

1.	Name of the department		PHYSICS			
2.	Year of Establishment		1963			
3.	Names of Programmes /Courses offered (UG, PG ,M.Phil., Ph.D. , Integrated Masters ; Integrated Ph.D., etc.)		UG course			
4.	Names of Interdisciplinary courses and the departments/units involved		Nil			
5.	Annual/semester/choice based credit system (programme wise)		Semester Based Credit System			
6.	Participation of the department in the courses offered by other departments		Student participated in diploma courses.			
7.	Courses in collaboration Other/ universities, industries/ with foreign/institutions, etc		NIL			
8.	Details of courses/ programmes discontinued (if any) with reasons		NIL			
9.	Number of Teaching posts	Government			Adhoc/ Part time	
			Sanctioned	Filled		
		Professor	0	0	0	
		Associate Professor	3	3	0	
		Asstt. Professor	5	5	0	
10.	Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt./Ph.D./M.Phil.etc.,)					
	Sanctioned					
	Name	Designation	Qualification	Specialization	No.of Years Of Experience	Nos. of Ph.D. Student Guided for the Last 5 years
	Dr. P. K. Dhar	Associate Professor	Ph. D	Particle Physics	31+	1
	Dr. M. K. Mahanta	Associate Professor	Ph. D	Theoretical Physics	18+	0
	Dr.Bhupali Sharma	Assistant Professor	Ph. D	Particle Physica	8+	0
	Dr.SubirSarkar	Assistant Professor	Ph. D	Nuclear Physics	11+	0
	Dr. Krishna Kingkar Pathak	Assistant Professor	Ph. D	High energy Physics	9+	0
	DR. Anupama Devi	Associate Professor	Ph.D	Theoretical Physics	17+	0
	Dr. Apurba Kumar Das	Assistant Professor	Ph.D	Nuclear Physics	14+	0
	Narayan Das	Assistant Professor	M.Sc.	Electronics	7+	0
	Adhoc/ Parttimer: NIL					
11.	List of senior visiting faculty		NIL			

12.	Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty	UG- 10% of the total class when the part-time teacher was present.					
13.	Student-Teacher Ratio (programme wise)	Programme	Ratio		Remark (if any)		
		UG	4 : 1		In the Major course		
			25:1		In the General course		
PG	Not applicable						
14.	Number of academic support staff (technical) and administrative staff ;sanctioned and filled	Sanctioned	Filled				
		4	3				
15.	Qualifications of teaching faculty with DSc /D.Litt /Ph.D /MPhil /PG.	DSc/ D.Litt	Ph.D	MPhil	PG		
		-----	7	1	1		
16.	Number of faculty with ongoing projects from: a)National b) International funding agencies and grants received						
	Name of faculty	Year	Funding Agency	Grant Received			
		2009					
		2010					
		2011					
	Dr. K. K. Pathak	2012	UGC	1,35,000.00 (completed)			
	Dr. B. Sharma		UGC	1,35,000.00 (completed)			
	Dr. M. K. Mahanta		UGC	1,15,000.00(completed)			
	Dr. A.K. Das	2014	UGC	3,40,000 (ongoing)			
17.	Departmental projects funded by DST-FIST;UGC, DBT, ICSSR, etc. and total grants received	3,68,000.00 from UGC					
18	Research Centre/facility recognized by the University	Ph.D research laboratories in different specialization like HEP, CMP, Plasma Physics, Electronics, Nuclear Physics, Astrophysics etc. are recognized by Gauhati University, Guwahati					
19	Publications (2009-15)						
	Nos. of papers published in Peer Reviewed /referred Journal (National/International)						
	Name of the Faculty	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
	Dr. P. K. Dhar : 07 Peer reviewed :07	1	1	0	0	3	2
	A Devi : 06 Peer reviewed : 04 Proceedings : 02	0	0	1	1	3	1
Dr. M. K. Mahanta : 05 Peer reviewed : 5	0	0	0	2	2	1	

	Dr Apurba Kumar Das: 07 Peer reviewed : 07	0	0	1	2	3	1
	Dr. Subir Sarkar :03 Peer reviewed : 03	1	1	0	0	1	0
	Dr. Krishna Kingkar Pathak:09 Peer reviewed Journal :09	0	1	2	2	2	2
	Dr. Bhupali Sharma: 02 Peer reviewed : 02	0	0	0	0	2	0
Nos. of Books/Chapters/articles							
	Name of the Faculty	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
	Dr. P. K. Dhar : 1			1			
	Dr. Krishna Kingkar Pathak: 02					1	1
20	Areas of consultancy and income generated	Dr. Manoj Kr. Mahanta voluntarily consulted a project on low-cost wind turbine set-up for irrigation purpose at the Darrang district of Assam. The project is still helping the farmers in the district					
21	Faculty as members in						
	Name of the Faculty	Name of the international/ National/Regional State level Committees/ Editorial Board				Membership status (Life/Annual)	
	Dr. P. K. Dhar	<ol style="list-style-type: none"> Chairman of two technical sessions in XX DAE-BRNS high energy Physics symposium held in Viswa-Bharati University, Santiniketan in 2012. Chairman of one technical session in PANE conference held in Aijawl,Mizoram in 2012. Chairman of one technical session in XXI DAE-BRNS high energy Physics symposium held in IIT-Guwahati in 2014. Member, Governing Body, Arya Vidyapeeth College for the session 2009-10. NOC member of XXI DAE HEP Symposium held in IIT Guwahati in Dec 2014 NOC member of PANE conference held in NERIST, Itanagar in Oct 2014 				<ol style="list-style-type: none"> PANE, life IPS(Indian Physical Society), life. 	

Anupama Devi	1. PANE	1.PANE, life
Dr Apurba Kumar Das	<ol style="list-style-type: none"> Chairman of teacher selection (TET) committee, Kamrup district. Convenor of workshop on “career counseling” organized by career counseling and placement cell of Arya Vidyapeeth College on 27.05.2011 and 28.05.2011. 	<ol style="list-style-type: none"> PANE, life IAPT, life
Dr. M. K. Mahanta	<ol style="list-style-type: none"> Member, Governing Body, Arya Vidyapeeth College for the session 2011-12. Worked as a member in the committee for “Ceremonial Distribution of Cheques to all Institutions of Higher & Technical Education” on 2nd May, 2012 vide appointment letter EC/HE/Plan-20/2012/53 issued by Director of Higher Education, Assam. Worked as Jury Member for evaluation of different competitions on various topics of Science and Technology organised by Arya Bhatta Science Centre, Kamrup (Metro), Govt of Assam, held at Guwahati Planetarium on 24th March, 2013 Worked as a Jury Member for evaluation of project presentation of 21st National Children’s Science Congress organised by ASTEC and NCSTC at Guwahati on 15th September, 2013. Worked as Observer for JEE (Main)-2013 conducted by CBSE, Govt. of India, Ministry of HRD on 7th April, 2013 vide letter No. CBSE/RO(G):JEE (MAIN)/2013. Worked as a Jury Member for evaluation of project presentation of National Children’s Science Congress organised by ASTEC and NCSTC at Guwahati on 12th September, 2010. Worked as Jury Member for evaluation of project presentation of National Children’s Science Congress organised by ASTEC and NCSTC at Guwahati on 4th September, 2011 	<ol style="list-style-type: none"> PANE, life Life member of PSSI(Plasma science society of India)
Dr. Krishna Kingkar Pathak	<ol style="list-style-type: none"> A member of the Interview board of SSC for selection of Technical Assistant, Geo-hydrology. 	<ol style="list-style-type: none"> PANE, life IAPT, life

		<ol style="list-style-type: none"> 2. Chairman of teacher selection (TET) committee, Kamrup district. 3. Convenor, symposia on “ Quality Enhancement in higher education” at A.V. College conducted by IQAC, A.V. College. 	
	Dr. Bhupali Sharma	1. Member of organizing committee of workshop on “career counseling” organized by career counseling and placement cell of Arya Vidyapeeth College on 27.05.2011 and 28.05.2011.	<ol style="list-style-type: none"> 1.PANE, life 2. IAPT,life
	Narayan Das	1. Expert in the Interview board of SSC for selection of Sub-inspector, Police force.	1. PANE, life
	Dr. Subir Sarkar	NIL	1.PANE, life
22	Student projects		
	Percentage of students who have done in-house projects including interdepartmental/ programme	NIL	
	Percentage of students placed for projects in other organizations outside the students i.e. Research Laboratories/ Industry / and other agencies.	100%	
23	Awards/Recognitions received by faculty and students		
	Name of Faculty:	Award	
	Dr. P. K. Dhar	<ul style="list-style-type: none"> • Gave an invited lecture on “Anomalous TopQuark Couplings” in IISER, Kolkata on 06.05.2015. • Visiting scientist in SINP, Kolkata in 2011-2013. • Visiting scientist in PRL, Ahmedabad in 2012. • Visiting scientist in IISER, Kolkata in May 2015. • Visiting scientist in Harish Chandra Research Institute(HRI) in July, 2014. • Got Ph. D. Guideship in 2013 under GU. • Invited to deliver a lecture on “BSM Physics in Tap Quark” in IIT Bombay, 2015 	
	Dr. M K Mahanta	<ul style="list-style-type: none"> • Got Ph. D. Guideship in 2014 under GU 	
24	List of eminent academicians and scientists/visitor to the Department	<ul style="list-style-type: none"> • Prof. Naresh Dadhitch, Prof., Inter University Center for Astronomy and Astrophysics, Pune, India • Dr. Bipul Kumar Bhuyan, Associate Professor, IIT, Guwahati • DK.Choudhury, Former Professor, Gauhati University 	

25	Seminars/Conferences/ Workshops organized & the source of funding National/international	1. Seminar talk by Dr. Bipul Kumar Bhuyan, Associate Professor, IIT, Guwahati on 19.11.2011. 2. Seminar talk by Prof. Naresh Dadhitch, Prof., Inter University Center for Astronomy and Astrophysics, Pune, India in 2011 3. Seminar talk by Dr. D. K. Choudhury, Former Professor, Gauhati University in 06.02. 2012																	
26	Student profile programme/ course wise: UG (Major)																		
	Year	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15												
	Programme	UG			UG														
	Course	MAJOR			MAJOR														
	Enrolled	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T			
	1 st year	17	03	20	16	04	20	22	03	25	17	08	25	22	03	25			
	2 nd year	09	05	14	12	03	15	11	03	14	12	02	14	17	08	25			
	3 rd year	07	01	08	10	06	16	12	03	15	11	03	14	13	01	14			
	Results of the Final Examination																		
	Year	2009-10			2010-11			2011-12			2012-13			2013-14			2014-15		
	Programme	UG			UG			UG			UG			UG			UG		
	Course	MAJOR			MAJOR			MAJOR			MAJOR			MAJOR			MAJOR		
		M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
	Appeared	11	02	13	20	05	25	12	03	15	10	02	12	10	01	11	10	07	17
	Passed	04	02	06	15	05	20	11	03	14	08	02	10	06	01	07	10	07	17
	% of Pass	36	100	46	75	100	80	92	100	93	80	100	83	60	100	64	100	100	100
27	Diversity of Students																		
	UG Course (Major)	2009-10			2010-11			2011-12			2012-13			2013-14			2014-15		
	% of students from the same State	100%			100%			100%			92%			92%			88		
	% of students from other States	0%			0%			0%			8%			8%			12		
	% of students from abroad	0%			0%			0%			0%			0%			0%		
28	How many students have cleared national and state competitive examination such as NET, SLET, GATE, Civilservices, Defense services, etc.?(2009-2014)	02 students cleared GATE																	
29	Student progression (2013-14)																		
	UG to PG	(60-80)%																	
	PG to M.Phil.	20%																	
	PG to Ph.D.	80%																	
	Ph.D. to Post-Doctoral	10%																	
	Employed •Campus selection •Other than campus recruitment	Between 90% to 95%																	
	Entrepreneurship/Self-employment	Not known																	

30	Details of Infrastructural facilities						
	a. Library	Nos. of Books in the Departmental Library.		Nos. of Books of the concerned subject in the Central Library.		Journals/ Magazines	
		> 500		>700		yes, (IAPT, PRAMMANA)	
	b. Internet facilities for Staff & Students	<ul style="list-style-type: none"> • 08 nos of Desktop computers with 24 hour internet facility • Both Linux based and window based OS are available. • Personal Laptops for each faculty members 50% of students having personal laptops 					
	c. Class rooms with ICT facilities	NIL					
d. Laboratories (Give details)	<ul style="list-style-type: none"> • There is well equipped laboratory for Physics (General) practicals having all the apparatus for fulfilling the Gauhati University syllabus • Sophisticated dark room with apparatus like Fresnel biprism, Laser, Spectrometers, polarimeters etc. • Highly equipped excellent electronics laboratory having all the testing and measuring equipments. • Necessary software and hardwares are there for virtual realization of different physical experiments. • Facility for computing for numerical calculations using Mathematica, Matlab etc. are available to enhance the knowledge of the students and also modern plotters like R, Origin, Gnuplot are being used to draw necessary scientific understanding of various problems. 						
31.	Number of students receiving College, University, Government or other agencies.						
	Financial assistance	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
	College	Annual grant of Rs. 165,000 per annum					
	University/ Government	UGC	UGC	DST/ UGC	UGC	UGC	NIL
32	Details on student enrichment programmes (special lectures/ workshops/ seminar) with external experts			Experts are invited to deliver special lectures for student enrichment programmes			
	Name of the Invitees			<ol style="list-style-type: none"> 1. Dr Amar Saikia, Principal dispur College 2. Dr. Dilip Sarma, Ex-HOD, Department of Physics, Cotton College 			
33.	Teaching methods adopted to improve student learning	Teaching Method			Comments		
		Peer teaching			yes		
		Group discussion:			Yes		
		Seminar by students			Yes		
		Guest Lecturer:			No		
		Project making/ Experimental workshop:			Yes		
		Chalk board or Power point			Yes		
		Preliminary discussion on earlier topics:			yes		
		Educational tour /visit:			Yes		

		Any other	Discussions with students regarding the recent updates of science.
34.	Participation in Institutional Social Responsibility (ISR) and Extension activities		<ul style="list-style-type: none"> • Remedial course for SC students
35.	SWOC analysis of the department and Future plans		
	Strength	<ul style="list-style-type: none"> • Quality Teaching • Well equipped laboratory • Computer laboratory constant internet service • Quality research facility • Round the clock consultancy to the students • Diversity of the books in the departmental library • Good and motivating environment for the students • Visit scientific laboratory & institutions by the students 	
	Weakness	<ul style="list-style-type: none"> • Self-sustaining career programmes are yet to be opened 	
	Opportunities	<ul style="list-style-type: none"> • Ph.d. guideship by two faculty members • Process of opening PG courses are going on • Recognized Ph.D. laboratory for research activities 	
	Challenges	<ul style="list-style-type: none"> • Within limited infrastructure it is a big challenge to open and run PG course • To set up a high quality research laboratory 	
	Future Plan	<ul style="list-style-type: none"> • Opening PG course • Developing good quality research lab in both theoretical and experimental Physics. 	