz Khan, International Fitness Model, Europa Bhoumik, Women Bodybuilder









He started his journey as from a humble background and now has been able to make a name for himself in the fitness industry



Invited Guests:

1			
Sl.No.	Name & Designation	Signature	Date
1	Prof. Samir Kumar Saha Retd. Professor and Head, Mechanical Engineering Department, Jadavpur University, Kolkata	Alar 29/01/19	29 (01), 59
2	Mr. Kanu Majumdar Secretary, West Bengal Body Building Association, Kolkata.	Wenage	29[61/19
3	Mr. Samir Ghosh Mr. Universe 2008 and Fitness Mentor, Kolkata.	I.	29/01/19
4	Dr. Soumya Sen, Assistant Professor, A.K. Choudhury School of Information Technology, C. U., Kolkata	frugt	30/01/19
5			
	\mathcal{A}		1
6			1
7			
8			
9			

Sl. No.	Name	Signature	Year/Sem	Department	
1	ISHIKA GUHA	gshika cuta	2ND SEM		
2	MOUMITA KARMAKAR	Moumita Kannakan	2ND SEM		
3	NILABJA MUKHERJEE	Nilabja Mukherjee	2ND SEM	BENGALI	
4	SADDAM SHAIKH	saddam se Kh	2ND SEM		
5	DIYA BHATTACHARYA	Rive Blotterehorger	2ND SEM		
6	BIDHAN CHANDRA BISWAS	Biellion Ch. Bisway	2ND SEM		
Y	SAYAN NANDY	Sayan Nandy.	2ND SEM		
8	HRIDAY CHOWDHURY	striday Hone choudhing	2ND SEM	BOTANY	
19	SHREYOSI DAS	Shreyost Das.	2ND SEM	Bill Shared	
120	DEBAYAN CHAKRABORTY	Debayan Chahraborty	2ND SEM	(2)	
M	SAYANTIK SAHA	Sayantik Saha.	2ND YEAR	1.	
12	SOURAV SARDAR	Sounar Sandan	2ND YEAR		
13	BALARAM GAYEN	Balerram Georgen	2ND YEAR		
14	PRITAM CHAKRABARTY	Button charkeraborty	2ND SEM	CHEMISTRY	
45	SANTANU GHOSH	Saula thok	2ND SEM	Bill Submitted and paid	
16	TARAK MONDAL	Tallak Mondal.	2ND SEM	(2)	
17	RESMIDAS RESHMI DAS	Restime das 29.1.2018	PART II, M.COM.		
18	ADITI BISWAS	Adifi Biswas 29.1.2018	PART II, M.COM.		
19	NIKKI KUMARI	ABSENT ON 29/1119 ABSENT ON 30/110	PART II, M.COM		
20	TANIYA SYAM	Taniya Syam	PART II, M.COM	COMMERCE	
22	SUBHAJEET SUBHJIT BHATTACHARJEE BHATTACHAR	Sublay 14 Phenthelin b	PART II, M.COM.	Bill Busmitted 2	
122	MANISHA UPADHYAY	Manisha Upaelhyar	PART II, M.COM.	(3)	
23	SRITAMA GANGULY	Saitoma Grangely	B.COM		
24	RIMA BANIK	Rema Banile	B.COM		
25	ADITYA DAS	AdityaDas	B.COM		

Sl. No.7	Name	Signature	Year/Sem	Department
26	ARGHADEEP PAUL	Arghadeep Paul	2 ND SEM	ELECTRONI
27	SUBHAJIT CHATTERJEE	Subhaji't Chatterjee	2 ND SEM	CS
28	SOMENATH MUKHERJEE	Somewath Mikherijee.	3 RD YEAR	11.1.1
29	SUSANTA SAHA	Suchanta Das.	2 ND YEAR	
30	NILAY GHOSH	Niby Brosh.	2 ND YEAR	and the second
31	SUVO SAHA	Suro Saha	2ND YR	
32	BIKRAM BEHERA	Bibrenn Believer	2ND SEM	ATICS
33	SAIKAT SAMANTA	Saikof Samanta	2ND YR	Anos
34	AYAN KARMAKAR	ABSENT ON 29/1/19 Present on 30/1/19	2ND YR	
35	ANKIT HAZRA	Anket Hazza	2ND YR	
-36	DEBASMITA BAG	Debasmita Bag.	2ND YR	
31	NABIN BISWAS	Nabin Biswas	2 ND YEAR	
38	ANKIT DUTTA	Inhit Quitta	3RD YR	PHYSICS
39	ASUTOSH KUMAR	Ashutosh kumax	3RD YR	
40	TRIASHA DEBNATH	ABSENT ON 29/1/19 ABSENT ON 30/1/19	2ND SEM	
41	APAROOPA DAS	ABBENT ON 29/11/19	2ND SEM	
42	SAYAN SAMADDAR	Sayou Samedda	3KD YR	
43	SAYANI MITRA	Sayani Mitra	3RD YR	
44	NILANJANA KARMAKAR	Nelanjana Karma Kar	3RD YR	PHYSIOLOGY
45	MAHASVETA DUTTA	Mahasveta Dutta	2ND YR	Bill submitt
46	DEBOPRIYA DAS	Deporriya Das	2ND YR	4 paid
47	DIPANKAR JAH JHA	Airenken The	2HD YR	(2)
48	LAXMI KAR	Zasemi Kaz	2 ND SEM	
49	NAVANITA MONDAL	Nabanita Mondal	2 2ND SEM	n
50	NARAYAN MONDAL	Narayah mondel	2 ND SEM	POLITICAL
51	SUSMITA BANERJEE	Susmita Banevice	2 ND SEM	SCIENCE
152	SANATAN NASHKAR	Sanatan Naskah	2ND SEM	Bill Bubnio
153	TAMA RANI GHOSH	Tamer Rami allach	2ND SEM	(2)

Ø

Sl. No.	Name	Signature	Year/Sem	Department
~54	NILANJANA BHATTACHARYYA	Nilanjana Bhattacharenya.	SEM I	
55	SUBHADIP GHOSH	Subhadip Ghosh	SEM I	
56	SHAYAN KR RUMAR NASKAR	Shayan Kro. Nackaro	SEM I	ZOOLOGY
157	SOUMEN MONDAL	Soumen Mondal	2ND YR	Rill submitted
58	SAMPA DAS	Sampor Das	2ND YR	and paid
N59	SWAGATA SEAL	Simanta Soal	2ND YR	(2)
60	SAYANI DAS	Sayahi Das	2 ND YR	
161	ALOKE MANDAL	Aloko Mandal	2 ND YR	
62	GOURAV DAS	GAUDAN DAB.	2 ND YR	GEOGRAP
63	SHUMIT DAS	Shumit Dal	2 ND YR	HY
~64	SUFAL PAL CHOWDHURY	Sural Pal Chowshurs	3 RD YR	
185	OISHIKA BANERJEE	Oishika Banenjee	3 RD YR	
66	KOUSTABH SEN	Koustabh Scn	3 RD YR	
57	ANKURITA GHOSH	Ankweita Ghosh.	3 RD YR	
~68	SNEHA (Houty) MAITY	Sheha Maity	2 ND SEM	
69	OINDRILLA TRINA CHAKRABORT	Thina Chaknabonty	2 ND SEM	ENGLISH
770	PRAGATI RAY	Poragati Say	2 ND SEM	
71	DIPSHA GHOSH	Dipsha Ginosh	2 ND YR	
72	NABANITA NASKAR	Nabanita Naskar.	2 ND YR	COMP. SC.
13	SRAYAN GUHA THAKURTA	Is ayon Cuha Thak usta	2 ND YR	
74	SUBHANKAR BOSE	Subhankar Rese	2 ND YR	
175	SAYAN ROY	Sayan voy	2ND YR	PHYSICS
AC.	SAGAR NATH .	Bagar Watth.	2NDYR	PHYSICS

Total Edusition - 22



Sl. No.	Name	Year/Sem	Department	Title of the Topic
1	ISIKA GUHA			
	MOUMITA KARMAKAR			
	NILABJA MUKHERJEE		BENGALI	SAHITYO O KHELA
	SADDAM SHAIKH			
2	DIYA BHATTACHARYA	2ND SEM		FOOD, HEALTH,
-	BIDHAN CHANDRA BISWAS	2ND SEM		SPORTS AND
	SAYAN NANDY	2ND SEM	BOTANY	EDUCATION
3	HRIDAY CHOWDHURY	2ND SEM		NANOTECHNOLOGY
5	SHREYOSI DAS	2ND SEM		IN SPORTS
	DEBAYAN CHAKRABORTY	2ND SEM		EQUIPMENTS THAT
				HELPS IN
				PREVENTION OF
				CANCER.
4	SAYANTIK SAHA	2ND YEAR		THE CHEMISTRY OF
-	SOURAV SARDAR	2ND YEAR		A FOOTBALL SHIRT
	BALARAM GAYEN	2ND YEAR	CHEMISTRY	
5	PRITAM CHAKRABARTY	2ND SEM		ROLE OF
				MEDICINES IN
	SANTANU GHOSH	2ND SEM		SPORTS (STEROID
	TARAK MONDAL	2ND SEM		AND ASPIRIN)
6	RESMI DAS	PART II,		STRATEGIC
		M.COM.		MANAGEMENT OF
	ADITI BISWAS	PART II,		SPORTS ORGANISATION
		M.COM.		ORGANISATION
	NIKKI KUMARI	PART II,		
		M.COM.		
7	TANIYA SYAM	PART II,		(DODT)
		M.COM.		SPORTS MARKETING
	SUBHAJEET BHATTACHARJEE	PART II,	COMMERCE	WARKETING
		M.COM.		
	MANISHA UPADHYAY	PART II,		
		M.COM.		(DOD)
8	SRITAMA GANGULY	B.COM		SPORTS
	RIMA BANIK	B.COM		INDUSTKIES AND FXPORT IN INDIA
	ADITYA DAS	B.COM		

Sl. No.	Name	Year/Sem	Department	Title of the Topic
9	ARGHADEEP PAUL	2 ND SEM		APPLICATION OF
		2ND CEM	ELECTRONICS	ELECTRONIC
	SOMENATU MUKUEDIEE	2 SEM 2^{RD} VD	-	TECHNOLOGY IN
	SOMENATH MUKHERJEE	5 IK		SPORTS
10	SUSANTA SAHA	2ND YEAR		How to hit a
	NILAY GHOSH	2ND YEAR	-	successful Goal in
	SUVO SAHA	2ND YR	MATHEMATICS	Rugby
	BIKRAM BEHERA	2ND SEM		
11	SAIKAT SAMANTA	2ND YR		The Effects of Wind
	AYAN KARMAKAR	2ND YR		and Altitude in the
	ANKIT HAZRA	2ND YR		400m Sprint with
				Geometries
12	DFBASMITA BAG	2ND YR		MOBIL F GAME
14	NABIN BISWAS		-	MODILL OF MIL
			PHYSICS	
12	ΔΝΚΙΤ ΟΠΤΤΔ	3RD VR	-	SPORTS &
13			-	ATHI FTICS
	TRIASHA DERNATH	2ND SEM	-	MILLING
		2ND SEM		
14	SAYAN SAMADDAR	3^{RD} YR		SPORTS FOR ALL
	SAYANI MITRA	3 RD YR	-	SI OKIDI OKILL
	NILANJANA KARMAKAR	3^{RD} YR	PHYSIOLOGY	
15	MAHASVETA DUTTA	2^{ND}YR		
	DEBOPRIYA DAS	2^{ND}YR		HOW TO BE A FIT
	DIPANKAR JAH	2^{ND}YR		PERSON
16	LAXMI KAR	2 ND SEM		"KHELAI
	NAVANITA MONDAL	2 ND SEM		RAJNAITIK
	NARAYAN MONDAL	2 ND SEM		PROVAB"
17	SUSMITA BANERJEE	2^{ND} SEM	POLITICAL SCIENCE	"KHELAI
	SANATAN NASHKAR	2^{ND} SEM		ANTORJATIK
	TAMA RANI GHOSH	2^{ND} SEM		PROVAB O
				SOUVRATITWO"
18	NILANJANA BHATTACHARYYA	SEM I		PLAYFULNESS OF
	SUBHADIP GHOSH	SEM I		ELEPHANT
	SHAYAN KR KUMAR NASKAR	SEM I	7001.002	
19	SOUMEN MONDAL	2ND YR GEN	ZUULUGT	
	SAMPA DAS	2ND YR GFN		RUNRUNRUN
	SWAGATA SEAL	2ND YR GEN		•••

Sl. No.	Name	Year/Sem	Department	Title of the Topic
20	SAYANI DAS	2^{ND} YR		
	ALOKE MANDAL	2 ND YR		"KRIRAH SHIKSHAR
	GOURAV DAS	2 ND YR		ANGA"
	SHUMIT DAS	2 ND YR		
21	SUFAL PAL CHOWDHURY	3 RD YR	GEOGRAPHY	"SHIKSHAR
	OISHIKA BANERJEE	3 RD YR		APARIHARYA ANGA
	KOUSTABH SEN	3 RD YR		PRAKRITI"
	ANKURITA GHOSH	3 RD YR		
22	SNEHA MAITY	2 ND SEM		SPORTS IN LITERATURE
	TRINA CHAKROBORTY	2 ND SEM		
		2 ND CEM	ENGLISH	
	PRAGATI KA I	2 SEM		
23	DIPSHA GHOSH	2 ND YR		
-0	NABANITA NASKAR	2 ND YR	COMPUTER	BIONIC ARM IN
	SRAYAN GUHA THAKURTA	2^{ND} YR	SCIENCE	SPORTS
	SUBHANKAR BOSE	2^{ND} YR		
24	SAYAN ROY	2^{ND} YR	PHYSICS	TECHNOLOGY
	SAGAR NATH	2 ND YR		IMPACT ON SPORTS

Annual Exhibition-2019 Jan 29-30

How to hit a successful Goal in Rugby Susanta Das¹, Suvo Saha¹, Nilay Ghosh¹ and Bikram Behera² Department of Mathematics * Netaji Nagar Day College ¹Second Year, ²Second Semester, B.Sc. Hons.

Situation: Before a record crowd of 100963, third ranked California faced sixth ranked Ohio State in the Rose Bowl on January 2, 1950. Only 1.55 minutes time was remained in the clock and two teams were dead-locked in a 14-14 tie. Ohio State's drive for the goal had stalled at the California 6-yard line; it was now fourth down. Ohio State coach Wes Fesler decided to try for a field goal to take the lead. However, confusion with substitutes caused Ohio State to draw a 5-yard delay-of-game penalty. The field game attempt was successful despite this seemingly foolish mistake and Ohio State went on to win the game 17-14.

The Optical Kicking Angle and Locus:

Fesler's Post Game Comment:

He deliberately sent in two substitutes just before the crucial field goal to draw a five-yard penalty and push the ball back from California's six-yard line to the eleven, "to give us a better goal".

Questions:

- 1. Did Fesler make the right call?
- 2. Is it really possible to improve the chances the scoring a field goal by backing up?
- 3. What is the factor affecting a kicker's chances of success?

Suppose the distance separating the two goal posts G and G at one end of the field is 2g. Let *l* denote the perpendicular bisector of the line segment GG, and l(x) the line parallel to *l* at a distance x. If x < g then the closer a kicker on l(x) is to the line of the goalposts, the larger is the angle subtended by the goalposts. But for $x \ge g$ the point K on l(x) at which the goalposts subtended the maximum possible angle is characterized

by the condition $\overline{KY} = \overline{YG}$, where Y is the closest point on *l* to K and G is the goalpost nearest l(x).



Corollary:

In the Cartesian co-ordinate system with the line through the two goal posts as x-axis and the line *l* as y-axis, the locus of points (x, y) at which the angle subtended by the goalposts is maximum is the portion of the hyperbola $x^2/g^2 - y^2/g^2 = 1$ above the x-axis.



A *try* is a way of scoring points in rugby union and rugby league football. A try is scored by grounding the ball (the ball must be touching the player when coming into contact with the ground) in the opposition's in-goal area (on or behind the goal line). Rugby union and league differ slightly in defining 'grounding the ball' and the 'in-goal' area

Important Notes:

In the game of Rugby, after a try the scoring team attempts a kick for extra points. The ball must be kicked from directly behind the place where the try was scored. The kicker can choose the distance but no lateral movement is allowed. Actually the kicker's best choices lie on the hyperbola $x^2/g^2 - y^2/g^2 = 1$. Instead of choosing points on the hyperbola, a player may also choose points on the asymptotes also. Because it is relatively easy to in the midst of the game to estimate these 45° angle lines through the middle of the goal.

Conclusion:

We have discussed here about the optimal kicking angle and locus of the point from which one rugby player can kick the ball towards the goal successfully. In 1950, Coach Fesler did not know the actual reason behind the kicker's success, but there was the application of Mathematics.

RULES

1. Standard dimensions and markings of a rugby league field. 2. The longer boundary lines are touch lines, while the shorter boundary lines are dead ball lines. The touch lines and dead ball lines are out of play. 3. Each end of the field is a goal line or try-line; they are 100 meters (109.4 yards) apart. 4. Play will occur within the field of play, this is the area bounded by, but not including, the touch lines and goal lines. 5. Between the goal lines, broken lines run parallel to each touch line at 10 and 20 meters from touch. 6. On each goal line are two goal posts 5.5 metres apart connected by a cross bar 3 metres from the ground. Each goal post is 16 metres in height.

References:

Daniel C Isaken, 'How to kick a field goal; A.Coxford, D.Hirschhorn and Z.Usiskin, The University of Chicago Math Project, Geometry,II 1991, pp746; Gladwin Hill, Ohio State field goal in last two minutes beats California in Rose bowl, New York Times, Jan 3, 1950, pp 26; <u>https://en.wikipedia.org/wiki/Rugb</u> y league playing field; <u>https://www.dsr.wa.gov.au</u> The Effects of Wind and Altitude in the 400m Sprint With Various IAAF Track Geometries Saikat Samanta, Ayan Karmakar and Ankit Hazra Department of Mathematics * Netaji Nagar Day College 2nd Year, B.Sc. Hons

Introduction

In a standard International Association of Athletics Federations (IAAF) track, there are eight lanes, and a maximum of eight runners in a race. Although each IAAF track has the same dimensions, questions have arisen as to the effect that wind and altitude have on the runner's performances, regardless of the event. Several models have been created to describe their effects on the 100m sprint, the 200m sprint, and the 4 x 100m relay. Modeling these performances proved to be relatively simple, but until 2004 no one had ever tried modeling a 400m sprint because of the difficulty of accounting for two straights and two bends. In 2004 Mike Quinn published a model for the 400m sprint, using data from the 1999 World Athletics Championships. It (Quinn, 2004) is the basis for our model. Physical intuition suggests that a constant wind blowing across a closed loop track would have a detrimental effect on a runner's time regardless of the wind direction.

Objective:

We have studied the effects that wind and altitude have on the 400m sprint when run on various IAAF track geometries. We validate Quinn's ODE model using data from the 1999 World Athletics Championships. The model is based on Newton's Law for the energy balance of a runner. We find that the effect of altitude is significant but of little consequence with respect to differences in track geometry.

Hill-Keller model:

$$\frac{dv(t)}{dt} = f(t) - \frac{1}{\tau}v$$

Where v(t) is the runner's velocity at time t in the direction of motion, and f(t) is the runner's total propulsive force per unit mass, which drives the runner forward and overcomes both the internal

and external resistive force $\frac{v}{\tau}$ per unit mass

(Keller, 1973). Keller assumed that the resistance is a linear function of *v* and that the damping

coefficient τ is a constant.



Altitude and the Propulsive Force:

We now consider the propulsive force. Although the drag coefficient is not affected by an increase in altitude, and variations in the gravitational acceleration due to altitude are negligible (Behncke, 1994), McArdle (2007) observed that increasing altitude forces a drop in the partial pressure of oxygen, reducing the percentage of oxygen saturation in the blood. This in turn decreases the oxygen supplied to the runner"s muscles by the aerobic energy system. The oxygen saturation reduction is relatively small for altitudes less than 3000 meters, but still has a detrimental effect on athletic performances (Quinn, 2004). The conclusion is that the aerobic energy system contributes significantly to the energy supply during long sprints and middle distance running.

Quinn's Model

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In 2003 Quinn extended Keller's model, as others had before him, to determine the effects of wind and altitude in the 200m sprint. Quinn's model included the reaction time of the sprinter, as well as air resistance. The reaction time for a world-class sprinter is rarely below 0.13 s and averages about 0.15 s. Reaction times also vary by gender, with men having a slightly faster reaction time than women (Quinn, 2003). Quinn's extended model equation is:

$$\frac{dv(t)}{dt} = Fe^{-\beta t} - \frac{v}{\tau} - \alpha (v - v_w)^2,$$

Where $v = \frac{ds}{dt}$, v_w is the velocity of the wind relative to the

ground and tangent to the path, and $\alpha = \frac{\rho C_d A}{2M}$ where ρ is the air density, taken to be1.184 kg/m at $25^{\circ}C \cdot C_d$ is the coefficient of drag, taken to be 0.715 (Walpert and Kyle, 1989), A is the frontal area of the athlete, estimated to be 0.51 m^2 for men (Quinn, 2004), and M is the mass of the athlete, taken to be 76 kg, a typical mass for a world class 400m sprinter. Quinn replaced f(t) by $Fe^{-\beta t}$, a propulsive force per unit mass that diminishes during the race as the athlete's

Effect of Winds

muscles tire.

Another parameter in Quinn's model is v_w , the wind velocity relative to the ground and tangent to the path of the runner. It is different in each of the four segments of the track, and depends on the wind velocity and the relative wind direction, which will vary continuously as the runners progress around the track.

In Quinn's 2004 model, he chose the maximum force *F*, the decay rate β , and the resistive force *r* to fit the available 400m data from Ferro's 2001 paper. The data provided in Ferro's analysis of the 400m event were produced using twelve analog and digital video cameras. Quinn was able to fit his model to the data by setting $F = 7.91 m/s^2$, $\beta = 6 \times 10^{-3} 1/s$, and $\tau = 1.45 s$ (for men).

1	Distance	Actual Time	Quinn's Model
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(m)	(s)	(s)
50	5.99	6.07
100	10.95	10.99
150	15.95	15.93
200	21.07	20.98
250	26.27	26.29
300	31.51	31.75
350	37.03	37.33
400	43.03	43.03
Finish time (s)	43.18	43.18

Reference: M. D. Quinn, The effects of wind and altitude in the 200-m sprint, *Journal of Applied Biomechanics* **19** (2003) 49-59.

To The Principal Netaji Nagar Day College Kolkata- 700092

Date: 10.12.2018

Sub: Proposal to Organise Annual Exhibition in the college

Respected Madam,

We are pleased to inform you that the Science and Nature Club of this college is willing to organize a science exhibition in the college like previous years. A meeting of this sub-committee for this purpose will be called soon after getting a favorable response from your end. Please give us the necessary permission to organize this exhibition.

Anticipating your heartiest cooperation and support to organize this event smoothly.

Thanking you

Please proceed for the necessary arrangements. Abgash 10,12.18

Yours truly,

Dr. Sucharita Mitra (Sarkar) 10/12/18

Convener



NETAJI NAGAR DAY COLLEGE Phone : 2411-5301

(Under Graduate & Post Graduate Institute) Affiliated to University of Calcutta Accredited by NAAC (B++) 170/436, N. S. C. BOSE ROAD REGENT ESTATE, KOLKATA - 700 092

Ref. No

Date 19/12/2018

Notice

A meeting of the Annual Exhibition Committee will be held in the Principal's room on 20th Dec, 2018 (Thursday) at 12 noor. The members are requested to attend the meeting.

Agenda:

1. To finalize the title of the exhibition

2. To fix the dates and time of the exhibition

- 3. To discuss the names of the speakers for Inaugural and Valedictory session
- 4. To distribute the duties among the members

4. Miscellaneous, if any

Members:

Dr. Chanchal Guha Roy	Dr. Surajit De	Dr. Sucharita Mitra(Sarkar)	Dr. Krishna Gangopadhyay
Dr. Satarupa Sarkar	Sri Probhas Mondal	Smt. Sanjukta Pan	Dr. Sayantani Das
Dr. Barnali Dutta	Smt Ishita Nag Anag	Sri Nadim Haider	Smt Mitra Tithi Dey
Sri Pitambar Das	Smt Mita Karmakar	Dr Jayeeta Paul	Mousumi Pramanick
Sri Suman Patra	Smt Malabi Chakraborty	Dr. Bhumika Pradhan	Smt Ivy Siddhanta
Dr. Ujjwal Kr. Pahari	Dr Shantanu Ganguly	Sri Santanu Pan	Sri Puspendu Roy

Staff Members:

Sri Biplab Das	Sri Amar Chatui	Smt Baishali Mukherjee
Sri Ratan P. Harijan	Sri Ajoy Kr. Chowrasia	Sri Tarak Das
Sri Dilip Adhikary		

Student Member: Sri Surya Kanta Chowdhury (G.S.)

SBJash

Dr. Sonali Banerjee Jash Principal

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Seturupassenen

Dr. Sujay Kr. Nayek & Dr. Satarupa Sarkar Jt. Convener(s)

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Members present in the Science and Nature Sub -committee meeting held on 14.12.18 (Friday) at 1-15 pm at Principals scoom:-

1. Sejash 14/12/18 2. C. Cale Ray 3. Probles Mondal, 14/12/18. 4. Barnali Dutta 5. Smjory & Nayeu 6. M. Winy18 7. Sycool Kenner Palari 14/12/18 8. Fitambar Dris 14/12/18 8. Suchent hit 14/12/18 9. Kristina Grangofatygy 14/12/18 10. Saterup Souces 14/12/18 11. Gite Mordel 14/12/18 -

Resolution of the sulting of Science and Nature bub conmittee held on 14-12-18 at 1:15 M at Principal's room -

1. Topic Discussion about he there of the estilition. Sports -) Bod sugar Nayer sugarstad the theme title of the theme band on brand title of the theme band on brand 2. End of January. in the next meeting to be rentalized dates of the exhibition in neucling to be "On 1714 is 18th January of 2013. S. CLCR buggets to Co-oft at least One faculty wendow of every department to form the estilition herebow of every department to form the estilition publicantite. Following members are worted to to for

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Bot -Dr. Bhunika. Prodhan Bot - Dr. Bhumika. Prodhan Physiology - 12 MH. Staff. - Biblab, Amer, Hist - IS Prof. Evy Siddhanta Tarak, Baisholi, Aley Hist - IS prof. Shantanu Ganguly Dilips Ratan. Erg - St SNG Student - G.S. Erg - And Ishita Nag Ero - (IN) Barg - AthT Dr. Anjana Guha. Thakurata. Cico - Sto SS/MP Brog. Monsumi Pramaner. Edu - MK Rod Mita Karmakar. Phil - MC/CR Prof Malabi Chaknaborty ENSIG. - SP Prof Sanjukta Pan Come. - JP Prof. Jayanta Paul Confise - MD . Rod. Mitratithi Day Pet SC AR anniel enhibitet are selected deg and Sujay Nayer of Sateria Sarker.

4. Budget - As (previous years) por approved in Finance (por Project Cast - Br 500(-)

Phone : 2411-5301



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(Under Graduate & Post Graduate Institute) Affiliated to University of Calcutta Accredited by NAAC (B++) 170/436, N. S. C. BOSE ROAD REGENT ESTATE, KOLKATA - 700 092

Ref. No

Date 08/1/19

Notice

A meeting of the Annual Exhibition Committee will be held in the Principal's room on 11th Jan, 2019 (Friday) at 1 pm. The members are requested to attend the meeting.

Agenda:

- 1. To discuss the names of the speakers for Inaugural and Valedictory session
- 2. To select the structure of mementos
- 3. To discuss about the logo of annual exhibition
- 4. Miscellaneous, if any

Members:

Dr. Chanchal Guha Roy	Dr. Surajit De	Dr. Sucharita Mitra(Sarkar)	Dr. Krishna Gangopadhyay
Dr. Satarupa Sarkar	Sri Probhas Mondal	Smt. Sanjukta Pan	Dr. Sayantani Das
Dr. Barnali Dutta	Smt Ishita Nag	Sri Nadim Haider	Smt Mitra Tithi Dey
Sri Pitambar Das	Smt Mita Karmakar	Dr Jayeeta Paul	Mousumi Pramanick
Sri Suman Patra	Smt Malabi	Dr. Bhumika Pradhan	Smt Ivy Siddhanta
Dr. Ujjwal Kr. Pahari	Dr Shantanu Ganguly	Sri Santanu Pan	Sri Puspendu Roy

Staff Members:

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Sri Batan P. Harijan	Sri Ajoy Kr. Chowrasia	Sri Tarak Das
Sri Dilip Adhikary		

Student Member: Sri Surya Kanta Chowdhury (G.S.)

ABJash Dr. Sonali Banerjee Jash Principal

Signy Kr. Noyell Dr. Sujay Kr. Nayek & Dr. Satarupa Sarkar Jt. Convener(s) Annual Exhibition-2019

Date: 11/01/19 Annual Exhibition - 2019 Netaji Nagar Day College Meeting of Annual Exhibition Committee

Members:

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Meeting on Annual Exhibition - 2019 Minutes. Date: 1/1/19 1. Discussion about Meneudós - Nemento has been finalized by all the prevent members. Each of the memento cost Rs. 250[-. Hemarto chall be presented to the following members -Prof. Samir Saha Judges. Prof. Soremye Sem Judges. 2 3) Poof. Sonali Banerjee Jash - Principal (a) Mr. Kanve Masumdar Special Guest. (5) Mr. Samir Ghost.] Special Guest. 2. 6) GB Members 7) GB President (2) Guest speakers and Judges are finalized by all members. (3) Discussion about LOGO-- Prof. Sujay Nayek designed two logos. One of Them is selected by all members (without any red boundary). - Logo attachment to the Memento has been finalized.

- Prof. Nadim Haider her been assigned to bring the Mementos. (a) Number af volunteers will be fixed to 20 porsons. Dufies) D'Emergency situation Student and guests control.
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Surga will ask about lang let from Decorators. 6 Will have to buy one gar of Eclairs for quest students. 7 flower slick - 6 (Fortwo Flower slick - 6 (Fortwo (3) Poof. Nadim Haider will have to buy two ket badge for judges. (9) Next Meeting Date: 22nd Jan, 2019, Time -> 2 p.m.

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