


A large, glowing orange and red sun with visible solar flares and a bright spot on its surface. The equation $E=MC^2$ is overlaid in white, serif font across the center of the sun.
$$E=MC^2$$

**Department of
PHYSICS**

VISION & MISSION

To provide a comprehensive degree program in physics.



Nurture Scientific temper, Research & innovation



To empower students to compete with others in making a bright career.



To train students to relate current technology to economic development.



ABOUT VS

HEAD : Ms.S. Santhakumari, M.Sc.,M.Phil.,B.Ed.,

No. of Faculty Members: 20

Academic Support Staff : 2

Technical Staff : 2

**Year of Establishment : B.Sc Physics (1987)
M.Sc Physics (2003)**

Qualification	No.of Faculty
M.Phil	20

No. of Faculty Members Pursuing Ph .D : 06

Programmes Offered : B.Sc.,(Phy), M.Sc.,(Phy)

DEPARTMENT OF PHYSICS



M.Sc Project Guidance

Faculty Name	No of Projects Guided					Total
	2009 - 2010	2010 - 2011	2011 - 2012	2012 - 2013	2013- 14	
S. Santhakumari	4	4	4	5	5	22
G.Bhuvaneswari	3	4	3	4	4	18
S. Vidhya	3	4	3	4	5	19
K.Sujatha	3	4	3	4	4	18
N.Sharmila	2	4	2	4	4	16
N.Uma maheswari	2	4	2	3	4	15
P.Sudha	2	3	2	3	3	13
S. Kanmani	2	3	2	3	4	14
V.Vijaya	2	2	2	2	2	10
A. Anitha Ezhil Mangaiyarkarasi	2	2	2	1	2	9
M. Padmavathy	1	1	1	1	1	5

PG PROJECT DETAILS

❖ **Project works done in the following fields:**

- 1. Crystal Growth**
- 2. Crystallography**
- 3. Spectroscopy**
- 4. Liquid State Physics**
- 5. Thin Film Physics**
- 6. Theoretical Physics**

RESEARCH PUBLICATIONS



Faculty Name	2012 - 13		2013-14		Total
	NJ	INJ	NJ	INJ	
Ms.R.G.Vidya	-	1	-	2	3
Ms.S.Santhakumari	-	1	-	3	4
Ms.K.Sujatha	-	-	-	4	4
Ms.N.Sharmila	-	-	-	1	1

Seminar / Workshop / Conference Attended (Last 5 Years)

Faculty Name	National Level	International Level	Regional	Papers Presented	Total
Ms.S.Santhakumari	3	2	2	5	12
Ms.R.G.Vidhya	8	1	1	4	14
K.Sujatha	3	2	1	5	11
Ms.N.Sharmila	4	1	-	2	7
Ms.N.Uma Maheswari	1	-	-	-	1
Ms.S.Kanmani	1	-	-	-	1
Ms.A.Anitha Ezhil Mangayarkarasi	-	1	1	-	2
Ms.M.Padmavathy	-	1	1	-	2
Ms. I. Josceline Vidhya	-	-	1	-	1
Total	20	8	7	16	51



**NATIONAL CONFERENCE, THIRUCHENGODE
PAPER PRESENTATION (6-12- 2012)
Ms. K. SUJATHA, Ms .S. SANTHAKUMARI**



**NATIONAL CONFERENCE, NATIONAL COLLEGE, TRICHY
PAPER PRESENTATION (21-3-2013) Ms. S. Vidhya**



**INTERNATIONAL CONFERENCE CSIR, NEWDELHI
PAPER PRESENTATION (12-11-2013)**



**NATIONAL CONFERENCE (AIISH, MYSORE)
PAPER PRESENTATION (13-11- 2014)**

AWARDS & RECOGNITION



NAME	AWARDS
Ms.M.Padmavathy	Best Reader Award
Ms.V.Vijaya	NSS Programme Officer Award
Ms.V.Vijaya	NSS Achievers Award
Ms.S.Kanmani	Best Reader Award

NAME	RECOGNITION
Ms. S. Santhakumari	Member, Board of Studies, BDU.(2012-2015)
Ms. G. Bhuvaneshwari	Member, Staff Selection Committee , St. Joseph's College, Trichy.(2013)

Recognition



BEST NSS OFFICER AWARD



நாட்டு நலப்பணித்திட்ட குழுமம்

பாரதிதாசன் பல்கலைக்கழகம்

திருச்சிராப்பள்ளி-24



2009 - 2010 ஆம் ஆண்டின் மாநில அளவிலான
சிறந்த நாட்டு நலப்பணித்திட்ட அலுவலர்
விருது பெற்றதற்காக

பாரதிதாசன் பல்கலைக்கழகம்
நாட்டு நலப்பணித்திட்டம்
வழங்கும்

சாதனையாளர் விருது
15 ஆகஸ்ட் 2011

திருமதி. வ. விஜயா
ஸ்ரீமதி இந்திராகாந்தி கல்லூரி
திருச்சி

BOOKS PUBLISHED



NAME	COURSE	TITLE
Ms. S. Santhakumari	M.Sc Electronics	Pulse Techniques
Ms. G.Bhuvaneswari	PGDCA	Digital Computer Fundamentals
Ms. S.Kanmani	M.Sc Computer Science	Microprocessors and Microcontrollers

INFRASTRUCTURE

- ✿ Three Well-Equipped Labs
- ✿ General Lab for UG Physics & Allied
- ✿ Electronics Lab for Applied Physics,
UG & PG Computer Science
- ✿ PG Lab for PG Physics



CONSULTANCY

Training Programme
- **Cell Phone Servicing**

18-8-2010



“Microprogramming”
to the Students of
Constituent College of BDU

14.2.2013



❖ Ms. S. Santhakumari, Ms.R.G. Vidhya – **‘TAMILNADU STATE COUNCIL OF SCIENCE AND TECHNOLOGY’** [IN SERVICE TRAINING Programme]. (21-11-2011 to 25-11-2011)

Interdepartmental Linkage Programmes

BASICS OF PC HARDWARE(31-8-2009)



**PHYSICS &
COMPUTER
SCIENCE**

Electro Fashion'10



**Mega Exhibition cum Sale
Wealth out of Waste
(13-3-2010)**



PHYSICS & FASHION TECHNOLOGY

Interdepartmental Linkage Programme

PC – TRONICS(23-9-14)



PHYSICS,
COMPUTER
SCIENCE, MCA, IT &
APPLICATIONS
(26-9-14) X-BIT

Stepper motor, Water level indicator ,Automatic traffic controller design, Automatic street light control etc.,

INTER-INSTITUTIONAL PROGRAMME

❖ As a Nodal Centre of Indira Gandhi National Open University and in collaboration with the Departments of Biochemistry, Chemistry, Microbiology & Physics, we were conducting a Certificate Programme in Laboratory Techniques (CPLT) till 2012. Now the same programme is conducted along with IECD of Bharathidasan University.

FDP Programmes (organised)

Maintenance and Servicing of Modern Gadgets for all Faculty Members.(10-2-2009)



Multimedia & Auto-Cad(Attended)2010-2011

FDP Programmes (Attended)

Name of the Staff	Programme Name	Organized
G.Bhuvaneswari , S.Kanmani	Embedded System Designing	ICT Academy
G.Bhuvaneswari , R.G. Vidhya	E-Literacy	ICT Academy & BARD
Ms.V.Vijaya	E-Literacy	ICT Academy

KNOWLEDGE ENRICHMENT PROGRAMME GENERAL LAB (I B.Sc Physics and Allied)



LAB
ORIENTATION
PROGRAMME

2009 -
2014

KNOWLEDGE ENRICHMENT PROGRAMME ELECTRONICS LAB (I B.Sc Physics and Allied)



KNOWLEDGE ENRICHMENT PROGRAMME (III B.Sc PHYSICS)

PG LAB - Spectrum Photograph Developing



GUEST LECTURE PROGRAMMES

Totally **30** Lecture Programmes were conducted for the past five years.

Eminent Scientist who visited the Department

Specialization

Prof. Mohan Sundararajan

Eminent Science Writer, Bangalore

Growth and Development of Internet

Dr. M. Arivanandhan

Research Institute of Electronics, Japan

Growth Mechanism of Organic Single Crystals

Dr. Srinivasalu Aitipamula

Scientist, ICE, Singapore

Chemical and Engineering Sciences

Dr. N. Vijayan

CSIR NPL, New Delhi

Growth Organic, Inorganic and Semi-Organic Single Crystals

GUEST LECTURE PROGRAMMES

S.No	Date	Title	Resource Persons
1	14.8.2009	Crystal Growth and Thin Film Physics	Dr. Vijayalakshmi Lakshmanan
2	15.12.2009	The Story of Telescopes in India- Galileo's Legacy	Prof. Mohan Sundara Rajan,
3	8.02.2010	Nanoscience and Nanotechnology	Dr.P.S. Joseph
4	31.08.2010	Trouble Shooting In Experiments	Mr. S.Sriraman
5	1.03.2011	Growth and Development of Internet	Prof. Mohan Sundararajan Eminent Science Writer, Bangalore
6	30.6.2011	Climate Changes – Ozone	Dr.M.V.Subramanian
7	20.7.2011	Acoustics and its Applications	Dr. Suhashini Ernest
8	15.09.2011	Nano Materials and its Applications	Mrs. A. Clara Dhanemozhi

GUEST LECTURE PROGRAMMES

S.No	Date	Title	Resource Persons
9	13.12.2011	Crystal growth and thin film physics	Mrs. R. Shanthakumari
10	12.1.2012	Recent Development in Nano Technology	Dr. Jebaraj Devadasan
11	10.7.2012	Remote Sensing and its Applications	Dr. J. John Prince
12	20.7.2012	Accelerators and God's Particle	Mr. R. Sambasivam
13	15.2.2013	Thin Film Physics	Dr. A. R. Balu
14	7.3.2013	Growth Mechanism of Organic Single Crystals	Dr. M. Arivanandhan Research Institute of Electronics, Japan
15	13.3.2013	Opportunity in Molecular Crystal Engineering & Overview of Institute of Chemical and Engineering Sciences	Dr. Srinivasalu Aitipamula, Scientist, ICE, Singapore
16	6.8.2013	Growth Organic, Inorganic and Semi-Organic Single Crystals for technological Applications.	Dr. N. Vijayan, CSIR NPL, New Delhi
17	19.8.2014	Thin film Physics	Dr. Victor Williams, Head

Nanoscience and
Nanotechnology”



Dr. P.S. Joseph, Principal,
Chidambaram Pillai College
for Women,
Mannachanallur, Trichy.

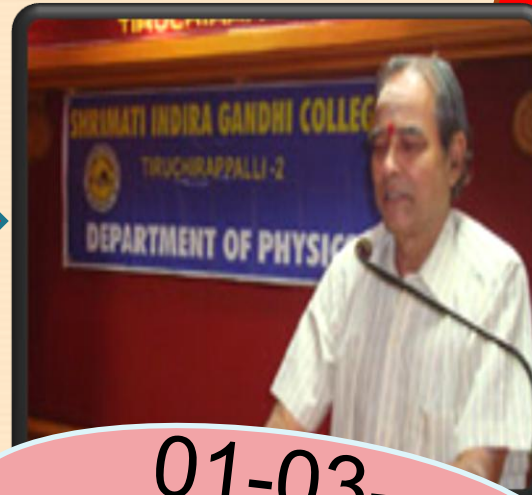
08-02-2009

08-8-2010

“Trouble Shooting In
Experiments

Mr. S.Sriraman, Ret,
Head, Department of
Physics, VOC
College.
Thoothukkudi

GUEST
LECTURE
PROGRAMMES



01-03-
2011

Prof. Mohan Sundararajan
**Eminent Science Writer,
Bangalore.** Growth and
Development of Internet.



Acoustics and its Applications

Dr. Suhashini
Ernest, HEAD, UDC, TRICHY

20-07-2011



07-3-2013

Growth Mechanism of
Organic Single Crystals

Dr. M. Arivanandhan
**Research Institute of
Electronics, Japan**

Mrs. R. Shanthakumari



Thin Films Physics
(13-8-2014)

Dr. R. Victor Williams,
Professor and Head,
Department of
Physics, St. Joseph's
College, Trichy.



13.12.2011

Crystal growth and thin film
physics.



International /National Seminars (organised)

Year	National Seminar	Regional Level Workshop	Topics
10.2.2012	-	1	Recent Trends in Physics
28.8.2012	1	-	Material Research

NATIONAL SEMINAR (28.8.2012)

Dr. I. Vetha Potheher,
Assistant Professor,
Department of
Physics, Anna
University of
Technology,
Tiruchirappalli
“NLO Crystals” .

Dr. G. Chandrasekaran,
Professor and Head,
Department of Physics,
Pondicherry University
“ Magnetic Nano
materials” .

Dr. M. Mohan Rao,
Principal, Scientist,
Chemical Technology,
Tarnaka, Hyderabad
“Nano Materials” .



NATIONAL SEMINAR (28.8.2012)



**Dr. S. Dhanushkodi,
Professor and Head,
Department of Physics,
Bharathidasan University
Tiruchirapalli.
“Nano Photonics”.**

**CERTIFICATE
DISTRIBUTION**



REGIONAL LEVEL WORKSHOP(10-2-2012)



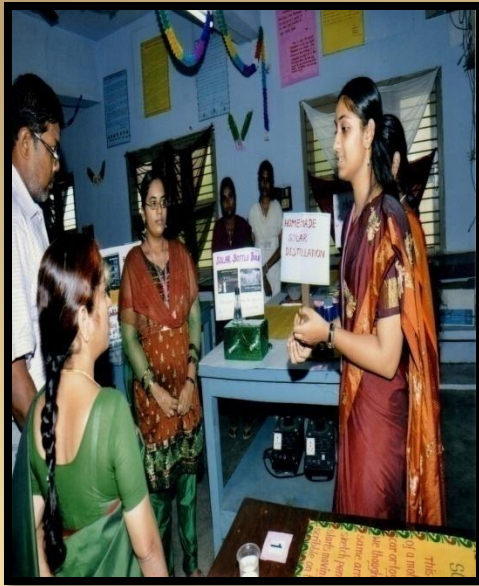
Dr. S. Brahadeeswaran, Assistant Professor, Anna University of Technology, Tiruchirappalli.
“Single crystals for Engineering Applications” .



Dr. L. Amal Raj , Associate professor, Virudhunagar Hindu Senthilkumara Nadar College, Virudhunagar,.
“Preparation and Characterization of semi conductor thin films applied for solar cells”.

Programme

ELECTRO PHY XBIT



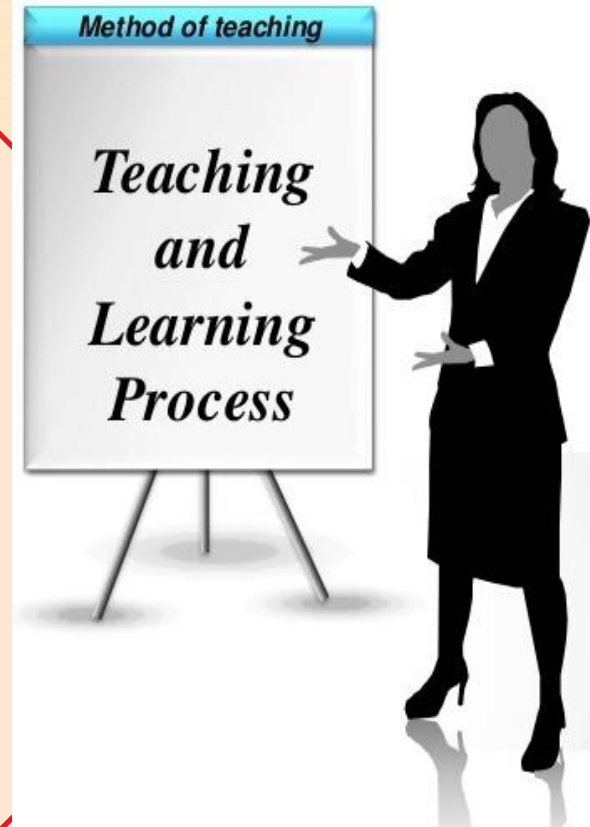
Programme

Field Visit- Planetarium



TEACHING & LEARNING PROCESS

- ❖ Chalk and talk method
- ❖ Remedial coaching
- ❖ ICT Materials, models and charts
- ❖ Theory of practicals
- ❖ Demonstration classes
- ❖ Student seminars
- ❖ Power point presentation
- ❖ Guest lecture programme for relevant papers

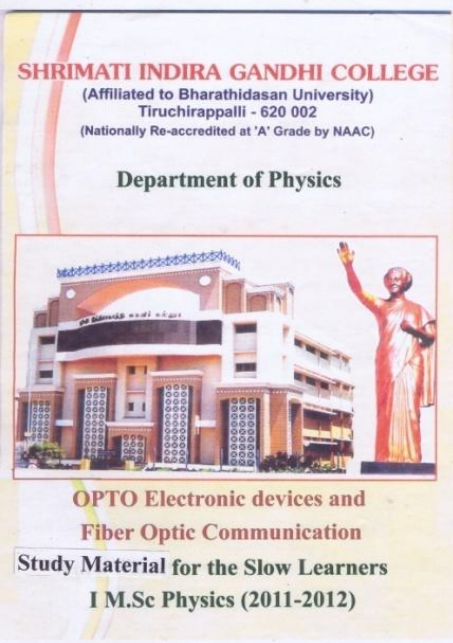
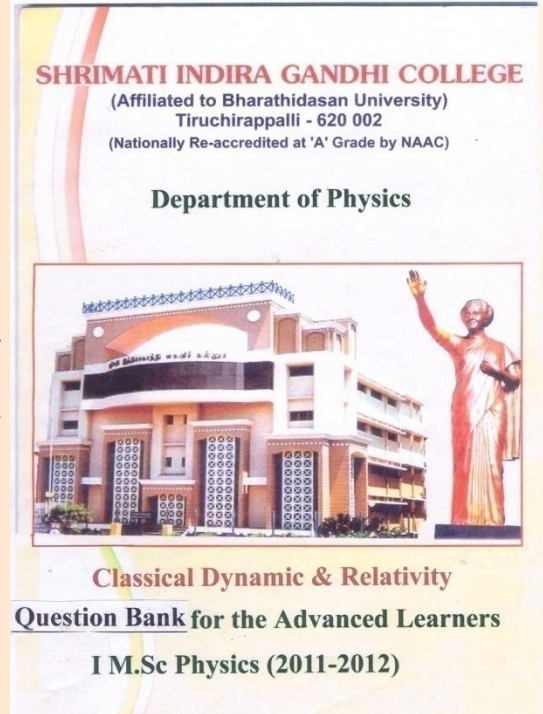
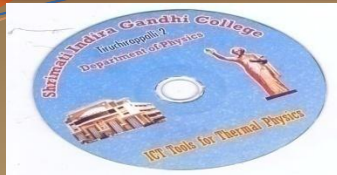


Study Materials

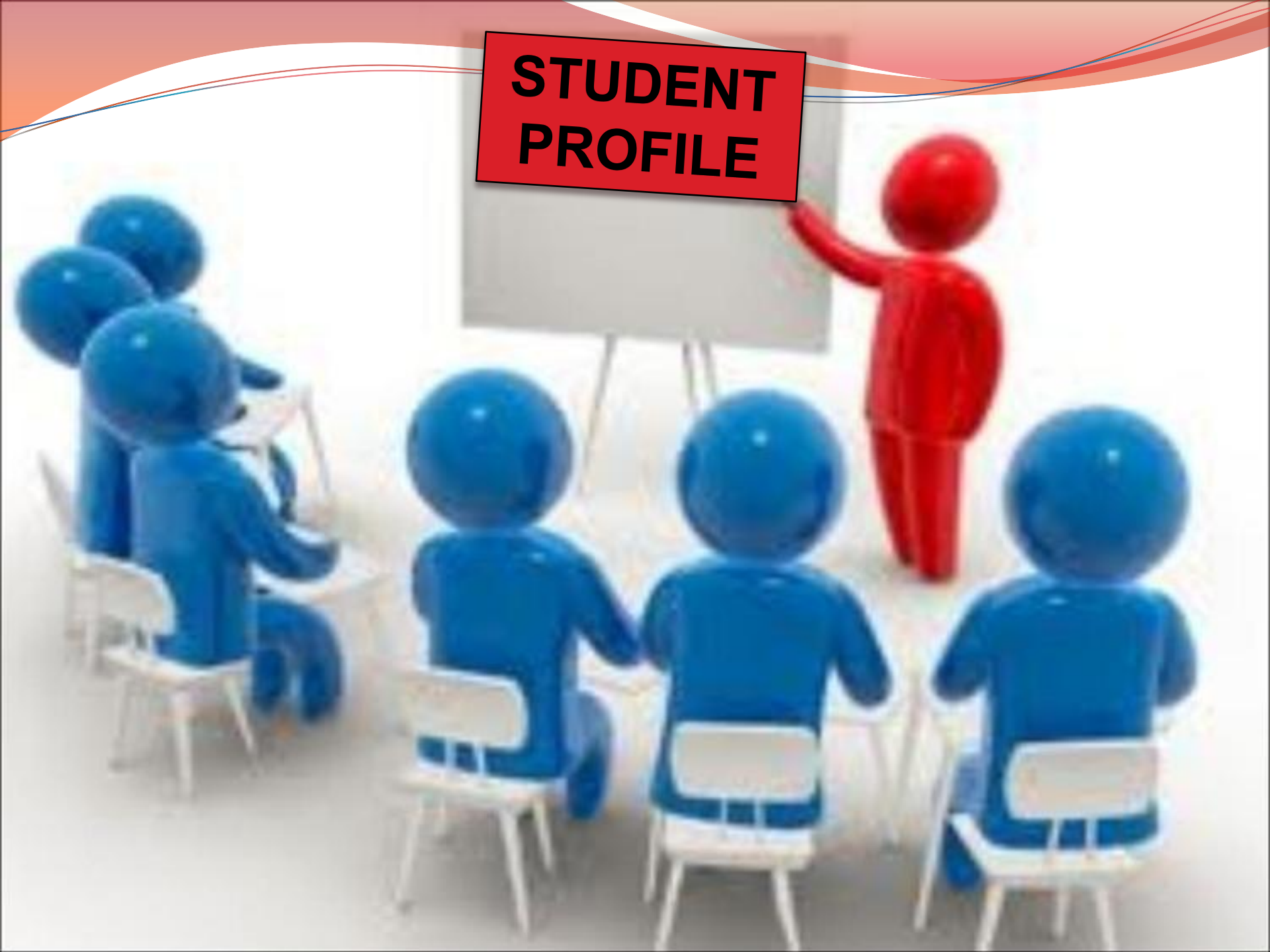
❖ **Classical Dynamics and Relativity**

❖ **OPTO Electronic Device and Fiber Optic Communication.**

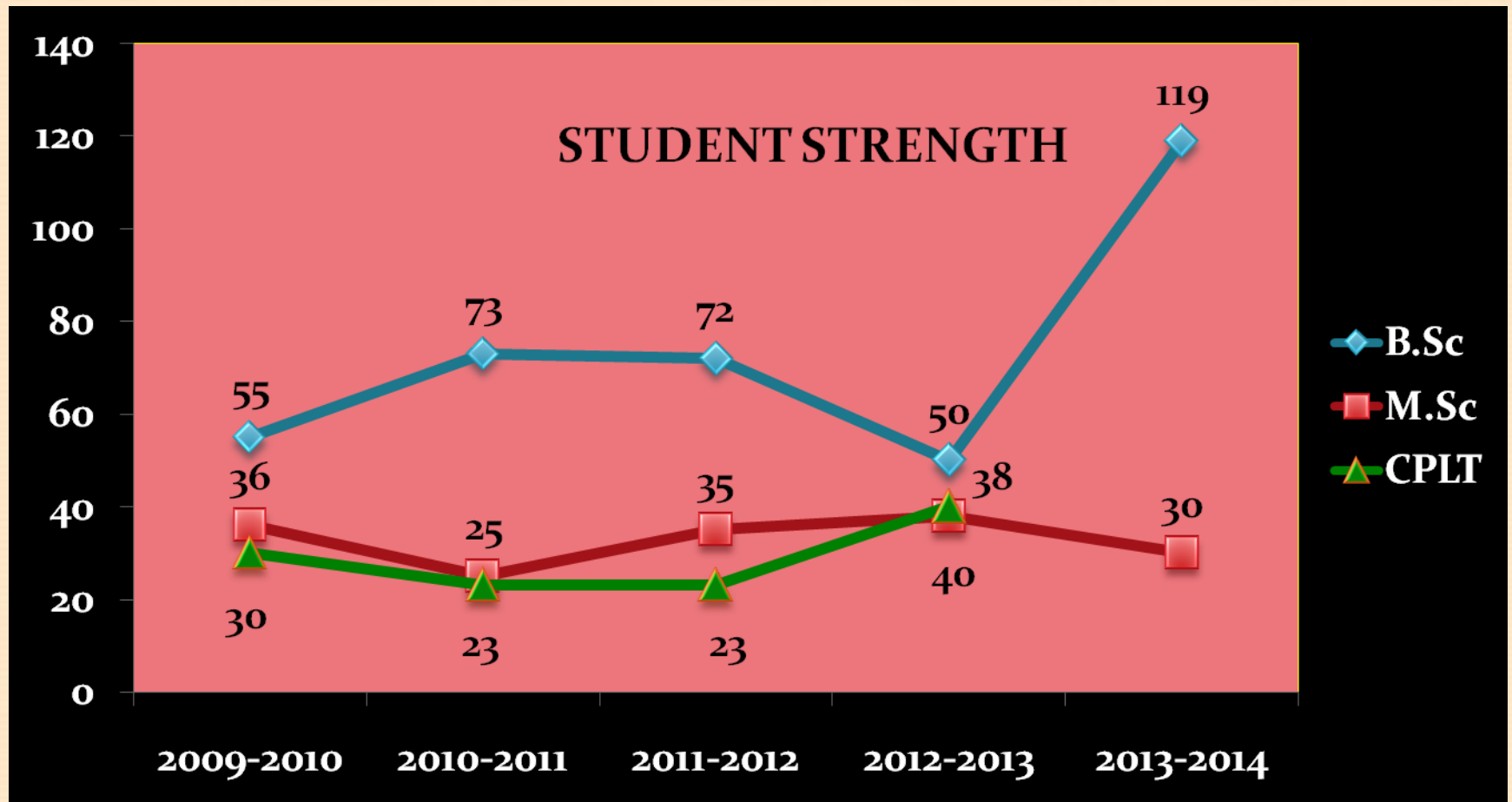
❖ **Two Mark question bank with answers & 10 mark question bank for Slow learners .**



STUDENT PROFILE

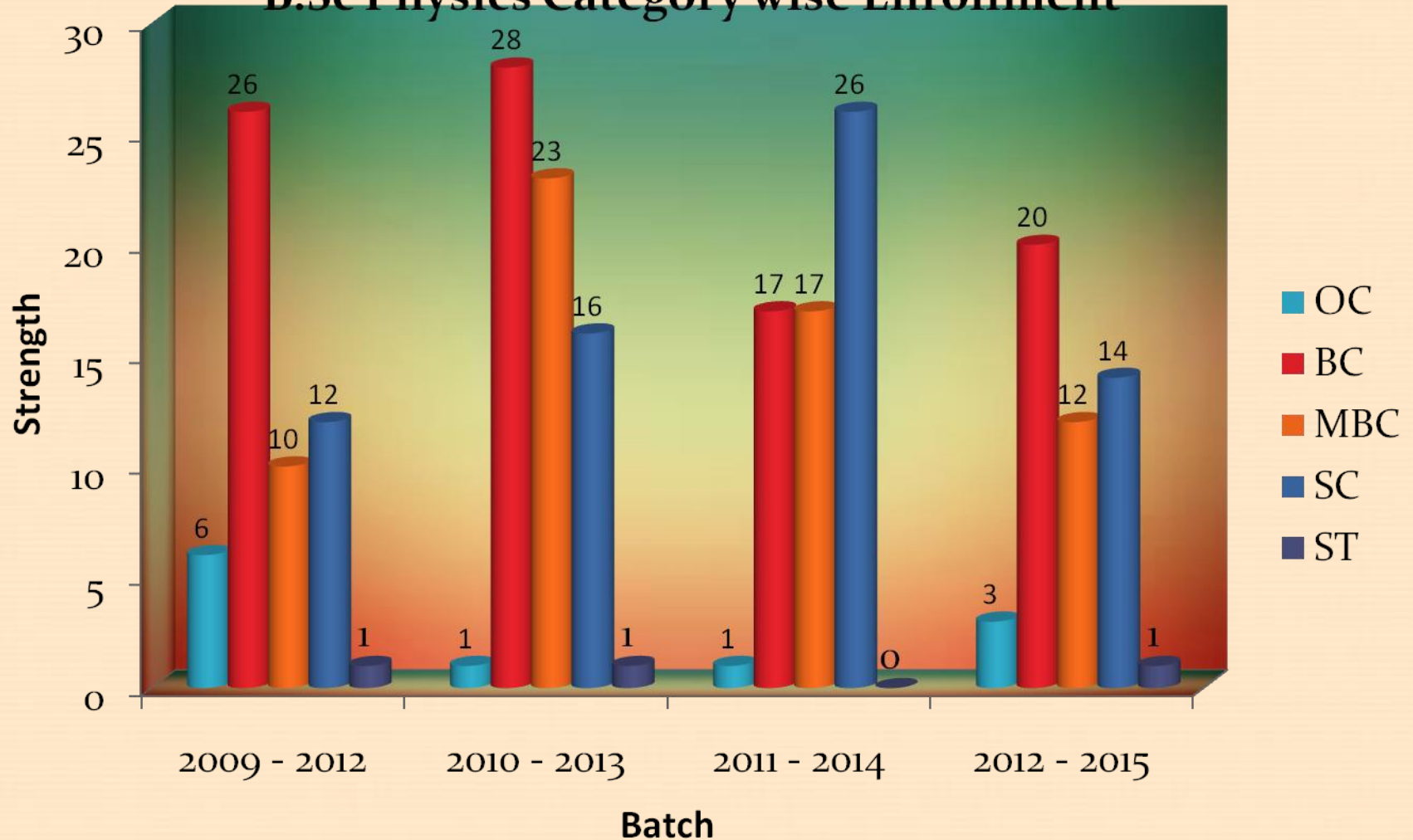


STUDENT PROFILE

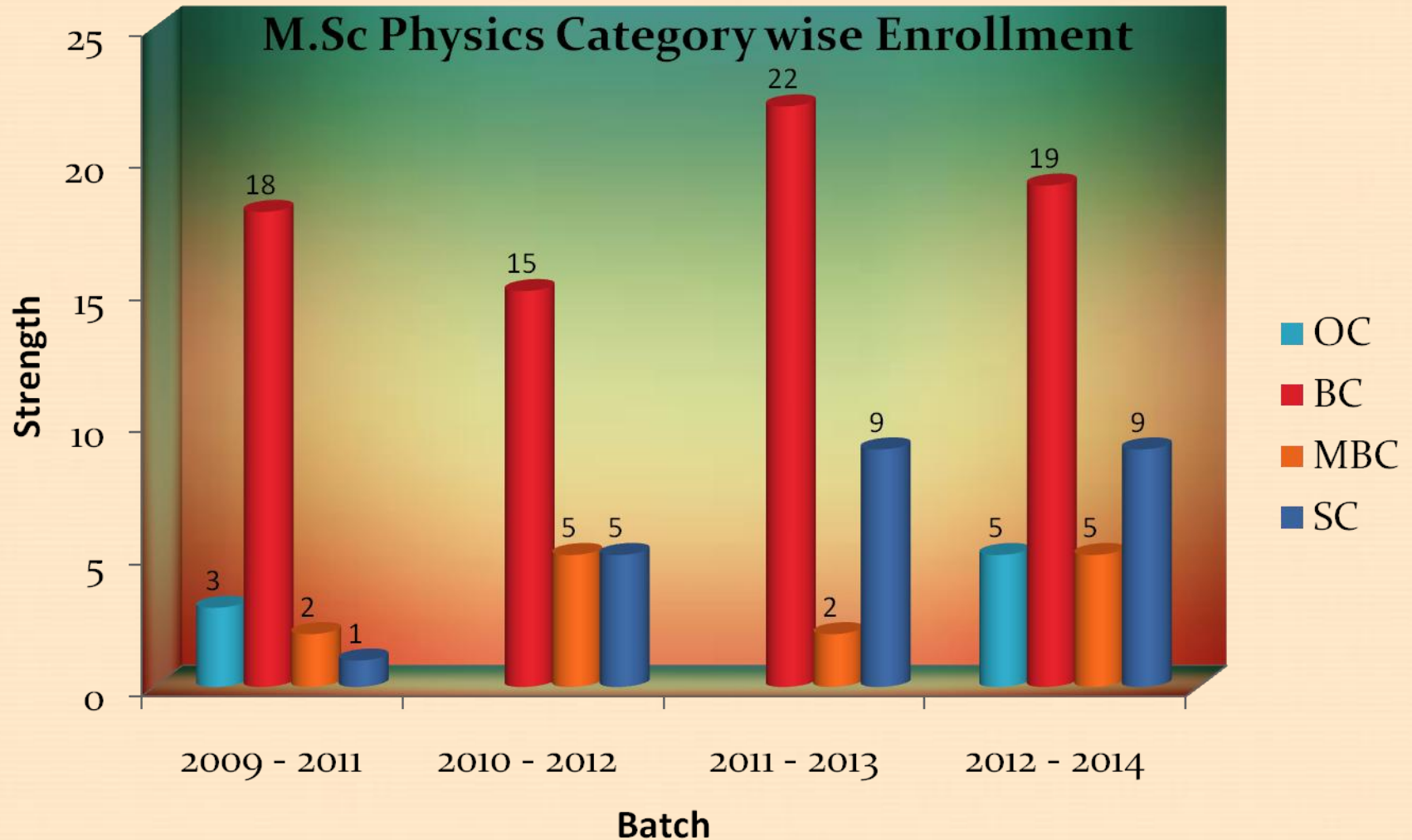


STUDENT PROFILE

B.Sc Physics Category wise Enrollment



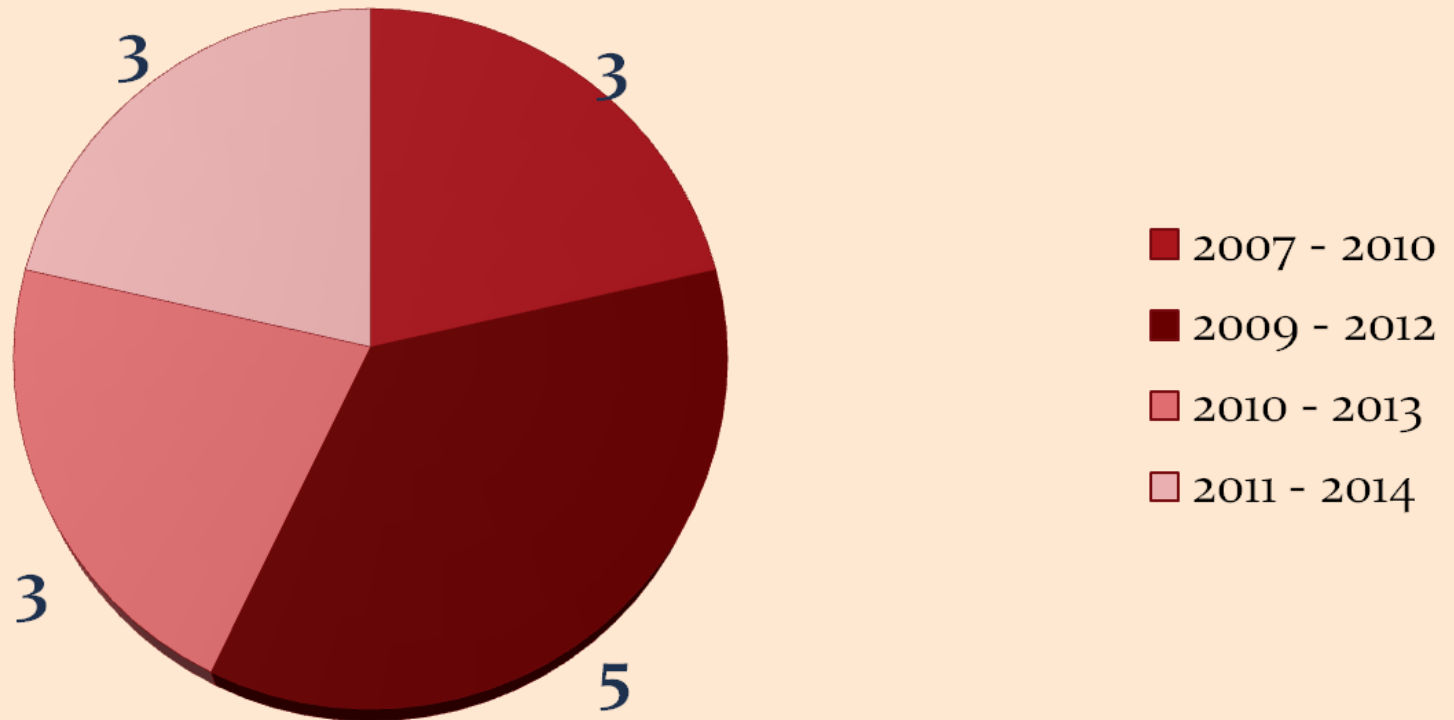
STUDENT PROFILE



RANK HOLDERS DETAILS

UG Physics

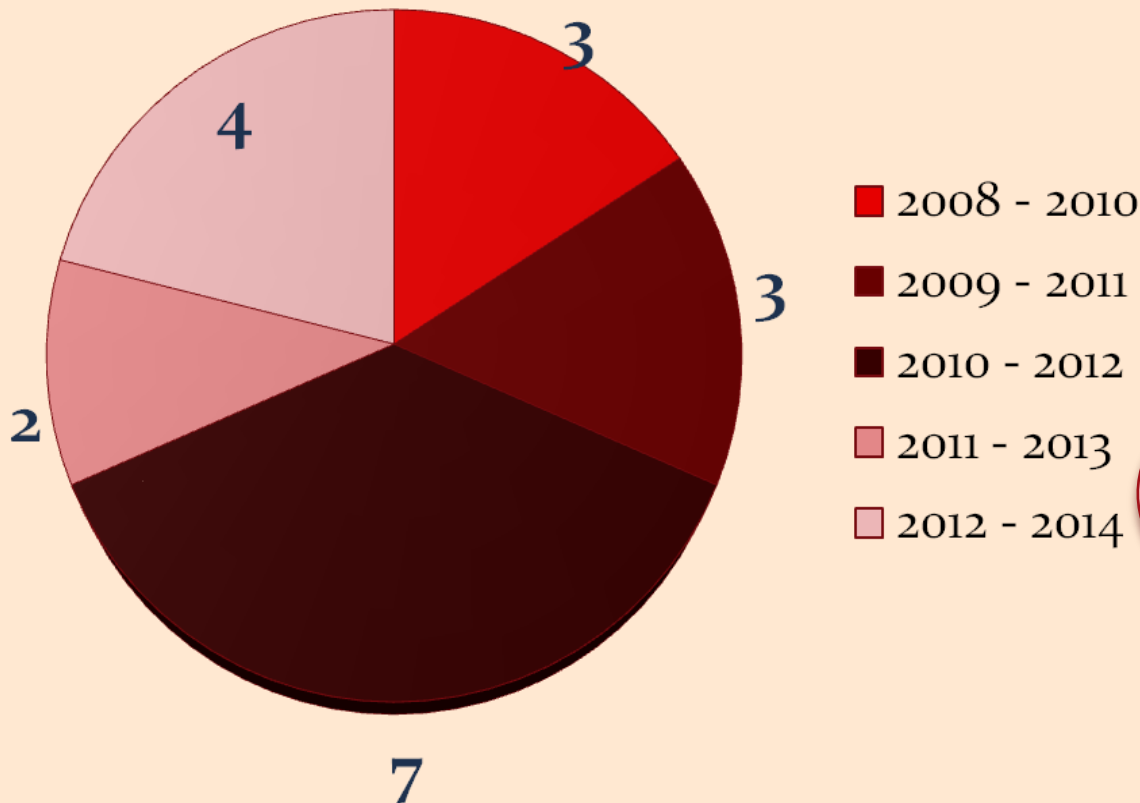
Ranks Obtained



RANK HOLDERS DETAILS

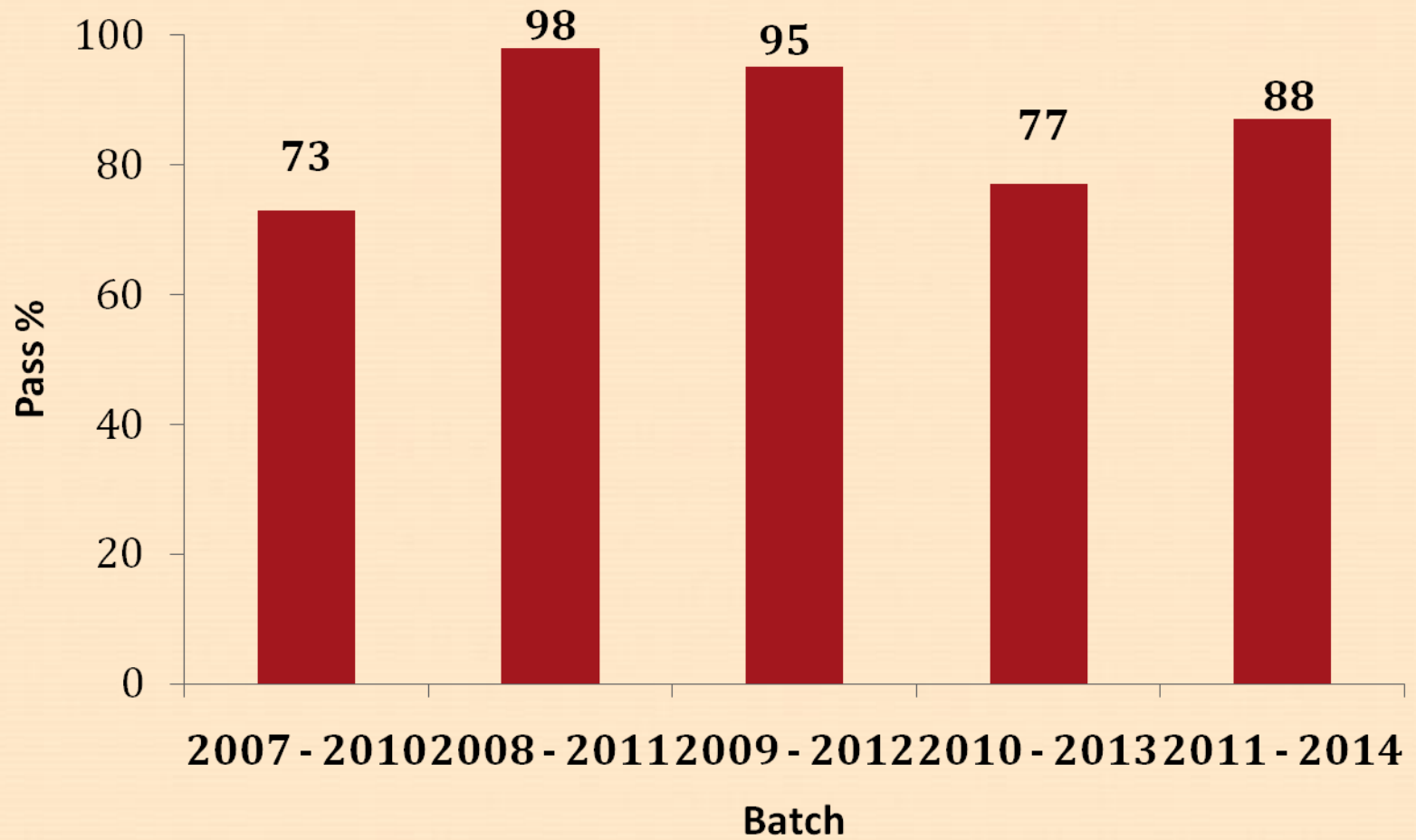
PG Physics

Ranks Obtained

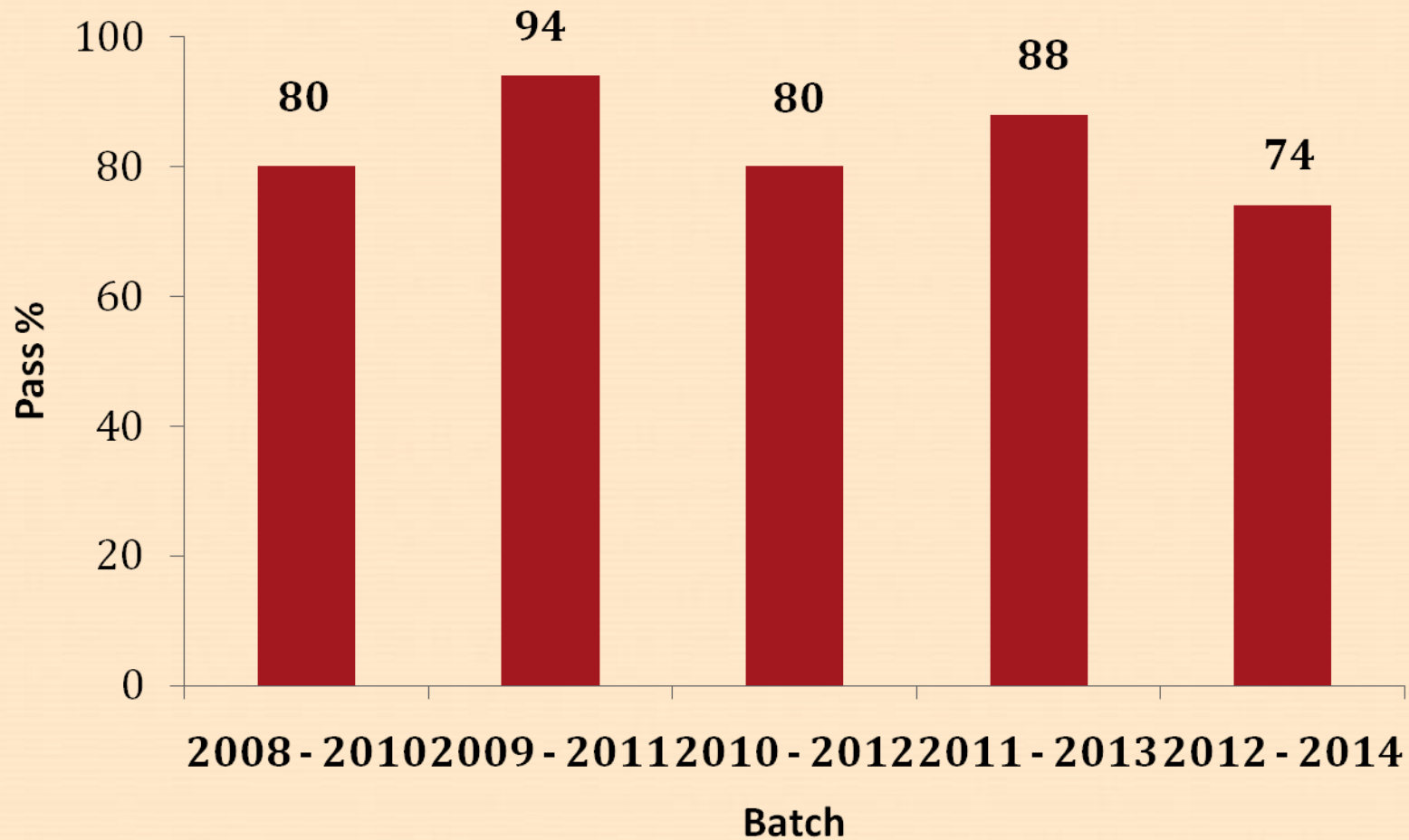


**No. of
Students
Passed NET
/ SLET/JRF :
4**

RESULT ANALYSIS - UG



RESULT ANALYSIS - PG

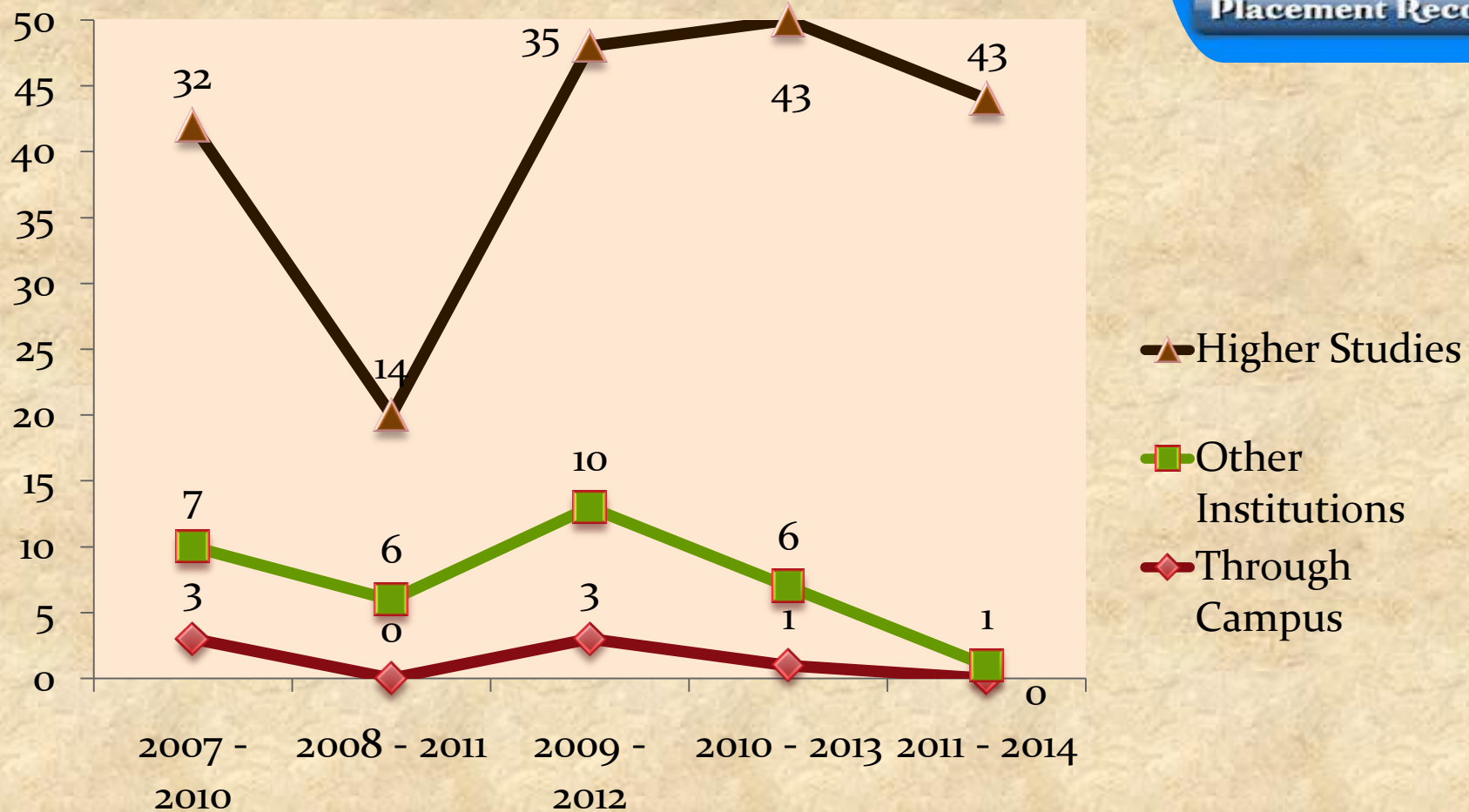


PLACEMENT DETAILS



Placement Record

UG PHYSICS

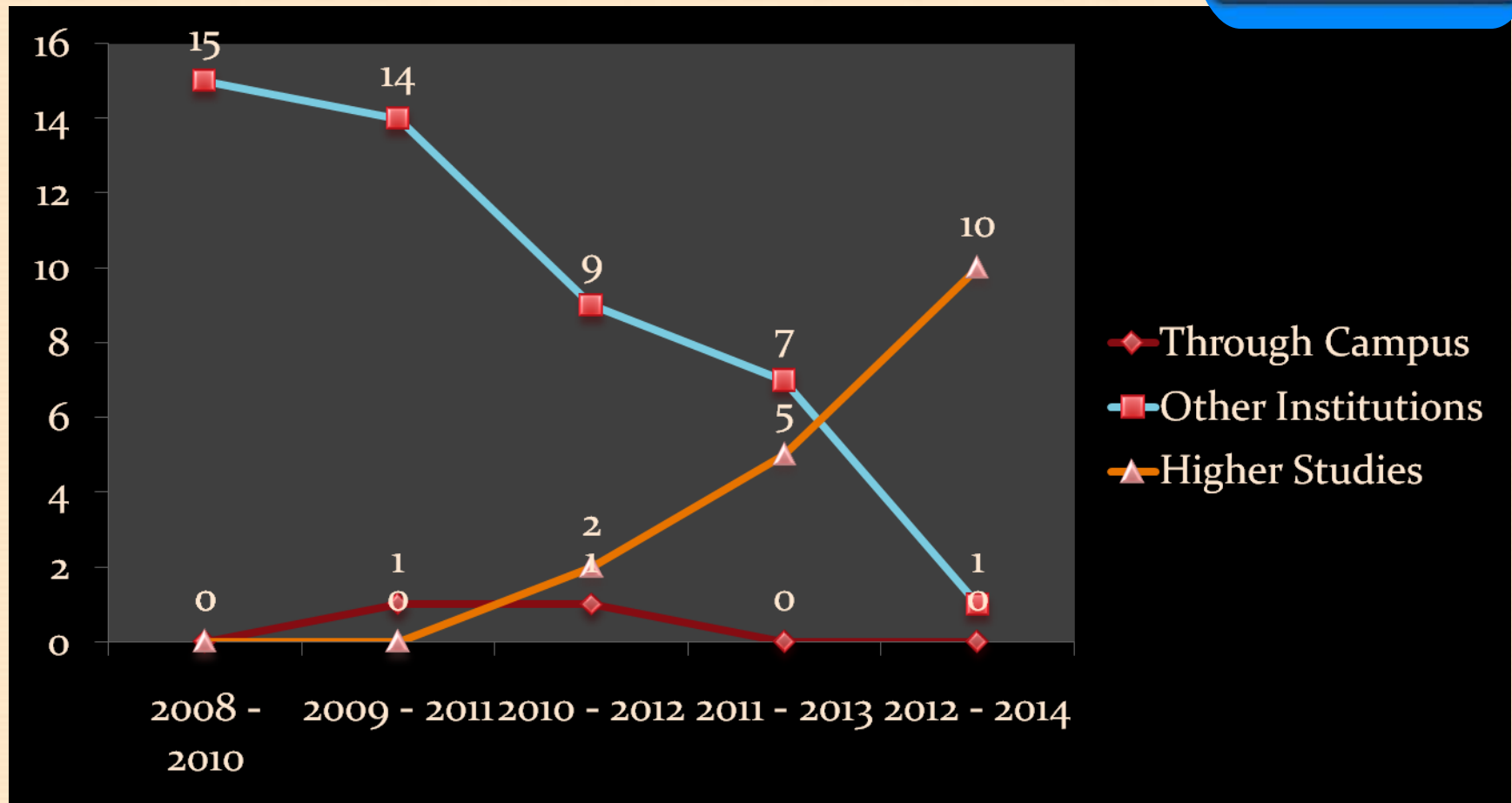


PLACEMENT DETAILS

PG PHYSICS



Placement Record



Student Achievements

2009 - 2010



Name	Event	Date	Venue	Prize
Rohini Bharathwaj	Geeta Recitation	20.8.2009	SRC, Trichy	I
Rohini Bharathwaj	Poetry	3.9.2009	SRC, Trichy	II
S. Jeronsiya	Mime	16.12.2009	BDU Fest	III
S. Jeronsiya	ADZAP	17.12.2009	Anbil Dharmalingam College	II
S. Jeronsiya	Skit	21.12.2009	National College	I
S.C. Swarna	Quiz	21.12.2009	National College	II
S. Jeronsiya	Mime	30.1.2010	Dinamalar	I

2010 - 2011



Name	Event	Date	Venue	Prize
F. Freeda Silvia	Mini Marathan	12.6.2010	BDU, Trichy	II
Rohini Bharadwaj	Miss SIGC	30.7.2010	SIGC, Trichy	I
S.Thiripurasundari	Mono Act Play and SKIT	7.8.2010	BDU Fest	I & II
K.A.Nithyajothi, S.C.Swarna	Quiz	7.8.2010	BDU Fest	V
Rohini Bharadwaj	Geetha Recitation	3.9.2010 & 30.10.2010	SRC, Trichy	I
Rohini Bharadwaj	Geetha Recetation	30.10.2010	Sanskrita Sahitya Parishad, Trichy	III

2011 - 2012



Name	Event	Date	Venue	Prize
Rohini Bharadwaj	Geeta Recitation	10.8.2011	SRC, Trichy	I
S. Thirupura Sundari, S.C Swarna	Quiz	24.8.2011	SRC, Trichy	I & Rolling Shield

2012 - 2013

Name	Event	Date	Venue	Prize
Rohini Bharadwaj	Sanskrit Drama	20.7.2012	Sanskrita Sahitya Parishad, Trichy	III
Rohini Bharadwaj	Geetha Recitation	22.10.2010	SRC, Trichy	I & Shield

2013 - 2014



Name	Event	Date	Venue	Prize
S.Thirupura Sundari & S.G.Saranya Devi	Quiz	24.8.2013	SRC, Trichy	II
A.Amudha	Speech Competition	24.8.2013	SRC, Trichy	III
A.Amudha	State Level Essay Writing	15.8.2013	Kaviyarasar Kalai Thamizh Sangam	Elakkiya Thendral Award
Rohini Bharadwaj	Recitation Competition	30.8.2013	Srimad Andavan College, Trichy	I
A.Amudha	Essay Writing	9.11.2013	SM Higher Secondary School, Trichy	II
A.Amudha	Speech Competition	5.1.2014	Indian Medical Association, Trichy	II & Shield



**MISS SIGC
(30-7-2010)**



**GEETHA
RECITATION
(10-8-2012)**

Funded Student Project

❖ In the Year 2010-11 one of our Students of M.Sc Physics Ms. M.KANIMOZHI Received **Rs. 6000/-** for Funded Student Project Sanctioned by **TNSCST.**

LIBRARY DETAILS

Titles - 728

Volumes - 1973

Journals

- Lab Experiments
 - Pramana
- IJPAP Indian Journal of Pure and Applied Physics

Magazines

- Physics for You
- Electronics for You

E – resources

- Delnet
- Inlibnet

COMPARATIVE ANALYSIS

	2004-2009	2009-2014
Faculty Strength	17	20
Result Analysis (Average)	UG: 85% PG:80%	UG: 85% PG:80%
Rank Holders	UG: 13 PG:17	UG: 14 PG:19
Placement	UG: 10 PG:10	UG: 12 PG:11

COMPARATIVE ANALYSIS

	2004-2009	2009-2014
Inter Departmental Linkage	Nil	3
Exhibition	5	2
International Journals	Nil	12
National Conference Proceedings (Paper Presentation)	6	20
Consultancy	Nil	3

COMPARATIVE ANALYSIS

	2004-2009	2009-2014
Ph.D (Pursuing)	-----	06
National Seminar	Nil	1
Regional Level Workshop	1	1
FDP	1	1

UNIQUE FEATURES



UNIQUE FEATURES

❖ Regarding Practicals

- ✓ **Theory of practicals is given before the commencement of the practical session.**
- ✓ **DEMO is given for all the experiments individually before each and every cycle.**
- ✓ **Repetition classes is given for the incomplete experiments.**

UNIQUE FEATURES

❖ Regarding theory classes

- ✓ **Models like crystal structure, lenses and prisms are shown to the students in the class room**
- ✓ **In Electronics classes PCBs and Interfacing boards are shown to the students for better understanding.**

UNIQUE FEATURES

❖ **NET,SET**

❖ **JRF**

❖ **LECTURERS**

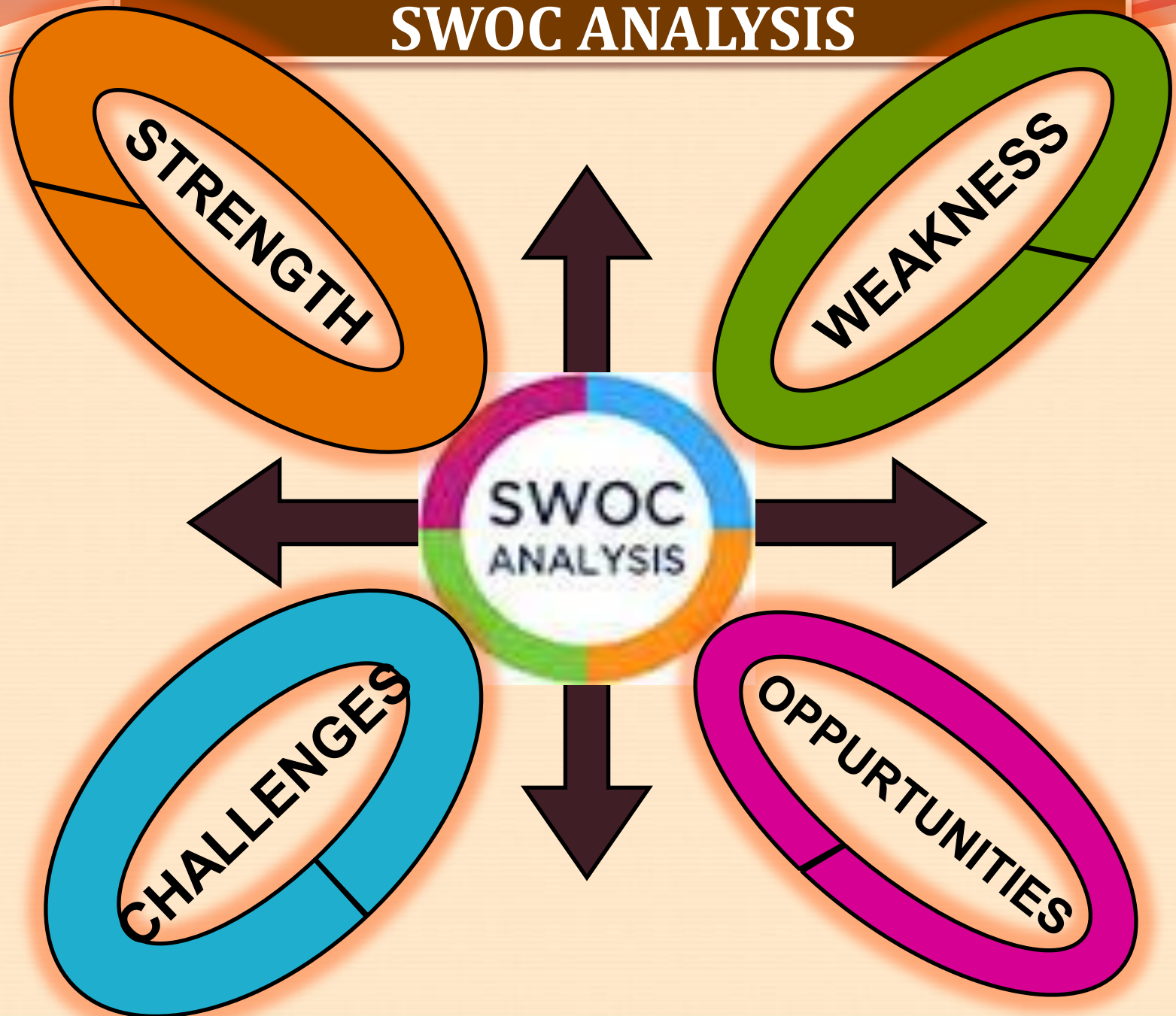
❖ **SCHOOL TEACHERS**

❖ **MEMBER,BOARD OF STUDIES**

❖ **QUIZ CLUB CO-ORDINATOR**

❖ **FINE ARTS CO-ORDINATOR**

SWOC ANALYSIS



SWOC ANALYSIS

STRENGTH

- ❖ **Good Infrastructure**
- ❖ **TNSCST funded students project carried out.**
- ❖ **Good Students progression and placement**

WEAKNESS

- ❖ **More participation in research work needed.**

SWOC ANALYSIS

OPPORTUNITIES

- ✿ **Scope for interaction with industries and research center for projects.**
- ✿ **Good Scope for interaction with other college for sharing resources for conducting research.**
- ✿ **Interdisciplinary projects with other science departments can be carried out.**
- ✿ **Funds for mini projects and student projects can be tapped from government.**

SWOC ANALYSIS

CHALLENGES

- ❖ **Motivating students for higher studies.**
- ❖ **Training students for placements.**

FUTURE PLANS



❖ ***RESEARCH DEPARTMENT***



*Thank You
So Much!*

PG PHYSICS COMPUTER LAB

NODES - 8 Nos.

INFINITI 2000 CELERON @ 466MHz

128KB CACHE MEMORY 132MB SDRAM

2 SERIAL AND 1 PARALLEL PORTS

4GB UDMA HDD /1/44MB FDD

14" Digital Colour Monitor

AGP CARD WITH 4MB VRAM

COMPEX 10 / 100MBPS ETHERNET CARD

104 KEYS KEYBOARD / MS INTEL MOUSE

PERIPHERALS

PRINTERS – 2 NOS

EPSON LQ 1050 + DXGOLD 132 COL 24 PIN

WIPRO DOT MATRIX 80 COLUMN