

**Key Indicator - 2.2 Catering to Student Diversity****2.2.1 The institution assesses the learning levels of the students and organizes special Programmes to cater to differential learning needs of the student****Outcome**

Students have demonstrated remarkable achievements across a diverse array of disciplines, garnering recognition from esteemed institutions. Empowering slow learners with essential support and resources has enabled them to raise their academic performance. Providing Advanced learners with enrichment activities, publishing articles, frequently visiting the library and mentorship programs greatly contributed to their intellectual and personal development.

**1. University Ranks** - Students achieved university ranks through the synergistic influence of staff motivation and their innate interest.

**UNIVERSITY RANKS AND RESULTS****Total Ranks Secured from the Year (2019-2024)**

YEAR	UG			PG			Total No. of Ranks
	First Ranks	Other Ranks	Total	First Ranks	Other Ranks	Total	
<b>2019</b>	2	60	62	-	27	27	89
<b>2020</b>	1	37	38	4	43	47	85
<b>2021</b>	1	59	60	1	9	10	70
<b>2022</b>	-	15	15	1	11	12	27
<b>2023</b>	3	11	14	1	8	09	23

**CRITERION II****OUTCOME**

**2. Results** - Through dedicated training and monitoring, slow learners were empowered to excel in their exams, demonstrating remarkable progress and achievements leading to good Pass Percentage.

**CAUVERY COLLEGE FOR WOMEN (AUTONOMOUS), TRICHY - 18**  
**END SEMESTER EXAMINATION – APRIL 2023**  
**RESULT ANALYSIS**  
**III UG**

S.NO	DEPARTMENT	SEM	NUMBER REGISTERED	NUMBER APPEARED	NUMBER OF PASS	PASS PERCENTAGE
1	TAMIL	VI	33	33	33	100
2	ENGLISH	VI	108	108	108	100
3	BSW	VI	35	35	35	100
4	BBA	VI	82	82	82	100
5	B.COM	VI	240	240	240	100
6	B.COM (CA)	VI	65	65	65	100
7	MATHEMATICS	VI	79	79	79	100
8	PHYSICS	VI	42	42	42	100
9	CHEMISTRY	VI	50	50	50	100
10	MICROBIOLOGY	VI	72	72	72	100
11	BIOTECHNOLOGY	VI	70	70	70	100
12	COMPUTER SCIENCE	VI	143	143	143	100
13	COMPUTER APPLICATIONS	VI	116	116	115	99.14
14	INFORMATION TECHNOLOGY	VI	39	39	39	100
15	NUTRITION & DIETETICS	VI	37	37	37	100

**CAUVERY COLLEGE FOR WOMEN (AUTONOMOUS), TRICHY -18****END SEMESTER EXAMINATION RESULTS – APRIL 2023****RESULT ANALYSIS****II PG**

S.NO	DEPARTMENT	SEM	NUMBER REGISTERED	NUMBER APPEARED	NUMBER OF PASS	PASS PERCENTAGE
1	TAMIL	IV	9	9	9	100
2	ENGLISH	IV	34	34	34	100
3	MSW	IV	16	16	16	100
4	COMMERCE	IV	15	15	15	100
5	MATHEMATICS	IV	42	42	42	100
6	PHYSICS	IV	29	29	29	100
7	CHEMISTRY	IV	23	23	23	100
8	MICROBIOLOGY	IV	19	19	19	100
9	COMPUTER SCIENCE	IV	34	34	34	100
10	FSM & D	IV	24	24	24	100



**CRITERION II**

**OUTCOME**

**3. Entrepreneurship** - EDC, in collaboration with IIC, provided advanced learners with specialized training to enrich their learning journey and nurture their growth. Ms. Anukarthika and Ms. V. Devi showcased their exceptional talents and innovative thinking by securing the third best idea in a nationwide hackathon organized by EDII Ahmedabad, through the platform of Innovation and Incubation Centre (IIC).

**NATION WIDE HACKATHON ORGANIZED BY EDII AHMEDABAD**



**NATION WIDE HACKATHON ORGANIZED BY EDII AHMEDABAD**





**CRITERION II**

**OUTCOME**

**NOMINATED AS INNOVATORS IN IDE BOOT CAMP AT NITTR CAMPUS, CHENNAI**



**PARTICIPATED AS INNOVATORS IN MILLET AWARENESS COMPETITION ORGANIZED BY CENTRAL LIBRARY, TRICHY**





**ENTREPRENEURSHIP CONCLAVE AT BITS PILANI**



The institution serves as a cornerstone for the Entrepreneurship Development Cell (EDC) facilitated by the Innovation and Incubation Center (IIC), empowering students to engage in **'Earn While You Learn'** initiatives and fostering startup ventures.



**CAUVERY COLLEGE FOR WOMEN (AUTONOMOUS)**  
 Nationally Accredited (III-Cycle) with 'A' Grade by NAAC  
 ISO 9001 : 2015 Certified  
 AnnamalaiNagar ,Trichy - 620018 , Tamilnadu.  
**IIC ID-IC202014274**  
 IIC : 3.0 , 4.0 , 5.0 , 4 ★★★★★

**INNOVATION & ENTREPRENEURSHIP ACTIVITIES 2022-2023**

Entrepreneurship	79
Innovation	45
Ideation	29
Startup	15

**Trained Human Resources In IIC Institution**

Innovation Ambassadors	19
External experts	45
Student members	175
IIC Faculties	19

**Pre incubation & Incubation Facilities in HEI**

<b>40</b> Internal Incubates	<b>25</b> External Incubates	<b>4</b> Clubs (Innovation, Ideation, IPR Cell and REDC)	<b>15</b> Startups (MSME/UDAHYAM Registered)
<b>1</b> Patent Utility Centre	<b>1</b> Technology Transfer Office	<b>1</b> Centre of Excellence	<b>1</b> Startup Cell
<b>1</b> Incubation centre	<b>1</b> IOT lab	<b>1</b> Entrepreneur Development Cell	

**StartupTN**  
Academic Partner  
Campus Circle  
TNiim

eMART Cauvery SHINE - An ONDC platform Exclusively for Women Entrepreneurs

**Nationwide Hackathon Challenge Organized by EDII**

Ahmedabad on 28.04.2023 & 29.04.2023 Selected as the third best idea for their Innovation on Natural Cough Candy.

**Ideation Entrepreneurship Development Boot Camp**

2 teams has been Selected on 21.06.2023 to 26.06.2023 at NITTR campus, Chennai.

**SDG Hackathon conducted by CareCollegeof Engineering**

Ms.J.Yogalakshmi Awarded as Best Innovator with cash prize of Rs.10,000/-

**OUR INCUBATES**

- Ms.Poojadevi (PSP Herbals)
- Ms.Radhiga (Mars Outfit)
- Ms.Gomathy (AroduraBioplastics),
- Ms.Shakila (Bright and Bright)

**OUR INNOVATORS**

**Yukti National Innovation Repository**

Ideas submitted	130
Prototype in process	32
Business Startups	15

**I & E COURSES**

<b>ACADEMIC COURSE</b> 2	<b>NON-ACADEMIC COURSE</b> 45	<b>KNOWLEDGE PARTNERS</b> 12
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Annamalai Nagar, Tiruchirappalli - 620 018, Tamil Nadu, South India.

Website : cauverycollege.ac.in Phone : 0431 - 2763939, 2751232 Fax : 0431 - 2751234

Email : principal@cauverycollege.ac.in ; cauverycollege\_try@rediffmail.com





**CAUVERY COLLEGE FOR WOMEN (AUTONOMOUS)**  
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 ISO 9001 : 2015 Certified  
 AnnamalaiNagar ,Trichy - 620018 , Tamilnadu.  
 IIC ID-IC202014274  
 IIC : 3.0 , 4.0 , 5.0 , 4 ★★★★★





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### STARTUPS - 2020

			
<b>Ms.Srinithi</b>	<b>Ms.PoojaDevi</b>	<b>Mrs.Dr.Gayathiri</b>	<b>Mrs.Dharani</b>
			
<b>ReTailors</b>	<b>PSPHerbals</b>	<b>HarshitNaturals</b>	<b>Narumugai Herbal Napkin</b>

### STARTUPS - 2023

			
<b>Ms.Bindhiya</b>	<b>Ms.ApsanaFasila</b>	<b>Ms.Anukarthika</b>	<b>Ms.Yogalakshmi</b>
			
<b>Robopedia</b>	<b>FIZAS Tech</b>	<b>Saturn &amp; Co</b>	<b>Guva Herbal Tea</b>

		
<b>Ms.Sowmiya</b>	<b>Ms.Vanisha</b>	<b>Ms.Radhiga</b>
		
<b>Cauvery Millets</b>	<b>VnR Matrix</b>	<b>MarsOutfit</b>

	
<b>Ms.Preethi</b>	<b>Ms.Hemalatha</b>
	
<b>Millet 'O' Media</b>	<b>Travel With Tracker</b>





**CRITERION II**

**OUTCOME**

**INNOVATORS AT EXPORT/IMPORT STALL ORGANIZED BY TRICHY INDUSTRIAL ASSOCIATION**



**ABINAYA HAS ACTIVELY PARTICIPATED IN STARTUP GK COMPETITION**





CRITERION II

OUTCOME

ANBUSANTHINI EXCELLED IN THE ONLINE QUIZ ON OP-AMP ORGANIZED BY PUNE



ANITHA SURPASSED IN ONLINE COURSE ON R PROGRAMMING LANGUAGE





**STUDENTS HAVE CRAFTED A BOUQUET OF NUTS TO THE VICE CHANCELLOR OF ANNA UNIVERSITY**



**SOWMIYA CATHERINE HAS ACTIVELY PARTICIPATED IN SHORT TERM COURSE ON ENLIGHTENING OF LIS PROFESSIONALS**

**MADURAI KAMARAJ UNIVERSITY**  
University with potential for Excellence  
(Re-Accredited by NAAC with A++ Grade in the 4th Cycle)

DEPARTMENT OF LIBRARY AND INFORMATION SCIENCE AND MADRAS LIBRARY ASSOCIATION  
JOINTLY ORGANIZED FIVE-DAY INTERNATIONAL VIRTUAL SHORT TERM COURSE ON  
"ENLIGHTENING OF LIS PROFESSIONALS IN EMERGING TECHNOLOGY-ELISPET-21"

*Certificate of Participation*

Is hereby awarded to  
**Ms. A.SOWMIYA CATHERINE, Mathematics,**  
**Cauvery college for women, INDIA.**

*he/she has actively participated in five day International virtual Short Term Course on  
"Enlightening of Lis Professionals in Emerging Technology ELISPET-21" from 12/04/2021 - 16/04/2021 conducted by  
Madurai Kamaraj University and Madras Library Association, Tamilnadu*

*Dr. K. Nithyanandam,*  
Programme Director,  
President,  
Madras Library Association.

*Dr. K. Chinnasamy,*  
Organizing Secretary,  
Professor & Head, Department of Library & Information Science,  
Madurai Kamaraj University.



**CRITERION II**

**OUTCOME**

**SHAMEENA YASMIN EXCELLED IN MACHINE LEARNING MASTER CLASS**



**APPRECIATION AWARD FOR MS. RYLA 2022 FROM ROTARY CLUB OF TIRUCHIRAPPALLI MID-TOWN**





**SUSTAINABILITY HACKATHON CHALLENGE**



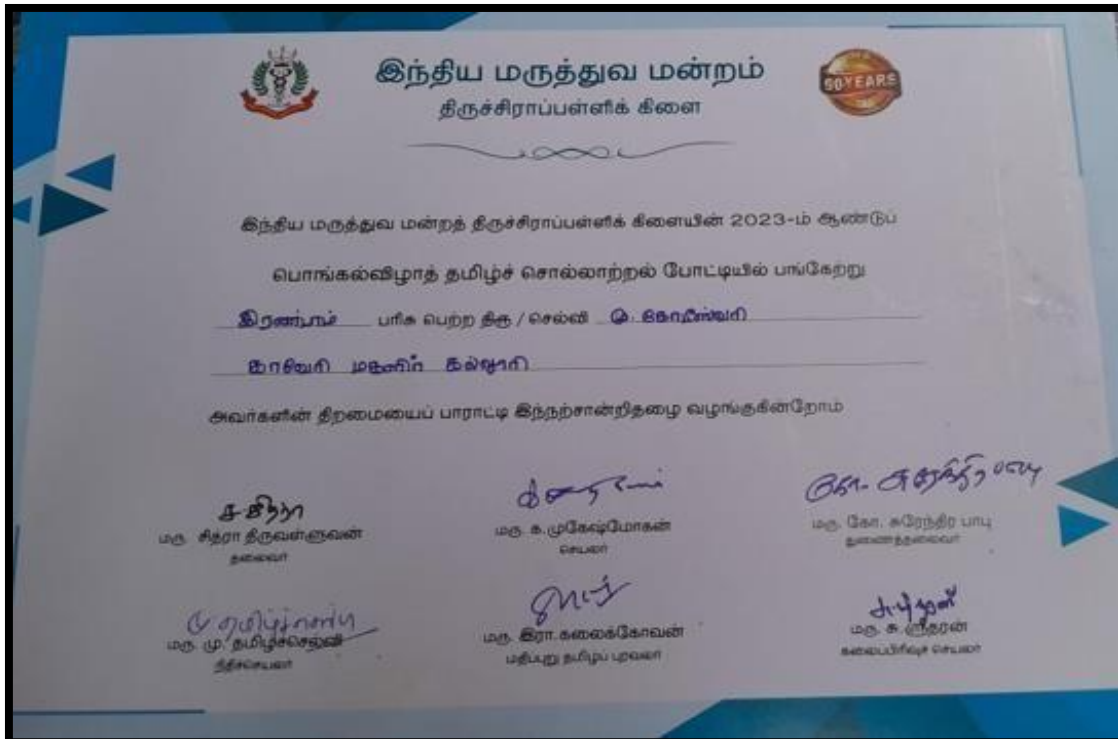


4. PRIZES IN COMPETITIONS

KOTESSWARI WON IN TAMIL ELOCUTION AT SRC, TRICHY



KOTESSWARI WON THE SECOND PRIZE IN SPEECH COMPETITION IN TAMIL ORGANIZED BY INDIAN MEDICAL ASSOCIATION





CRITERION II

OUTCOME

BEST ORAL PRESENTATION ON “EMERGING TRENDS IN MANAGEMENT, EDUCATION, ENGINEERING, SCIENCE AND TECHNOLOGY AT INDRA GANESAN COLLEGE OF ENGINEERING, TRICHY



OVERALL CHAMPION IN “BIO-DE-FIESTA 2023” AN INTERCOLLEGIATE ORGANIZED BY THE DEPARTMENT OF BIOTECHNOLOGY, ST. JOSEPH’S COLLEGE (AUTONOMOUS)





WINNER IN MILLET FOOD FESTIVAL







**M. MARWA FATHIMA & K.NIKITHA OF FOOD SERVICE MANAGEMENT & DIETETICS HAS SECURED THIRD PLACE WITH CASH AWARD OF RS.10,000, IN A NATIONAL LEVEL DEBATE ORGANIZED BY THE DEPARTMENT OF COMMERCE, ST. JOSEPH'S COLLEGE (AUTONOMOUS), TRICHY**





**CRITERION II**

**OUTCOME**


**A.APARNA OF BUSINESS ADMINISTRATION RECEIVED THE BEST MANAGER AWARD FROM BHARATHIDASAN UNIVERSITY, TRICHY**





4. PUBLICATIONS - Students Published their articles, with the encouragement and support provided by the staff members.

International Journal in Management and Social Science  
 Volume 11 Issue 2, February 2023 ISSN: 2321-1784 Impact Factor: 7.088  
 Journal Homepage: <http://ijmr.net.in>, Email: [ijmss@gmail.com](mailto:ijmss@gmail.com)  
 Double-Blind Peer Reviewed Refereed Open Access International Journal




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**POWER-3 HERONIAN ODD MEAN LABELING FOR SOME SPECIAL GRAPHS**  
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 (Autonomous), Tiruchirappalli-620018, India.  
[drpshalini1@gmail.com](mailto:drpshalini1@gmail.com)  
<sup>2</sup>S.Tamizharasi  
<sup>2</sup>PG & Research department of mathematics, Cauvery College For  
 Women (Autonomous), Tiruchirappalli-620018, India.  
[stamizharasi2001@gmail.com](mailto:stamizharasi2001@gmail.com)

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**Abstract:** In this article, we discuss Power-3 Heronian odd Mean Labeling for some families of graphs. A function is said to be Power-3 Heronian odd mean labelling of a graph G with q edges, if f is a objective function from the vertices of G to the set {1,3,5,.....,2p-1} such that when each edges uv is assigned the label. The resulting edge labels are distinct numbers.

$$\beta^*(e = uv) = \left\lceil \sqrt{\frac{\beta(u)^2 + (\beta(u)\beta(v))^{\frac{3}{2}} + \beta(v)^2}{3}} \right\rceil$$

**Keywords:**  
 Mean labeling, multiplicative labeling, Additive labeling.

**Introduction:**  
 In this paper, the graphs are taken as simple, finite and undirected. Let V(G) denotes set of all vertices and E(G) denotes set of all edges .A graph labeling an assignment of integers at its vertices or edges under certain conditions. A vertex labeling is a function of V to a set of labels. A graph with such a vertex labeling function is defined as Vertex – labeled graph. An edge labeling is a function of E to a set of labels and a graph with such a function is called an edge labeled graph. In this article  $P_n \odot K_{1,2}$ ,  $P_n \odot K_{1,3}$ ,  $T_3$ , Quadrilateral snakes are discussed Power-3 Heronian odd Mean Labeling of Graphs All Graphs in



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# On Integer Solutions of the Ternary Quadratic Equation $3a^2 + 3r^2 - 2ar = 332n^2$

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<sup>2</sup>PG Student, PG and Research Department of Mathematics, Cauvery College for Women (Autonomous), Affiliated to Bharathidasan University, Trichy - 18.

**Abstract:** Analysis is conducted on the non-trivial different integral solution to the quadratic equation  $3a^2 + 3r^2 - 2ar = 332n^2$ . We derive distinct integral solutions in four different patterns. There are a few intriguing connections between the solutions and unique polygonal numbers that are presented.

**Keywords:** Quadratic equation, integral solutions, polygonal numbers, special numbers, square number.

## I. INTRODUCTION

Number theory is a vast and fascinating field of mathematics concerned with the properties of numbers in general and integers in particular as well as the wider classes of problems that arise from their study. Number theory has fascinated and inspired both amateurs and mathematicians for over two millennia. A sound and fundamental body of knowledge, it has been developed by the untiring pursuits of mathematicians all over the world. The study of Number theory is very important because all other branches depend upon this branch for their final results. The older term for number theory is "arithmetic". During the seventeenth century. The term "Number theory" was coined by the French mathematician Pierre Fermat who is considered as the "Father of modern number theory". The first scientific approach to the study of integers, that is the true origin of the theory of numbers, is generally attributed to the Greeks. Around 600BC Pythagoras and his disciples made rather thorough studies of this integer. A Greek mathematician, Diophantus of Alexandria was able to solve equations with two or three unknowns. These equations are called Diophantine equations the study of these is known as "Diophantine analysis". The basic problem is representation of an integer  $n$  by the quadratic form with the integral values  $x$  and  $y$ .

A linear Diophantine equation is an equation between two sums of monomial of degree zero (or) one. In 628 AD, Brahmagupta an Indian mathematician gave the first explicit solution of the quadratic equation. The word quadratic is derived from the Latin word quadrates for square. The quadratic equation is a second-order polynomial equation in a single variable  $x$ .

There are several different ternary quadratic equations. To comprehend something in more detail is [1-4] visible. For the non-trivial integral answers to the ternary quadratic equation [5-7] has been researched. For numerous ternary quadratic equation [8-10] has been cited. In this article, we investigate another intriguing ternary quadratic equation  $3a^2 + 3r^2 - 2ar = 332n^2$  and obtain several non-trivial integral patterns. A few intriguing connections between the solutions and unique polygons, rhombic, centered and Gnomonic number are displayed.

### A. Notations

$T_{m,n}$  = Polygonal number of rank  $n$  with size  $m$

$RD_n$  = Rhombic dodecagonal number of rank  $n$


$P_n^5$  = Pentagonal Pyramidal number of rank  $n$

$TO_n$  = Truncated octahedral number of rank  $n$

$P_n^4$  = Square Pyramidal number of rank  $n$



4. EXTRA CREDITS- Advanced learners demonstrated excellence in the npTEL course



**Elite**  
**NPTEL Online Certification**  
 (Funded by the MoE, Govt. of India)

This certificate is awarded to  
**HEMALATHA S**  
 for successfully completing the course

**Forests and their Management**  
 with a consolidated score of **97** %

Online Assignments	23.44/25	Proctored Exam	73.5/75
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Total number of candidates certified in this course: **4916**

Prof. B. V. Ratish Kumar  
 Chairman, Centre for Continuing Education  
 IIT Kanpur

Jan-Apr 2023  
 (12 week course)

Prof. Satyaki Roy  
 NPTEL Coordinator  
 IIT Kanpur

Indian Institute of Technology Kanpur

swayam

Roll No: NPTEL23BT29S64780403 To validate the certificate No. of credits recommended: 3 or 4



**Elite**  
**NPTEL Online Certification**  
 (Funded by the MoE, Govt. of India)

This certificate is awarded to  
**T AKSHAYAA**  
 for successfully completing the course

**Stress Management**  
 with a consolidated score of **91** %

Online Assignments	25/25	Proctored Exam	66/75
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Total number of candidates certified in this course: **1763**

**TOP TOPPER 2%**

Aug-Sep 2023  
 (4 week course)

Prof. Haimanti Banerji  
 Coordinator, NPTEL  
 IIT Kharagpur

Indian Institute of Technology Kharagpur

swayam

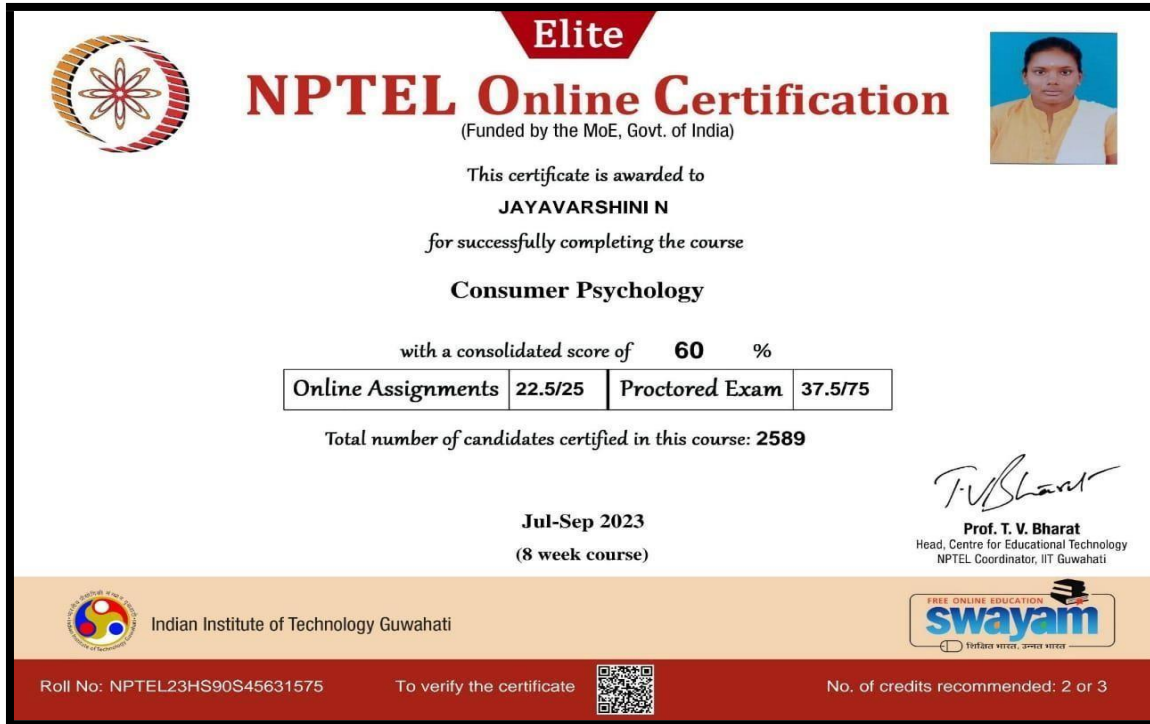
Roll No: NPTEL23HS138S648502027 To verify the certificate No. of credits recommended: 1 or 2



**CRITERION II**

Slow learners have excelled in their NPTEL course, successfully completing with notable achievement.

**OUTCOME**



**Elite**

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This certificate is awarded to  
**JAYAVARSHINI N**  
for successfully completing the course  
**Consumer Psychology**  
with a consolidated score of **60** %


Online Assignments	22.5/25	Proctored Exam	37.5/75
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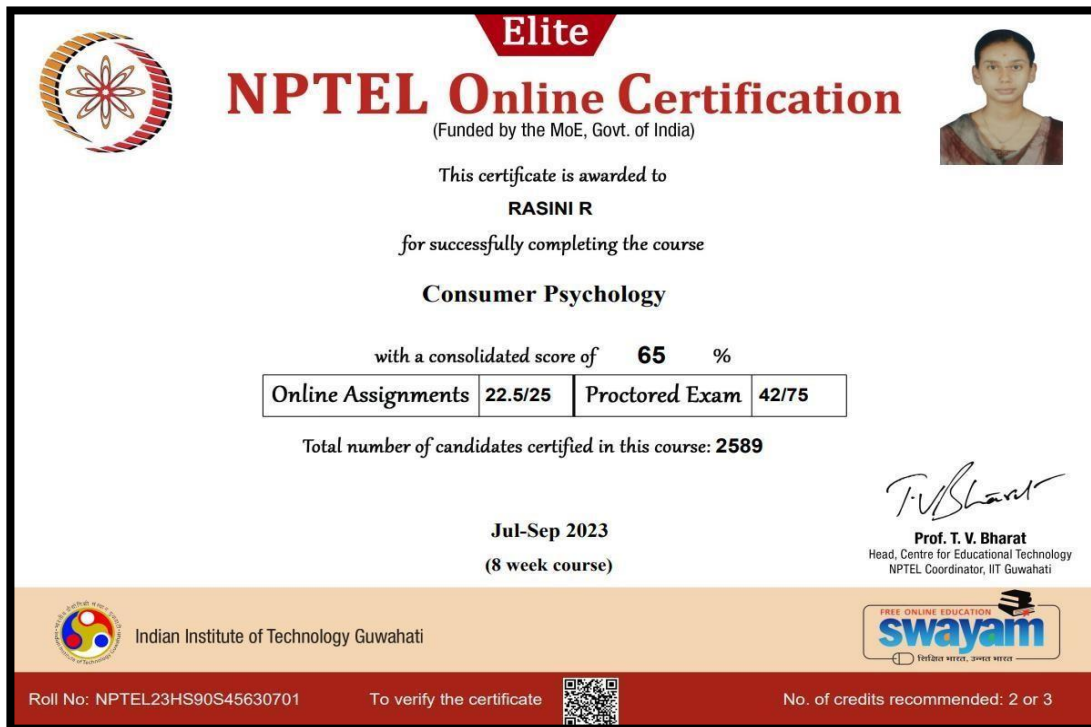
Total number of candidates certified in this course: **2589**

**Jul-Sep 2023**  
(8 week course)

*T.V. Bharat*  
**Prof. T. V. Bharat**  
Head, Centre for Educational Technology  
NPTEL Coordinator, IIT Guwahati

Indian Institute of Technology Guwahati

Roll No: NPTEL23HS90S45631575 To verify the certificate  No. of credits recommended: 2 or 3



**Elite**

**NPTEL Online Certification**  
(Funded by the MoE, Govt. of India)

This certificate is awarded to  
**RASINI R**  
for successfully completing the course  
**Consumer Psychology**  
with a consolidated score of **65** %


Online Assignments	22.5/25	Proctored Exam	42/75
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Total number of candidates certified in this course: **2589**

**Jul-Sep 2023**  
(8 week course)

*T.V. Bharat*  
**Prof. T. V. Bharat**  
Head, Centre for Educational Technology  
NPTEL Coordinator, IIT Guwahati

Indian Institute of Technology Guwahati

Roll No: NPTEL23HS90S45630701 To verify the certificate  No. of credits recommended: 2 or 3



**CRITERION II**

**OUTCOME**

**4. PLACEMENTS**

**RECRUITERS**



**PLACEMENT ORDER**







**CRITERION II****OUTCOME**

<b>RECRUITMENT DETAILS FOR THE YEAR 2023-2024</b>
<b>Selected from Cauvery College for Women</b>
<b>No. of Recruitment(Total) : 344</b>
<b>On - Campus : 344</b>
<b>Off - Campus : NIL</b>
<b>RECRUITMENT - ON CAMPUS</b>

S.NO	DATE	NAME OF COMPANY	ATTENDED	SELECTED
1	JUNE'23	Omega Healthcare	40	7
2	JUNE'23	Wipro	5	1
3	09/06/2023	Raj Vidhya Bhavan School	32	15
4	04/07/2023	Humani Care	7	3
5	05/12/2024	Accenture	32	3
6	14/12/2023	Big Temple International School	72	23
7	08/01/2024	WICE	65	32
8	24/01/2024	Michael's Academy (MACE)	112	48
9	06/02/2024	Kamala Niketan (KNMS)	62	7



# CAUVERY COLLEGE FOR WOMEN (AUTONOMOUS)

NAAC Accreditation III Cycle : A Grade (CGPA 3.41 out of 4)

Tiruchirappalli - 620018, Tamil Nadu, India

NAAC - Cycle IV SSR

## CRITERION II

## OUTCOME

10	13/02/2024	Vijay School	85	12
11	14/02/2024	Omega Healthcare	74	26
12	01/03/2024	SFT School	63	27
13	07/03/2024	EIT	105	75
14	13/01/2024	TCS	60	1
15	03/15/24	Capgemini	75	64
<b>TOTAL</b>			<b>814</b>	<b>344</b>

Annamalai Nagar, Tiruchirappalli - 620 018, Tamil Nadu, South India.

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Email : [principal@cauverycollege.ac.in](mailto:principal@cauverycollege.ac.in) ; [cauverycollege\\_try@rediffmail.com](mailto:cauverycollege_try@rediffmail.com)