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**(16,17)**

# PATNA UNIVERSITY

REPORTS

ON

COLLEGES

By The University Inspectors.

1927-28

*Published by Patna University.*

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# INSPECTION REPORT

ON

## CUTTACK TRAINING COLLEGE.

*For the year 1927-28.*

Inspected by Dr. M. West on January 9, 1928.

### Records and Office.

The Auditor should check the cash balance in the safe. The Governing Body lacks one member correspondence is pending with Director of Public Instruction.

The record of students does not show punctuality, leave, games, special qualifications (e. g, Music, Scouting) and contains no photograph. I suggest that each student should be supplied with a copy of his record, through the Headmaster or Inspector who deputed him. The student's application for admission, giving address etc., and the Principal's private notes may be attached to the record in the College file.

### Grants.

It is desirable that an annual grant of 2½% to 5% of the value of the hostel and college-furniture should be made for repairs and replacement There is at present no provision for this

The grant for apparatus appears to be inadequate ; Rs. 150 would be sufficient Periodic doles for this purpose are apt to lead to waste.

The library grant is sufficient for the professional library, but leaves no margin for a library of light reading designed to encourage the reading habit A grant of initial Rs. 200 and recurring Rs. 75 is desirable.

The present practice of purchasing journals out of contingency is not strictly correct. Professional journals should be bought from the library grant and picture papers from Common Room grant , or a special heading may be made in the budget for "Journals".

### Admissions.

It does not appear necessary to impose an age-limit. Cases arise in which the College is required to do the best it can to improve an old teacher so that the cost of his salary may not be sheer waste. More-over declarations of age are notoriously unreliable. The matter is best left to the discretion of the principal.

### Caution Money

Students should be required to deposit Rs. 10 at the time of selection as a guarantee of bonafide, and the cost of replacing all books and apparatus lost during the course should be deducted from the amount deposited by the students before the money is refunded at the end of the course The deposit of students leaving the college before completing the course should be forfeited unless adequate reason can be shown.

### Buildings.

The present hostel is extremely unsatisfactory It is undesirable that college and Normal Training School students should be so mixed up. I suggest that the house at present used by the Headmaster of the Collegiate School ( which is far too large for that purpose ) should be converted into a hostel, the Headmaster being given the house of the Inspector of Students' Residences. The proper place for the Inspector of Residences to live might be in the Kathjuri Hostel for which he is supposed to be responsible.

It is desirable that the Tennis Court be made pucca and provided with wire netting.

### Equipment

This is on the whole satisfactory, but the Common Room might be made more attractive. The Indian student has so little idea of recreation that this room possesses,—or should possess a real educational value. A mat, arm-chairs, more games and a light are needed. The Common Room should be in the hostel, not in the college building.

More recreational Magazines are needed e. g. My Magazine, Discovery, Illustrated London News, Scientific American.

It is a pity that the School Manual Room is not available for college students who wish to use it

### Courses and Text-books

The students' knowledge of world history is so meagre that I doubt whether they are able to attach significance to a course on the history of education. A course on the lines shown in the enclosure on present day problems of education would be more profitable.

The course on hygiene appears to lay too much stress on school hygiene. What the students need is some elementary knowledge of how their bodies work, of personal care and cleanliness, and of the treatment of common ailments and accidents. English and American text-books are, in my opinion, useless in this subject. Ross, 'Hygiene for Indian students' (K. & J. Cooper) is the most suitable book known to me.

Collar and Crook is a most undesirable book in school management, being permeated with an obsolete and misleading psychology. I suggest the use of "Indian School Organization and Inspection" (K. & J. Cooper) as the only book known to me which deals with the special problems of schools in India.

In Principles of Teaching the course and the text-books appear to be too advanced for the pupils. These students will, without exception be teachers of day-schools, hence the more subtle points of Growth and of character-formation which arise in the boarding school, have less significance. What they need to know thoroughly is the psychology of learning, practice, habit, and the psychology of instinct in reference to the motivation of learning. I do not consider them capable of dealing with a multiplicity of texts. One good book is as much as they can master. I suggest Woodburne's Educational Psychology (Oxford Press) which is both up to date, and is written for Indian students. It should be supplemented from Pyle Psychology of Learning.

In special method I doubt the utility of Branford, and would suggest Thorndike 'New Methods in Arithmetic' and 'Psychology of Algebra' as being more intelligible and useful. I suggest that 'Occasional Report 13 of the Government of India' be added to Wyatt on the subject of English teaching.

I doubt the desirability of adding "Books Recommended". These presumably are for the teacher, who, if at all competent, is able to discover books for himself. As bibliographies for the teachers' use the recommended lists are obviously both inadequate and in many respects extremely defective.

### The Teaching.

The note-books are tidy and well kept, but students should be pulled up for careless spelling. If every student has a dictionary (as he ought to have) there is no excuse for such errors.

I suggest that more use might be made of printed notes and schemes of work. They save much time and facilitate the work of the average and weaker student, especially in courses, such as Principles, in which no ideally suitable text is available. The cost is met from the Caution Money.

The students' knowledge of Psychology indicates that rather undue stress has been placed on Growth and Adolescence, and that the Psychology of the Unconscious is above their heads. The subjects of Practice, Habit, Learning should have been taken up at an earlier stage in the course.

The students' knowledge of Anatomy was weak. The dissection of a goat before the class and the dissection by each student of a frog, are in our experience, the best means of giving a general idea of the organs. The course, as noted above, has tended to deal too much with School Hygiene and too little with elements of personal hygiene (which the English or American student has already learnt at school).

#### **Practical Work.**

There appear to be no facilities for the practice-teaching of Sub-Inspectors to be done in Primary Schools.

The honorarium to Practising Schools has been discontinued this year. It is most necessary that it be renewed. The amount paid at Dacca for 80 students is Rs. 1,300 and this has not been found too much. For this College the sum of Rs. 300 would be required.

Criticism lessons should, I consider, be given in the third term, after practice teaching has commenced, rather than in the second.

I saw the teaching of three students. They tended rather to the spectacular and unnecessarily oral type. This is no doubt due to the existence of a practical examination. A system of moderation of the College Record would discourage this type of teaching,—and be more just in its working.

The teachers should think less of what they will do, and more of what the boys are to do.

#### **General Remarks**

The College is on the whole in an efficient condition, and is doing good work so far as its circumstances permit, but this is very far from the maximum usefulness possible. What strikes one most forcibly in connexion with this College is the wastefulness of having four institutions, by nature very closely connected, under separate management in the same compound.

##### **1. The Collegiate School.**

It is not merely the function of a Training College to lecture on the theory of better education. Its main function is to produce better education. If this College has therefore any lesson of value to the teachers of the province it should be able to manage a typical Government School better than it is now managed.

The Principal of the College is a man of high qualifications and is drawing a relatively large salary. It is presumably the desire of the Department to get the fullest value from, and to make the fullest use of a highly paid officer.

It would appear evident, without further argument, that the Collegiate School should be under the control of the Training College not as a Practising School, but as a model showing in practice what the college teaches in theory. Only the most carefully selected students of the college should be allowed to do teaching there. The staff should be picked men trained at the College who will realise in

their daily work the theories which the College teaches in its lectures. The bulk of the practice-teaching should be done in the non-government Schools.

### 2. *The Normal School*

One of the most important functions of a Training College at the present juncture is the training of Inspecting Officers. For this the co-operation of the Normal School is essential.

Moreover the qualifications of the Principal of the College, and his experience as an Inspector of Schools, should be most valuable in maintaining the Normal School at a high level of efficiency.

Thirdly, by judicious arrangement the staffs of the two institutions can be so correlated that each may help the other, and enable a higher degree of specialization in the teaching. Thus the vernacular teacher of the School may teach a course in vernacular in the College ( which is much needed ), and the Lecturer of the College may help with psychology in the School.

### 3 *The Inspector of Students' Residences.*

The present arrangements for the teaching of Hygiene do not appear to be very satisfactory. The medical man is seldom a good teacher of this subject. The Inspector of Students' Residences is presumably a teacher by profession and particularly well qualified in problems of hygiene. That this is not so in fact, I am well aware. But I suggest that it should be made so. If no suitably qualified person is otherwise available, I suggest that a selected teacher may be sent to take a special course in Biology and Hygiene at Dacca or elsewhere. He may then be appointed Inspector of Students' Residences, and lecturer in Hygiene in the Training College and in the Normal School. The present post of Inspector is more or less of a sine cure. The added duties will supply to Government a peculiarly apt combination of theory and practice, and a better return for the cost of the post.

Sd. MICHAEL WEST.  
19th, Jan 1928.

**PATNA UNIVERSITY.****Inspection of Arts and Science Colleges.**

The following information is required for the use of the Inspectors at the time of their inspection of a college, and should be prepared shortly before the date fixed for the inspection.

- 1 No. of meetings of the Governing Body last session 1  
This session ( up to date ) 2
2. No. of meetings of the College Council last session ..  
This session ( up to date ) ...
3. A return of income and expenditure in attached form A.
4. A return for the College Library in attached form B.
5. Particular of expenditure on Science in attached form C.
6. A complete return of the teaching staff in attached form D.
- 7 Particulars as to changes in the teaching staff since the date of the last inspection in attached form E.
- 8 A copy of the college routine , annexed. Appendix—VI (a)
9. A detailed return of the weekly curriculum in all subjects in attached form F
10. No of students on the rolls at beginning of last session 22  
Do at end of last Do. 20  
Do at beginning of  
this session 21
11. A return of the college results in the last I. A, I. Sc, B. A., B Sc, examinations in attached form G.
- 12 Particulars of residence of all students at date of inspection :—  
No. living in college hostel 11  
Do attached messes ..  
Do unattached messes .....  
Do. with their parents 4  
Do. with local guardians 2  
Do. with family 2

## PATNA UNIVERSITY.

FORM—A.

APPENDIX—I.

*Return of Income and Expenditure for the last financial year. (1926-27)*

Income.		Expenditure		
Principal heads	Rs.	Principal heads	Rs.	A. P.
Nil.		1. Principal's Salary ...	8,585	13 0
		2. Professor's Do. .	4,408	1 0
		3. Establishment .	768	13 0
		4. Government Servants on training ...	773	7 0
		5. Travelling Allowance ( voted ) ...	337	10 0
		6. Grain Compensation Allowance ...	23	0 0
		7. Contract Contingencies... ..	999	15 9
		8. Furniture Maintenance... ..	25	0 0
		9. Rents, Rates and Taxes ... ..	306	10 0
		10. Livery . . . . .	20	0 0
		11. Excursion ... ..	150	0 0
		12. Hygiene Lectures ... ..	125	0 0
		13. First Aid ... ..	30	0 0
		14. Athletic Club ... ..	100	0 0
		15. Stipends to Pupil Teachers ... ..	6,188	5 0
		16. Apparatus(Special Grant) ... ..	1,684	10 6
		17. Boarding Charges ... ..	287	0 0
		18. Common Room ... ..	49	2 0
		19. Library ( Special Grant )... ..	2,999	15 3
		20. Remuneration to teachers of P. M Academy ... ..	100	0 0
		21. Apparatus (recurring grant ) ... ..	50	0 0
		22. Purchase of a Duplicator (Special Grant ) ... ..	75	0 0
		23. Purchase of a Cycle ( Special Grant ) .	120	0 0
		<b>TOTAL ... ..</b>	<b>28,207</b>	<b>6 6</b>

**PATNA UNIVERSITY.****FORM—B****APPENDIX—II.***Return for the College Library ( and Common Room )*

1. Total number of volumes in Library at the date of inspection 1323  
 2. Number of volumes added to the Library last session,  
 subject by subject :— ... .. 607

Subject.	No.	Amount Spent.		
		Rs.	A	P.
		2,999	15	3
TOTAL ...		2,999	15	3
(Special Grant)				

3. No of books borrowed by students during last session ... 496  
 4. List of periodicals subscribed for :—

- |                                |     |                                 |
|--------------------------------|-----|---------------------------------|
| (a) General                    | —   |                                 |
| (b) Scientific                 | —   |                                 |
| (c) For Staff Common Room      | —   |                                 |
| (d) For Students' Common Room— |     |                                 |
|                                | 1.  | Teachers' World                 |
|                                | 2.  | Journal of Education            |
|                                | 3.  | Times Educational Supplement    |
|                                | 4.  | British Psychological Journal   |
|                                | 5.  | Geographical Teacher            |
|                                | 6.  | Educational Review ( Madras )   |
|                                | 7.  | Times of India                  |
|                                | 8.  | The Punjab Educational Journal  |
|                                | 9.  | Educational Review (New York)   |
|                                | 10. | The Bharat Varsa                |
|                                | 11. | The Utkala Sahitya              |
|                                | 12. | The Bihar and Orissa Scout      |
|                                | 13. | The Statesman(Daily News Paper) |

## PATNA UNIVERSITY.

## FORM—C.

## APPENDIX—III.

*Abstract of Expenditure on Science.*

## ANNUAL GRANT.

				Rs	A	P.
Apparatus & Chemicals	..	...	...	...	0	0
Contingent	...	...	...	1,685	0	0
				(Special grant)		
TOTAL				1,685	0	0

## EXPENDITURE.

				Rs.	A	P.
Chemicals	...	...	...	...		
Apparatus	...	...	...	1,684	10	6
Workshop	...	...	...	...		
TOTAL				1,684	10	6

## FIRMS DEALT WITH.

Name of Firm...	...	...	Cost of goods supplied.
			Rs. A. P.
1. The Indian School Supply Depot, Calcutta,			
2. Messrs W. Newman & Co., Calcutta.			( Account not kept separately )
3. Messrs Baird & Tatlock, London			
4. „ Lawrence & Mayo, Calcutta			

N. B.—Indents must be ready for inspection.

# PATNA UNIVERSITY.

FORM—D.

APPENDIX—IV.

*Return of the Pay, Qualifications, etc. of the Teaching Staff*

Name.	Post, Academic Qualifications (Degrees, Class and year)	Period of Service in this college ( Year and months. )	Pay.	REMARKS
1. Mr. F. B. Whitmore	Principal, M A ( 1921 ) Dip. in Edn. ( Oxen )	3 years, 4 months	1,450	Salary-1,050 O Pay-400
2. Mr. B. Mukharji	Professor, M. A. B L ( Cal ) M. A. Edn. ( Leeds ) ( on deputation. )	...	...	..
3 Mr. M. P. Sarkar	M. A ( Cal ) II Class M. Ed. ( Leeds ) 1927 ( Officiating )	6 months	250	..
<b>OCCASIONAL TEACHERS</b>				
Babu B Rout...	Lecturer in Mathematics M A B. Ed	...	...	..
Dr. S. Pujari ...	Lecturer in Hygiene M. B	...	...	Up to 24-9-27
Dr. S N. Acharya	Do	...	...	From 26-10-27
Babu M. M Sahu	Teacher in B. B & Drawing	...	...	..

## PATNA UNIVERSITY.

## FORM—E

## APPENDIX—V.

*Particulars as to changes in the teaching staff since the date of the last inspection.*

Name of officer relieved (and post which he held).	Date of his leaving.	Reason for his leaving.	Name of relieving officer.	Date of his joining.
Mr. F. B. Whitmore, Principal, Cuttack, Training College,	27-4-25	Leave	Rai Sabe U. N. Dutta Gupta	14-7-25
Rai Saheb U N Datta Gupta.	29-10-25	Reversion	Mr. F B Whitmore	29-10-25
Mr. F. B. Whitmore,	13-7-26	Transfer	Dr. S. C. Sarkar	12-7-26
Dr. S C Sarkar,	13-7 27	Do.	Mr B. Mukharji	13-7-27
Mr. B Mukharji.	26-10-27	Do	Mr F. B Whitmore	26-10-27

*N. B.*—Give particulars also of any posts which may have been created, and how they have been filled.

Prof. B. Mukharji having been appointed to act as Offg. Inspector of Schools, Orissa Division, a temporary post in the B. & O. Educational Service on a pay of Rs 250 was created for the Training College and Mr. M P. Sarkar was appointed to it.

# PATNA UNIVERSITY.

## FORM—F. APPENDIX—VI

### A detailed return of Weekly Curriculum in all Subjects.

SUBJECT \_\_\_\_\_

Class.	Name of Teacher.	No. of lectures.	No. of tutorial (or Practical) Periods.	No. of students in Class.	No. of tutorial (or Practical batches).	REMARKS.
4th Year Hons.	...	..	...	...	...	...
" Pass	...	..	...	...	...	...
3rd Year Hons.	...	...	...	...	...	...
" Pass	..	...	..	..	...	...
2nd Year	...	..	.	...	..	...
1st Year	..	.	.	...	...	...
Dip. in Edn.	1. Mr. F. B Whitmore 2. Mr. M. P. Sarkar 3. Babu Bhima Rout 4. Dr. S. N. Acharya 5. Babu M. M. Sahu	7 9 2 2 1	2 2 ... ... ...	19 " " " "	2 2 ... ... ...	... 4 4 1 ... ... <b>PRACTICAL</b>

## A RETURN OF THE COLLEGE RESULTS FOR THE LAST 3 YEARS.

## APPENDIX—VII.

Year.	No. who appeared.	No. who passed.	Percentage of Passes.	REMARKS.
1924—25	L T. Exam. 17	15	88	1 got distinction.
1925—26	20	17	85	...
1926—27	Dip in Edn. 20	17	85	...

TIME TABLE FROM 27-10-27.

APPENDIX—VI(a)

	10-30—11-15	11-15—12	12—12-15	12-15—1.	1—1-45	1 45—2.	2—2-45.	2-45—3-30.
Monday ...	Psych. ( Pr. )	Hist ( Prof )	.	Practical (Prof)	..	...	Tut ( Prof & Pr )	Hyg. ( Dr. )
Tuesday ...	Eng. ( Prof )	B. B. & Drawing.	.	Princ. (Prof.)	.	...	Mathematics ( H. M )	..
Wednesday ..	Hyg ( Pr. )	Hist M (Prof)	...	Hist. ( Prof. )	Consultation	..	Tut. ( Prof & Pr. )	Practical (H.M. or Prof)
Thursday ...	Psych. ( Pr. )	Geog. M ( Prof. )	...	Essay or Seminar (Pr or Prof )	..	...	Maths. ( H. M )	...
Friday ...	10-20—11-5 Hist. ( Pr. )	11-5—11 50 Princ. (Prof.)	..	12—12-45 Practical (Prof.)	12-45—1-45 Recess	1-45—2 Discussion	Hist ( Prof )	Hyg. ( Dr. )
Saturday ...	Pract. (Princ.)	Pract	...	Debates	..	.		..



# REPORT

ON

## Greer Bhumihar Brahman College for 1927-28

*Inspected by Dr K S Caldwell on the 20th and 21st January, 1928*

The Science laboratories of this college were originally designed for the purpose of teaching the subjects of Physics and Chemistry up to the Intermediate standard to classes of 32 students in each year, *i e.*, 64 students in all. The actual number of Science students on the roll at the time of the inspection was

I Sc	1st year	32
	2nd year	32
B Sc	3rd year	5
	4th year	14

Accommodation for this additional work has been suitably provided by the construction of second lecture theatre and preparation room and a separate workshop and power house block comprising —

Dynam room	36' × 20'
Battery room	17' × 10'
Workshop	20' × 15'
Store room	11' × 10'
Distillation room	15' × 10'

This with certain minor alterations in the laboratory buildings including the conversion of the original workshop into a B Sc laboratory has given the necessary accommodation for the small B Sc classes.

Attention is called to the following points of detail in connection with minor alterations suggested

### PHYSICS

1 The old preparation room should be handed over to the chemistry department as suggested in the year 1923 when second lecture theatre was designed

2 The North East verandah should be enclosed and used as a store room, the present store room being used for the purpose for which the old preparation room is now being used

3 There is room in the present lecture apparatus room for suitable experimental work

4 Better use can be made of the I Sc general laboratory. Four tables at the east end might be set apart for B Sc work

5 The room under the lecture theatre at present housing a collection of rubbish and used as an acid store might be suitably fitted up as a compounders room for Physics and Chemistry

## CHEMISTRY

1 The enclosed north-west verandah should be suitably fitted up for physical chemistry work

2 Accommodation in the store rooms should be increased by extending the shelves to the ceiling Glass materials could be placed in these extensions setting free space in the almshalls for special apparatus

Action has been taken on most of the suggestions made at the 1924 inspection and it is understood that the proposals then made as regards improvements to the water supply are under consideration

## FINANCES.

Annual grant for apparatus and chemicals No change recommended

*Contingent Grant*—The laboratory general contingent grant of Rs 1,500 is divided equally between Physics and Chemistry Of the Rs 750 allotted to Chemistry Rs 610 was spent in supplying gas and water to both laboratories leaving very little for general contingencies Taking into consideration the fact that the Physics Department have a special grant for power house expenses it is for consideration whether the chemical laboratory should not have a greater share of the general laboratory contingent grant

When effect is given to the proposed water-supply scheme presumably the chemical laboratory will be relieved of some of this expenditure

Details of the financial expenditure are given below —

## STAFF

Teaching—No change recommended

Servants—The present scale of wages is as follows —

Physics one on Rs 11	length of service	28 years
Do	9 "	12 years
Do	8 "	3 years
Chemistry one on Rs 10	length of service	10 years
Do	8 "	7 years
Do	8 "	3 years

It is recommended that these should be placed on an incremental scale rising to Rs 15/-, Rs 12/- and Rs 10/- respectively



## PATNA UNIVERSITY.

## FORM A.

*Return of Income and Expenditure for the last financial year.*

INCOME.		EXPENDITURE	
Principal heads	Rs.	Principal heads	Rs. a p
College fees including admission and Transfer fees	35,312	Salary of Teaching Staff ..	1,00,832 8 0
Fines ...	657	do Laboratory Assts and Clerks	6,867 4 0
Sale proceeds	393	do Mental Staff ( E H )	1,998 0 0
Municipal taxes realised from staff .	152	Travelling allowance	937 13 0
		Library Books ...	2,828 15 0
		Laboratory spl. grants apparatus	6,086 14 0
		do contingencies	1,500 0 0
		do customs and freight...	788 4 0
		Furniture ...	600 0 0
		Contract contingencies	2,872 0 0
		Common Room	100 0 0
		Athletic ...	750 0 0
		Rents and Taxes ...	3,168 12 0
		Periodicals . ...	346 0 0
		Liveries ...	40 0 0
		First Aid lectures	30 0 0
		do apparatus .	27 15 0
		Emersion ...	500 0 0
		Ministers' fund	300 0 0
		Scholarships	2,468 0 0
Total	36,514	Total .	1,33,142 5 0
HOSTEL.			
Hostel seat rent	1,512	Hostel supdt's allowance .	1,310 0 0
		do Medical do	680 0 0
		do furniture	204 0 0
GRAND TOTAL .	38,026	GRAND TOTAL ...	2,194 0 0
			1,35,336 5 0

## PATNA UNIVERSITY.

## FORM B.

*Return for the College Library Physics Department*

1. Total No of volumes in Library at date of inspection. 418  
 2. Number of volumes added to the library last session, subject by subject 17.

Subject	No.	AMOUNT SPENT		
		Rs	As	P
Physics	17	107	14	0

3. No of books borrowed by students during last session, 103

4. 1st year 29, 2nd year 16, 3rd year 34, 4th year 24

5. List of periodicals subscribed for :—

- |                              |                                |
|------------------------------|--------------------------------|
| (a)                          | (1) Philosophical Magazine.    |
| (b) Scientific. ( Physics. ) | (2) Nature                     |
| (c)                          | (3) Physical Review.           |
| (d)                          | (4) Indian Journal of Physics. |

## PATNA UNIVERSITY.

## FORM B.

*Return for the College Sectional Library-Chemistry.*

1. Total No of volumes in Library at date of inspection. 228.
2. Number of volumes added to the library last session, subject by subject.

Subject.	No	Amount spent.		
		Rs	as.	p.
hemistry	11	12C	7	6

- 3 No of books borrowed by students during last session 22.
4. 1st year 3.      2nd year 5.      3rd year 11      4th year 3
5. List of periodicals subscribed for:—
  - (a) General —
  - (b) Scientific—Chemistry—(i) Journal of the Chemical Society, London
  - (c) For staff Common Room:—(ii) Journal of the American Chemical Society
  - (d) For students Common Room:—(iii) Journal of the Society of Chemical Industry.

## PATNA UNIVERSITY.

## FORM B.

Return for the College Library (*and Common Rooms*).

1. Total No. of volumes in library at date of inspection 8431 (on 21 1 28)
2. Number of volumes added to the library last session, subject by subject 475 :—

Subject.	No	Amount Spent			—
		Rs	A	P	
English	75	195	10	0	Special Grant.
History.	48	267	13	0	
Economics.	26	147	4	0	
Philosophy.	18	138	12	6	
Arabic & Persian.	17	120	13	9	
Sanskrit	172	61 1178	6 14	0 11	
Hindi	28	38	5	3	
Mathematics	38	203	15	0	
Physics	17	107	14	0	
Chemistry	11	125	7	6	
Bengali	25	42	12	0	
Miscellaneous and Journals	..	193	15		
		1650 1170	0 14	0 11	
<b>TOTAL</b>	475	2828	14	11	

3 No of books borrowed by students during last session,—2237 and Staff 1089.

4 1st year 1108 2nd year 395 3rd year 506 4th year 228

4 List of periodicals subscribed for :—

(a) General :

(b) Scientific .

(c) For Staff Common-room :

(d) For Students' Common-room :

PATNA UNIVERSITY

FORM B

Return for College Library.

4. List of Periodicals subscribed for G. B.B. College Library.

A. B. & C.

1. Journal of the Society of Chemical Industry
2. Journal of the Chemical society of London.
3. Journal of the American Chemical Society.
4. Nature.
5. Physical Review.
6. Philosophical Magazine
7. Indian Journal of Physics
8. Journal of the Indian Mathematical Society
9. The Times Educational Supplement
10. Man in India.
11. The Bengal Co-operative Journal.
12. Federation Gazette.
13. Epigraphia Indica.
14. Journal of the B & O. Research Society.
15. Journal of the Royal Asiatic Society of Great Britain and Ireland.
16. The English Historical Review
17. The Indian Antiquary
18. The Economic Journal
19. The Indian Journal of Economics
20. The Psychological Review.
21. The International Journal of Ethics
22. The Mind.

## PATNA UNIVERSITY.

## FORM C

*Abstract of Expenditure on Science.*

## CHEMISTRY DEPARTMENT.

## ANNUAL GRANT

		Rs	A.	P.
Apparatus and Chemicals	...	2,305	0	0
Contingent	...	750	0	0
Total	...	3,055	0	0

## EXPENDITURE.

		Rs.	A.	P.
Chemicals	...	750	11	3
Apparatus	...	1,637	9	6
Workshop	...	0	0	0
Total	...	2,388	4	9

## FIRMS DEALT WITH.

Name of Firm.		Cost of goods supplied			
		Rs.	A.	P.	
1.	Messrs. Baird & Tatlock, London	678	13	1	Apparatus
2.	do F. E Beckjek & Co., London	550	6	6	do.
3.	The British Drug Houses, London	339	1	9	Chemicals
4.	Messrs Mansfield & Sons, Calcutta	90	0	0	Gas Retort.
5.	Patna Electric Works	22	4	0	Apparatus.
6.	Adam Hilger & Co., London	9	8	8	do.
7.	The Nadia Chemical Works, Calcutta	152	1	0	do
8.	Messrs. D. Waldie & Co, Calcutta	173	13	0	Chemicals
9.	Messrs. Adair Dutt & Co, Ltd London.	237	12	6	do
10.	do do do	134	8	3	Apparatus.
	Total	2,388	4	9	

## PATNA UNIVERSITY.

## FORM C.

*Abstract of Expenditure on Science*

## PHYSICS DEPARTMENT.

## ANNUAL GRANT.—1926-27.

	Rs	A.	P.
1. Apparatus, and Chemicals ...	2,305	0	0
2 Contingent, Physical Labora- tory	750	0	0
3. Contingent, Power house (be- sides the pay of a cooly for 8 months at 15/ p m.	858	0	0
4 Special grants for purchasing workshop materials,	500	0	0
Total ..	4,413	0	0

## EXPENDITURE.

Chemicals ..	...	86	0	C
Apparatus	...	2,324	0	0
Workshop	..	763	0	0
Power house	...	858	0	0
Miscellaneous	..	382	0	0
Total	...	4,413	0	0

## FIRMS DEALT WITH.

Name of firm.	Cost of goods supplied.
1. Messrs Adair Dutt & Co , London & Calcutta	... 967 6 8
2 do Baird & Tatlock, London	... 236 11 11
3 do. Max Kohl & Co , Chemists, Germany	... 6 4 0
4 The Scientific Instrument Co , Cal & Allahabad	.. 774 15 3
5. The India Rubber Gutta Percha & Tel Works, Calcutta.	. 193 8 9
6 The Bengal Cheml. & Phar. Works, Ltd , Calcutta	... 119 7 6
7 Messrs T E Thomson, & Co., Calcutta...	... 485 5 3
8 Messrs Houghton Butcher & Co , Calcutta	.. 15 15 0
9. The Photographic Stores & Agency, Calcutta	.. 20 5 0
10 The Nadia Chemical Works, Calcutta	... 52 2 0
11 Messrs Mansfield & Sons, Calcutta	... 30 0 0
12 do. Newman & Co., Calcutta	... 23 4 0

## PATNA UNIVERSITY.

## FORM D.

Return of the Pay, Qualifications, etc., of the Teaching Staff.

Name.	Post, Academic Qualifications (Degrees, class and year)	Period of Service in this College (Years and Months)		Pay.	REMARKS.
		Yrs.	Mths.		
1 W. V Duke, Esqr.,	Principal, B A, R U I. M.A., T C. D., I E S	3	3	1,450 150 ₹30	Special Pay. Oversea Pay.
2 R P. Khosla, Esqr.	Prof. of History, M A (Punjab), I E S., Gold Medalist and University Prize Winner First in the Final Examination of the Central Training College, Punjab, Gold Medalist, B. A ( Hist ) Honours, Oxford II Class, 1925 High Proficiency in Urdu, Class II New College Prize Winner	10	4	1,000 300	O P
3 B Gosthahari Sinha.	Professor of English M. A Clas. II ( C U ), 1914	1	5	450	
4 B Bireswar Chatter ji	Professor of English, M A 1913	9	6	410	
5 B Khettra Pal Das.	Prof of Mathematics. M Sc (Allbd) Class III.	16	6	450	
6 B Jiban Krishna Sarkar	Professor of Philosophy 1914, Vidyabhushan	10	6	450	
7 Rai Saheb Avadh Bihari Prasad Sinha	Prof of Arabic & Per Private studies of Arabic & Persian, F. A. ( C U ) 1898	27	6	450	
8. B Bamesh Chandra Sen	Prof of Physics M.A. (Cal) 1908, Class III	16	6	450	
9 B Rajant Kanta Basu	Prof of Chemistry	8	6	410	
10 B Shivanath Basu	Prof of History M.A Class II ( C U ) 1914.	5	6	450	
11 B. B. Indeshwar Prasad.	Prof of English, M A ( C U.-1912 ) Class III Prof of English, ( Pre- Allabd-1912 Class I' ( Group A-English ).	14	2	370	
12. B. Atulananda Sen.	Asstt. Prof. of History, M.A. C.U.-1913, Class III.	14	0	330 75	Hostel Allowance

## PATNA UNIVERSITY.

## FORM D.

## Return of the Pay, Qualifications, etc., of the Teaching Staff

Name	Post, Academic Qualifications ( Degrees, class and year )	Period of Service in this College ( Years and Months )		Pay	REMARKS
		Yrs.	Mths		
13 B Ananta Mohan Sen Gupta,	Asstt Prof. of Physics, M A. Cal -1912, Class III	16	1	330	
14. Mr. Syed Abdul Majid.	Asstt Prof. of Arabic & Pers Higher Cal Madrasa, Matric-Cal	13	4	320	
15. B. Bhupati Bhushan Mukerji	Asstt. Prof Econo MA Cal 1917 (Econs) Class II, Woodman Prize Winner, 1915, B. L	6	10	250	
16. B Rameshwar Prasad.	Asstt Prof Mathematics M.A. (C U -1918) Class I	8	6	250	
17 B Gagan Chandra Ghosh	Lect in Philosophy, MA Phil Cal. 1918 Class-I, B L Cal	7	11	240	
18 Pt. Ram Das Ray	Lect in Sanskrit, Sanskrit Title Exam of Cal Sans Board 1915 F A - Cal. 1914	18	6	240 30	Hostel Allowance
19. Pt Umanath Jha	Lect in Sanskrit, M A. Class II, Sans -1921, Sankhya Yoga. 2nd Exam -Sahityapadhy B L	2	5	190	
20. Babu Ramani Mohan	Asstt Prof. of Chemistry MA in Chem Cal 1918 1st in Class II & II in Cal Univer	8	6	250	
21. B. Paresh Chandra Dutta	Demonstrator in Chemistry M Sc Class I 1923	3	2	200	
22 B Sushil Chandra Ray Chaudhary	Demonstrator in Phys M Sc Class I-1919.	3	2	200	
23. Babu Shital Prasad Shukla	Lect in Sanskrit.	.	.	170	Offg in a vacant post vice B S. N Mazumdar transferred.

## PATNA UNIVERSITY

## FORM E.

Particulars as to *changes in the teaching staff* since the date of the last inspection.

Name of officer relieved (and post which he held)	Date of his leaving.	Reason for his leaving.	Name of relieving officer.	Date of his joining.
1 B Maheswar Prasad Laboratory Assistant and Storekeeper	11 12 1926	Abolition of the post as a higher pay post sanctioned for a B Sc.	B. Damodar Prasad, B. Sc	11-12-26
2. W W T. Moore, Esqr, Principal.	23-12-26	Transfer.	W, V Duke, Esqr Principal	23-12-26
3 Mr Jonathan Mahanty, Lecturer in English.	14 8 26	Do	B Gostihari Sinha Professor of English	14 8 26
4 B Surendranath Mazumdar Sastri Professor of Sanskrit,	24 9-27	Do	B Shital Prasad Shukla Lecturer in Sanskrit	28-10-27
5 B Nares Chandra Chatterji, Lect in Mathes.	23-12-1927	Do	Vacant	
6 B Ramapati Gupta M. Sc Laboratory Asstt (Phys Lab)	26 8-27	Do	B. Sant Prasad, B. Sc.	27-8-1927

*NB* — Give particulars also of any posts which may have been created, and how they have been filled

ROUTINE OF LECTURES G B B COLLEGE, MUZAF ARPUR 16TH JULY, 1927.

	10-30--11-25	11-30--12-25	12-30--1-25	1-30--2-25	2-30--3-25	3-30--4-25
I	Eng—M T W Th F. Verns—S	Phys—W Th Chem—F Maths—M S Logic—Th 2nd Langs—T W F	Phys—S Chem—T Maths—W Th Hist—S Logic—T	Chem—W Hist—M T W 2nd Langs—Th Logic—F	Phys—F Chem—Th Practical—T W	Practical—T W.
II	Eng (B)—M T W, Th F Hist (A)—T, W, Th F Hist (B)—S Chem—S	Phys—F Chem—N T Eng (A)—S Hist (B)—Th Logic—T W F 2nd Langs—M Pract—W Th S	Eng (A)—M T Maths—M T Logic—Th S 2nd Langs—W	Eng (A)—W F Maths—V F Phys—M T Th Hist (B)—M T	Chem—F Verns—Th 2nd Langs—T, F Pract—M	
III	Chem—M, Th Maths (Hon)—W, S Hist (Hon)—M, W, S Philo—T Th F Econ—T Th F	Maths (Pass)—M W Th F Maths (Hon)—M T W Th Hist (Hon)—T Hist—M W Th F Philo—S Econ—S Chem Prac—S,	Pract—W Th S Phys—M T Th Chem—W Maths (Hon)—F Sans (Hon)—F Eng—M T W Th S Chem Prac—S	Phys—W Chem—F Maths (Fase)—T Sans (Hon)—M Th Maths (Hon)—M T Th Verns—W.	Sansk (Hob)—W 2nd Langs—M, T, Th F.	Practical—M.
IV	Phys—T W S Maths (Hon)—M Hist (Hon)—M Th F Sans (Hon)—M Th F. Philo—W S Econ—W S 2nd Langs—T	Chem—W Th Maths (Pass)—T, F Maths (Hon)—T F S Hist (Hon)—T Hist—F Eng—M W Th. Phys Prac—M	Maths (Pass)—W Th S, Maths (Hon)—T W Th S Sans (Hon)—T Philo—M Econ—M Hist—W Th S Phys Prac—M	Phys—F Chem—M T Math (Hon)—W Th English—T F 2nd Langs—M	Verns—M 2nd Langs—Th F Sansk—W Philo—T Econ—T Chem Prac—M T F Phys Prac—W Th	Chem Prac—M T F Phys Prac—W Th

N. B.—The following is the plan according to which the 2nd year class has been split up into two sections for English and History, in the new routine—  
 English—Sec.—B All Mathematics students and all Persian students  
 Sec.—A All Sanskrit students having no Mathematics  
 History—Sec.—B All Mathematics and all Persian students and First 25 Sanskrit students having no Mathematics  
 Sec.—A. Remaining Sanskrit students having no Mathematics.

## TUTORIAL BATCHES 2ND YEAR CLASS

A—2, 3, 5, 6, 9, 16, 23, 25, 27, 30, 41, 42, 52.	I Sc.
B—57, 59, 64, 71, 75, 83, 96, 98, 102, 139, 169, 174, 176, 177	I Sc.
C—51, 170, 171 (Mohammedan students)	I Sc
D—22, 44, 50, 108, 119, 120, 143	M. S. P. L.
E—10, 55, 62, 63, 66, 88, 106, 126, 130, 134, 139, 157	H M L.
F—4, 13, 29, 34, 48, 61, 74, 103, 145, 152, 153.	H P L
G—Vacant at present	H. P. L.
H—1, 11, 12, 14, 15, 17, 19, 20, 24, 28, 31, 36, 37	H S L.
I—38, 40, 43, 47, 49, 53, 54, 56, 67, 69, 70, 73.	H. S. L.
J—76, 77, 78, 80, 81, 84, 85, 89, 90, 91, 92, 94, 95, 97	H. S. L.
K—100, 104, 107, 109, 110, 111, 113, 115, 116, 118, 124, 127, 129, 132	II. S. L.
L—133, 135, 137, 138, 140, 142, 146, 148, 149, 155, 156, 157, 163, 166.	H S L.
M—167, 168, 172, 173, 175, 178	II S L.
N—Vacant at present.	

## PATNA UNIVERSITY

## FORM F

A detailed return of *Weekly Curriculum* in all subjects

## SUBJECT—Economics.

Class	Name of teachers	No of Lectures	No of tutorial (or practical) periods	No of students in class	No of tutorial (or practical) batches.	REMARKS
4th Year Hons	0	0	0	0	0	
4th Year Pass	W V Duke Esqr Babu Bhupati Bhusan Mukherji	1 3	2 0	18	2	
3rd Year Hons	0	0	0	0	0	
3rd Year Pass.	W V Duke Esqr Babu Bhupati Bhusan Mukherji	2 2	0 2	22	2	
2nd Year	0	0	0	0	0	
1st Year	0	0	0	0	0	
SUBJECT—History						
4th Year Hons	R P Khosla Esqr Babu Shiva Nath Bose Babu Atulananda Sen	1 2 1	.. ..	14		
4th Year Pass.	R P. Khosla Esqr Babu Shiva Nath Bose Babu Atulananda Sen	1 1 2	1 2 1	53	4	
3rd Year Hons	R. P Khosla Esqr Babu Shiva Nath Bose, Babu Atulananda Sen	1 1 2	.. .	14	—	
3rd Year Pass	R P. Khosla Esqr. Babu Shiva Nath Bose Babu Atulananda Sen	1 2 1	2 2 1	52	5	
2nd Year	R P Khosla Esqr. Babu Shiva Nath Bose Babu Atulananda Sen.	4 4 0	3 2 5	124	10	
1st Year	R. P Khosla Esqr Babu Shiva Nath Bose Babu Atulananda Sen.	2 0 2	2 3 3	100	8	

## PATNA UNIVERSITY

## FORM F

A detailed return of *Weekly Curriculum* in all subjects,

## SUBJECT—English

Class	Name of teachers	No of Lectures	No. of tutorial (or practical) periods	No. of students in class	No of tutorial (or practical) batches	REMARKS,
4th Year Hons	0	0	0	0	0	
4th Year Pass	Babu Ghostha Hari Sinha Babu Bireshwar Chatterji Babu Bindheshwari Prasad	2 1 2	2 3 2	75	7	
3rd Year Hons	0	0	0	0	0	
3rd Year Pass	Babu Ghostha Hari Sinha Babu Bireshwar Chatterji Babu Bindheshwari Prasad	1 2 2	2 2 3	68	7	
2nd Year	Babu Ghostha Hari Sinha Babu Bireshwar Chatterji Babu Bindheshwari Prasad	4 4 2	6 5 2	164	13	
1st Year	W V Duke Esqr Babu Ghostha Hari Sinha Babu Bireshwar Chatterji Babu Bindheshwari Prasad	1 2 1 2	0 2 3 7	135	12	

## SUBJECT—Logic and Philosophy

4th Year Hons,	0	0	0	0	0	
4th Year Pass,	Babu Jiwan Krishna Sarkar Babu Gagan Chandra Ghosh	3 1	1 3	21	4	
3rd Year Hons,	0	0	0	0	0	
3rd Year Pass,	Babu Jiwan Krishna Sarkar Babu Gagan Chandra Ghosh	2 2	1 1	11	2	
2nd Year	Babu Jiwan Krishna Sarkar Babu Gagan Chandra Ghosh	4 1	6 4	130	10	
1st Year	Babu Jiwan Krishna Sarkar Babu Gagan Chandra Ghosh	0 3	4 6	100	10	

## PATNA UNIVERSITY

## FORM F

A detailed return of Weekly Curriculum in all subjects  
SUBJECT—Mathematics

Class	Name of Teachers	No. of Lectures	No. of Tutorial (or Practical) Period	No. of Students in Class	No. of Tutorial (or Practical) Batches	REMARKS
4th year Hons	B Khettra Pal Das	2	1	6	1	
	B Rameshwar Pd	3		..	.	
	B Naresh Ch Chatterji	4		.	...	
4th year Pass	B Khettra Pal Das	2	1	19	2	
	B Rameshwar Pd	2			.	
	B Naresh Ch Chatterji	..	1		...	
3rd year Hons	B Khettra Pal Das	3		2	1	
	B Rameshwar Pd	3	1	...	...	
	B Naresh Ch Chatterji	3			...	
3rd year Pass	B Khettra Pal Das	2	.	6	1	
	B Rameshwar Pd	2	1	...	...	
	B Naresh Ch Chatterji			..	...	
2nd year	B Khettra Pal Das	2	2	57	4	
	B Rameshwar Pd		1		..	
	B Naresh Ch Chatterji	2	1	...	..	
1st year	B Khettra Pal Das	.	1	49	4	
	B Rameshwar Pd	2	1	...	..	
	B Naresh Ch Chatterji	2	2		.	
SUBJECT—Sanskrit						
4th year Hons	B Surendra Nath Mazumdar	2	1	5	1	}
	Pt Ram Das Ray	1				
	Pt Uma Nath Jha					
4th year Pass	B Surendra Nath Mazumdar	3		33		
	Pt Ram Das Ray	...	.			
	Pt Uma Nath Jha	2	2			
3rd year Hons	B Surendra Nath Mazumdar	2	1	9	1	
	Pt Ram Das Ray	...	..			
	Pt Uma Nath Jha	1		..	...	
3rd year Pass	B Surendra Nath Mazumdar	1	2	30	2	
	Pt Ram Das Ray	2	..	...	..	
	Pt Uma Nath Jha	1	.	..	...	
2nd year	B Surendra Nath Mazumdar			99	9	
	Pt Ram Das Ray	2	5	...	...	
	Pt Uma Nath Jha	2	3	..	.	
1st year	B Surendra Nath Mazumdar	1	2	79	7	
	Pt Ram Das Ray	2	2	..	..	
	Pt Uma Nath Jha	1	3	...		

\* Hons and Pass Tutorial batches are combined  
N. B.—Pandit Shital Prasad Sukla took the work of Mr. S. N. Mozumdar since October, last.

## PATNA UNIVERSITY

## FORM F

A detailed return Weekly Curriculum in all subjects.

## SUBJECT—Persian

Name	Name of teachers	No of Lectures	No of tutorial (or practical) periods	No of students in class.	No of tutorial (or practical) batches	REMARKS
4th year Hons		..	...			
4th year Pass	Rai Sahib Awadha Behari Pd Sinha Syed Abdul Majid	3 2		16	2	
3rd year Hons		...	..			
3rd year Pass	Rai Sahib Awadha Behari Pd Sinha Syed Abdul Majid	2 2	... 1	14	1	
II year	Rai Sahib Awadha Behari Pd Sinha Syed Abdul Majid	2 2	3 ...	18 ..	3 ..	
I year	Rai Sahib Awadha Behari Pd Sinha Syed Abdul Majid	2 2		15	2	

## SUBJECT—Physics

4th year (Hons)					...	
4th year Pass	B Ramesh Chandra Sen B Ananta Mohan Sen B Sushil Ch Chaudhary	2 2	4 2	13	1 ...	
3rd year Hons	...	..	..	.		
3rd year Pass	B Ramesh Ch Sen B Ananta Mohan Sen B Sushil Ch Chaudhary	. 2 2		5	1 ..	
2nd year	B Ramesh Ch Sen B Ananta Mohan Sen B Sushil Ch Chaudhary	2 2	4 4	32 ..	2 .	
1st year	B. Ramesh Ch Sen B Ananta Mohan Sen B Sushil Ch Chaudhary	.. 2 2	... 2 2	32 ... ...	2 . ...	

## PATNA UNIVERSITY

## FORM F.

A detailed return of Weekly Curriculum in all subjects.

## SUBJECT—Chemistry

Class	Name of Teachers	No of Lectures	No of Tutorial (or Practical) Period	No of Students in Class	No of Tutorial (or Practical) Per. hrs.	REMARKS
4th year Hons	.	.	.	..	...	
4th year Pass	B Rajani Kant Basu B Ramani Mohan Sinha B Paresh Ch Dutta	1 1 2	4 2 ...	13 .	1 . ..	
3rd year Hons		..	...	.	...	
3rd year Pass	B Rajani Kanta Basu B Ramani Mohan Sinha B Paresh Ch Dutta	2 1 1	. 2 4	5 ..	1 . ..	
2nd year	B Rajani Kanta Basu B Ramani Mohan Sinha B Paresh Ch Dutta	2 2	. 4 4	32 ...	2 . ..	
1st year	B Rajani Kanta Basu B Ramani Mohan Sinha B Paresh Ch Dutta	. 4	4	32 ..	2 . ..	
SUBJECT—Hindi (Vernacular)						
IV year	Pandit Umanath Jha	1		49	.	
III year	Pandit Ram Das Ray	1	...	48	.	
II year	Pandit Umanath Jha	1		124	.	
Ist year	Pandit Ram Das Ray	1		103	..	
SUBJECT Urdu (Vernacular)						
4th Year	Syed Abdul Majid	1	..	19		
3rd Year	Syed Abdul Majid	1		16		
II Year	Syed Abdul Majid	1	.	22	.	
1st Year	Syed Abdul Majid	1	..	17	...	
SUBJECT Bengali (Vernacular)						
4th Year	Babu Atulananda Sen	1	.	7	..	
3rd Year	Babu Bhupati Bhusan Mukherji	1	..	4	...	
II Year	Babu Bhupati Bhusan Mukherji	1	.	18		
1st Year	Babu Atulananda Sen	1		15	...	

PATNA UNIVERSITY.

FORM G

A return of the College results at the last University Examinations.

B Sc (Annual) Examination.

	Subject			Results as a whole
	English	Mathematics	Physics Chemistry	
No. who appeared	...	10	10	1 Total No in class at the time of Test.. 12
No who passed	...	6	6	2 No of Ex-students nil
Percentage of passes	...	60	60	3 Total No sent up ..10.
No who failed in this subject only		4	nil	4 No who appeared...10
				5 No who passed 5
				6 Percentage of passes 50% (Calculated on No who appeared)

No. who obtained distinction in the B, Sc.. 2.

PATNA UNIVERSITY.

FORM G.

A return of the College results at the last University Examinations

I Sc. ( Annual ) Examination

	Subject.			Results as a whole
	English	Mathe- matics	Physics   Chemistry	
No. who appeared .	25	28	28	1 Total No in class at time of Test ..33
No. who passed ...	21	21	23	2 No of Ex-students.. 5
Percentage of passes .	75	75	82	3 Total No sent up 28
No who failed in this subject only ..	7	7	Nil	4 No who appeared ..28
				5 No who passed..18
				6 Percentage of passes.. 64.3 (calculated on No who appeared )

PATNA UNIVERSITY

FORM G

A return of the College results at the last University Examinations

15c ( Supplementary ) Examination

	Subject				Results as a whole.
	English	Mathe- matics	Physics	Chemistry	
No who appeared	10	10	10	10	1 Total No in class at time of Test.....
No who passed	3	2	4	5	2 No of Ex-students...1
Percentage of passes	30	20	40	50	3 Total No sent up . 11
No who failed in this subject only	7	8	Nil	Nil	4 No who appeared...10
					5 No who passed...1
					6 Percentage of passes . 10 ( Calculated on No who appeared )

PATNA UNIVERSITY

FORM G

A return of the College results at the last University Examinations

I A ( Annual ) Examination

	Subject						Results as a whole		
	English	Sanskrit	Persian	History	Logic	Mathematics		Botany	Elementary Physics & Chemistry
No who appeared	105	79	20	94	104	15	..	1	Total No in class at time of test .. 125
No who passed	61	51	16	71	91	10	..	2	No of Ex-students .. ... 15
Percentage of passes	58.1	64.5	80	75.5	87.5	66.6	..	3	Total No sent up . 105
No who failed in this subject only	44	28	4	23	13	5	..	4	No who appeared . 101
								5	No who passed . 45
								6	Percentage of passes ... 44.8 ( Calculated on No who appeared )

V B—In the case of the B A, and B Sc, Examinations give the following additional particulars —  
Subject No sent up for Honours No who obtained

First Class —  
Second Class —

No who obtained distinction in B A . . . . .  
do. do in the B Sc. . . . .

PATNA UNIVERSITY

FORM G

A return of the College results at the last University Examinations  
B. A (Annual) Examination.

	Subject							Results as a whole
	English	Sanskrit	Persian	History	Philosophy	Mathematics	Forts Elementary Physics and Chemistry	
No who appeared	56	20	16	41	14	4	13	Total No in class at time of test 75
No who passed	19	14	15	25	4	2	4	No of Ex-students 6
Percentage of passes	33.9	70	93.7	60.3	28.5	50	30.7	Total No sent up 56
No who failed in this subject only	37	6	1	16	10	2	9	No who appeared 55
								No who passed 15
								Percentage of passes 27.2 (Calculated on No who appeared)

N. B.—In the case of the B. A. and B. Sc. Examinations give the following additional particulars —  
Subject No sent up for Honours (History-14), No who obtained do

First Class — nil  
Second Class — 5 (Hist. Hons) 2 (Sansk. Hons).  
do who obtained distinction in B. A. 1  
do do in B. Sc. 2

PATNA UNIVERSITY.

FORM G

A return of the College results at the last University Examinations

I A (Supplementary) Examination

	Subject							Results as a whole
	English	Sanskrit	Persian	History	Logic	Mathematics	Botany	
No who appeared	68	49	15	60	66	10	..	1 Total No in class at time of test . 95
No who passed	..	34	41	54	54	5	..	2 No of Ex-students . 3
Percentage of passes	..	50	83.5	93.3	90	81.3	..	3 Total No sent up . 68
No who failed in this subject only	..	34	8	1	6	12	..	4 No who appeared . ... 67
								5 No who passed .. . 28
								6 Percentage of passes . ... 41.7 (Calculated on No who appeared)

N B—In the case of the B A and B Sc. Examinations give the following additional particulars —  
Subject No sent up for Honours No. who obtained

First Class ---  
Second Class ---

No who obtained distinction in B A  
do do in the B Sc.

PATNA UNIVERSITY

FORM C

A return of the College results at the last University Examinations

B A (Supplementary) Examination

	Subject							Results as a whole						
	English	Sanskrit	Persian	History	Horns	Mathematics	Philosophy	Elementary Physics and Chemistry	1	2	3	4	5	6
No who appeared	49	22	13	37	12	3	11	..	Total No in class at time of test	60				
No who passed	21	19	12	25	9	2	7	..	No of Ex-students	..	2			
Percentage of passes	12.8	86.3	92.3	67.5	75	66.6	63.6	..	Total No sent up	..	49			
No who failed in this subject only	28	3	1	12	3	1	4		No who appeared	48				
									No who passed	15				
									Percentage of passes (Calculated on No who appeared)	31.2				

N. B — In the case of the B A and B Sc Examinations give the following additional particulars —  
Subject No sent up for Honours No who obtained

First Class —  
Second Class —

No who obtained distinction in B A  
do do in the B Sc

# Report

## ON THE

### I A Classes of the Ranchi Zila School for the year 1927-28

*Inspected by Mr. D. N. Sen ( University Inspector ) and  
the Rev P. L. Singh ( Representative of the Board  
of Secondary Education ) on January 30  
and 31, 1928.*

The I. A. Classes of Ranchi Zila School were inspected on the 30th and 31st of January, 1928

2. The managing committee is constituted as follows
  1. Mr. W. B Brett, Dy. Commissioner, President
  2. Mr T R. Spiller, Head Master, Secretary
  3. Rai Bahadur S. C. Roy.
  4. Babu Jagat Pal Sahai
  5. Babu Jogendranath Chatterji
  6. Maulvi Altaf Hussain,
  7. Babu S C. Ghosal, representative of the staff

3. The building of the Ranchi Zila school is one of the finest in the province and stands in the midst of a healthy and picturesque environment formed by the lake and a hill in the background. The accommodation, though sufficient for the school proper, is not adequate for the institution as a whole including the I A classes, and with the increase of numbers it will be impossible to find room for both the school and the college classes in the same building. The capacity of the building seems to have been seriously strained already, even small corner rooms having been requisitioned for classes. The playgrounds also are no longer sufficient for the boys studying in the institution, numbering about 700. In the first year class there were 40 students last year and 65 this year, an increase of about 62 per cent. Of these 65, 40 live with parents and 25 with guardians. This clearly shows that the classes have satisfied a local demand. The question of separating the college classes from the school and giving them an independent existence and a home of their own will demand an answer in the near future. The furniture is up-to-date and just enough for the requirements of the classes. The sanitary arrangements are good.

4. The teaching staff is adequate and well-qualified, consisting of 1st and 2nd class M. A's. Most of them were appointed about two years ago. There were four replacements in the staff during the year 1926-27.

5. The Headmaster has been supplied with quarters in the immediate neighbourhood of the school and the superintendent of the hostels lives in quarters provided for him. Only two I. A. students live in the school hostels and three in attached messes. In the larger hostel dormitories boys of all ages live together. Some discrimination should be exercised in this matter. The Zamindars' hostel has now been thrown open to all who pay the enhanced rate. In one of the hostels a large dormitory has been turned into class rooms with wooden partitions. These are not very convenient for teaching and the congestion in the crowded dormitories also calls for relief. The

night from the outside. This is obviously unsatisfactory and arrangements should be made for enclosing the compound of the hostel.

6. The library is in the course of formation and will require building up by judicious additions from year to year

7. The subjects taught are (1) English, in which provision is made for 7 periods in each class every week; (2) Logic, with 5 periods a week; (3) History, with 5; (4) Mathematics, with 6, (5) Sanskrit, with 5; (6) Persian, with 5; (7) Hindi, as a principal subject with 4, (8) Vernacular Composition with 1. Only two teachers of the college classes take part in school teaching. This seems to be far from satisfactory, resulting as it does in only partial employment of some of the I. A. teachers, while those in the school are overworked.

The teaching arrangements are adequate. The Headmaster teaches 6 hours every week. Other I A teachers from 16 to 18 with the exception of one, who takes only 13 periods

8. The college and hostel registers are kept properly. They struck me as very neatly maintained.

9. The state of discipline is good.

10. The social life of the institution is not fully developed yet and the arrangements for games will require further expansion.

*The school was inspected on January 30 and 31.*

*Building, etc.*—The school was founded in 1837. For a long time it was located in the building which is now the main building of the Secondary Training School. In 1917 it occupied its present building, which is one of the finest High School buildings in the Province. It is excellently situated in a commodious compound, with well laid-out and well-kept paths and playing fields, commanding a beautiful view of the Ranchi Lake and the open country beyond. It has all the accommodation necessary for the maximum number of pupils in a high school. It has also a Laboratory for science in the school classes and a Workshop for manual training. In 1926 the school was raised to the status of a school with I. A. classes.

*Number on the Roll*—At the time of inspection the 2nd year and the old Matriculation classes were dissolved and the number on the Roll was 673 of whom 65 were in the 1st year class. There were 50 aboriginal boys, 23 in the 1st year I. A. class and 27 in the school proper. All the classes, including the 1st year class, are divided into two or three sections according to number. The total number of free students is 107, of whom 32 are scholarship-holders. The percentage of attendance for the last six months was 90. The total number rises to about 750 in summer, when the Secretariate comes up from Patna.

*Conditions of residence of the pupils*—526 boys live with their parents or near relatives; 98 live with recognised guardians or in approved messes, and 49 live in the school hostels. There are two hostels. One is known as the Zamindars' Hostel; as the name implies it was originally intended for the sons of Zamindars. On the day of the inspection there were 20 boys in this hostel, one of whom was an I. A. student.

The other hostel is intended for boys in general. One of the dormitories of this hostel is at present divided into three rooms by light partitions, and some junior classes are held there. In both the hostels boys of all ages from 8 to 10 to 19 or 20 live together, which is not desirable. The boys were in their classes at the time of the inspection. The hostel rooms were neat and clean, but it does not appear that the clerestory windows are often opened. I understand that for want of

room three I. A. students and two school boys live in the Training School hostel.

**Finance** :—In 1926-27 there was a fee income of Rs. 17,412 and an expenditure of Rs 78,388. When there were no I. A. classes, the fee income was about Rs. 15,000 and expenditure was about Rs. 50,000. The I. A. classes have increased the expenditure by over 50 per cent.

**Examination results** :—The school has always done well at the Matriculation Examination. During the last three years out of a total of 163 boys in the Matriculation class the school sent up 131 boys of whom 97 passed; 17 in the 1st Division; 36 in the 2nd Division, and 44 in the 3rd Division; and 5 obtained divisional scholarships, 2 obtained District scholarships and 2 other scholarships. Few schools in the Province can show equally good results.

**The Managing Committee** :—The managing committee is composed of Mr. W. B. Brett, the Deputy Commissioner of Ranchi, who is the President, Mr. T. R. Spiller, the Headmaster, who is the Secretary, Rai Bahadur S. C. Roy, Babu Jagatpal Sahay, Babu Jogendra Nath Chatterjee, Babu S. C. Ghosal, who represents the staff, and Maulvi Altaf Hussain. The committee is a thoroughly representative one. The only improvement I can suggest is to have a member of the aboriginal community on it, especially as no less than 50 aboriginal boys are on the roll.

**The Staff** :—The staff is composed of 36 members of whom 18 are graduates and 4 are L. T's. Six of the graduates are also B. Ed's. Five of the staff including the Headmaster teach only in the I. A. classes and two teach both in I. A. and school classes.

**Library** :—The library has 5361 books on its shelves. It is used both by the staff and the boys, but it is not what it should be. A large number of books have seen better days and should be replaced. The annual allowance of Rs. 720 will soon improve matters.

**Games** :—In all there are four playing-fields, which are not enough for the number in the institution. Boys play by rotation and each boy gets a chance of playing twice a week. The chief games that are played are football and hockey, of which the former is more popular. Cricket is also played, but not much. Each I. A. student has to pay Re. 1 per annum and each school boy has to pay 12 annas per annum for games.

**General Remarks :**

- (a) In my opinion the addition of the I. A. classes has not in any way improved the school.

The I. A. teachers have done nothing, and under present conditions can do nothing, to improve the school. When the I. A. classes were started it was confidently expected that the highly qualified teachers appointed to teach primarily in the I. A. classes would also teach in the school and thus improve the teaching of the school, but the teachers so appointed in most cases do no teaching in the school. In other words, the I. A. class teachers are quite distinct from the school teachers.

- (b) The addition of the I. A. classes has seriously prejudiced the work of the school. The building in which the school is held was erected for the purposes of a High School, with sufficient accommodation for all the classes of a high school. It was not erected for the purposes of a high school with I. A. classes. To accommodate the I. A. classes some school classes have been driven out of the main building and are being held in a dormitory, which has been divided with light partitions into three class-rooms, not one of which is large enough for the purpose. These classes are working under very unsatisfactory conditions.

2. The number of desks appeared to be insufficient. In several rooms some dual desks were occupied by three boys.

3. The addition of the I. A. classes has destroyed the healthy *esprit de corps* which formerly characterised the school. When the I. A. classes were added it was thought that they would be under the same kind of discipline, and that they and the school classes would form one institution. Practically they do not do so except in name; each section is independent of the other. It is perhaps impossible to amalgamate in the same institution boys of 8 and 9 and young men of 18 and 20. The Sadler Commission suggested an institution containing I. A. and the top four school classes, but the Ranchi Zila School contains middle and primary school classes in addition to these. An institution composed of so many different elements, and elements of discord, is not the soil in which *esprit de corps* is likely to flourish.

4. It is feared that the presence of the I. A. classes will lead those in authority to neglect the interests of the school proper for the I. A. classes

- (c) The work of the I. A., classes has also suffered for lack of additional accommodation. I noticed two classes being held in what I may call store rooms which were barely 10 ft. by 10 ft.

There is a demand for the introduction of Geography as one of the subjects for the I. A. course, but there is no accommodation for teaching the subject

*Conclusion*—In the light of the above report the committee of University Inspectors are of the opinion that the accommodation for the institution as at present constituted is inadequate, and that the existence of the I. A. classes as at present conducted is tending to destroy the traditions and individuality of the oldest and one of the best High Schools in the Province. There appear to be two alternatives

- (i) To separate the I. A. classes with a view to their developing eventually into a first grade college.
- (ii) To detach the four lower classes of the school and establish an institution of the late New College type. While the existing accommodation would be adequate for such an institution, the great objection to this alternative is that it would result in the destruction of the traditions and individuality of the existing High School.

# REPORT

## ON THE

### Bihar College of Engineering

For the year 1927-28.

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Inspected by Messrs. Charles A. King, Principal of the Engineering College, Benares Hindu University, and J. S. Armour, Professor of Patna College, on the 20th January, 1928.

The Report contains the following sections—

Administration.  
Admissions.  
Buildings and Site  
College Buildings  
Museum.  
Library.  
Laboratories.  
Workshops.  
Expansion.  
Transfer to Jamshedpur  
Teaching Staff  
College Life.  
Hostels.  
Engineers' Hostel  
Subordinates' Hostel.  
Conclusion.

#### APPENDICES

Appendix A. Scheme of Local Expansion by Mr. Tullis, Officiating Principal.

Appendix B. Report of the Special Committee on the question of transfer to Jamshedpur.

#### ADMINISTRATION.

The various books which are required to be kept by every College were found to be in order. The Attendance Register is now kept in safe custody, and all corrections in it carefully initialled. It was found that the fine of four annas a day imposed for absence from lectures was still being levied, despite the recommendation made in the last Inspection Report and endorsed by the Sub-Committee which considered that Report, that the fine should be abolished. The Officiating Principal explained, however, that he considered that a change of this nature should be inaugurated by the new Principal, whose appointment was expected daily. We, therefore, invite the attention of Mr Coueslant to the matter, and would suggest that the fine be still imposed on all free students, scholarship-holders, etc.

There are many signs of the conscientious organization of Mr. Walford, the late Principal, by whose recent retirement and untimely death the College has suffered an irretrievable loss and been deprived of a sincere well-wisher. Mr. Tullis, too, during his officiating term, has introduced certain useful improvements and innovations, including an up-to-date filing system of the Koneo type, which appears to be working smoothly and satisfactorily. He has also amplified the Card Record of each student who has been through the College, so that it now affords, in a compendious form, full information about his Class Marks, Examination Results, and College Career. A Record such as this would be of even greater value, we think, were it extended further to include also the authoritative personal opinion about the student of a responsible member of the staff, e. g., the Warden or Superintendent of his Hostel or the Professor-in-charge of Games.

So far as it goes, indeed, the organization throughout the College is admirable, but it is not suitable for a large University College. In our opinion it would require reorganization in Departments, each with its own Head reporting to the Principal. The direct superintendence exercised by the late Principal would not be possible if the College comprised the Departments of a moderately complete College. These would normally be:—

- (1) Civil Engineering.
- (2) Mechanical Engineering.
- (3) Electrical Engineering.
- (4) Mathematics.
- (5) Chemistry and Metallurgy.
- (6) Commerce.
- (7) Workshops.

Each of these would have its own Head, with his subordinate staff reporting to him, and through him to the Principal. No great advance will ever be possible under a Principal whose time is wasted and mind preoccupied with a multitude of relatively unimportant details.

#### ADMISSIONS.

In the last Inspection Report it was recommended that the Principal should have a free hand in making a preliminary list of the best qualified candidates, arranged in two divisions, each containing 20 names. Those in the first division should then be admitted without further question (provided they belong to the Province), a selection being made from among those in the second division to fill the remaining 10 seats, due weight being given to the claims of the various communities.

A special meeting of the Board of Governors considered recommendation, and passed the following Resolution—

1. That in future 20 admissions be made on a competitive basis from amongst applicants who are proved to the satisfaction of the Governing Body or any Sub-Committee appointed for the purpose, to be natives of, or domiciled in, the Province (all others being rigorously excluded) and the test shall be the percentage of aggregate of marks secured at the I. Sc. Examination.
- (2) That the remaining 10 seats also be filled up on a competitive basis as in the preceding paragraph, but subject to the following: that if the number of Muhammadan applicants selected under Clause (1) be not ~~xxx~~, the deficiency would be made up by selec-

tion, on a competitive basis, out of the Muhammadan applicants, of as many as necessary to make up the number six.

We are informed that this system of selection will be adopted at the beginning of the new session in July, 1928.

The question of the selection of students for admission to the College has become to a considerable extent a communal problem in the solving of which the representatives of the tax payers who support the College have very properly a say. It is, in our opinion, not altogether unreasonable that any large body of these should claim a due proportion of the available places regardless of whether their candidates are of as high a standard as others. Assuming this to be also the opinion of the Governors of the College it appears to be in our province to say whether the resulting classes should be taught together or not. Provided that the minimum standard of admission is the I. Sc., with Mathematics, Physics and Chemistry, we see no difficulty that could not be overcome. If experience showed any community to be backward, it would only mean that its candidates would enter the College at a more advanced age.

But if this minimum standard of admission were lowered in favour of a particular section of the community, they could be suitably taught only in separate more elementary classes, and to this extent the College would lose its character of a University College. There would also be other disruptive tendencies of a very undesirable nature. We understand that there is at present a number of "Mechanical Apprentices" of standard even lower than Matriculation. Such youths are wasting their own time and the time of their teachers in a University College. They should be in an Intermediate College, or in one of the several Technical Schools of less than University rank that are to be found in the Province.

Generally speaking, it is not sound to differentiate Engineering students earlier than their third year, either as regards the various branches of Engineering, or as regards their ability. It can be seen only as his education proceeds whether a man is in fact of "Subordinate" character or otherwise. Those who fail to complete the full degree course should not be declared complete failures. They should be given Diplomas certifying the amount of proficiency they have acquired, provided that it is sufficient to be usefully applied in practice. Such should be justly denominated "Subordinate", but every student entering the College should have a prospect of securing its highest honours. In this way the driving force of competition is secured. As things are, the weaker students do even less than they are capable of doing.

The ground work of an Engineering education requires about two years after passing the I. Sc., and may be identical for Civil, Mechanical, and Electrical Engineers. It is very wasteful of staff and equipment to differentiate earlier. In India, where specialization is as yet in its infancy, and in practice the Engineer must normally turn his hand to almost anything of a constructive character, there is much to be said for deferring specialization until the Fourth, and, perhaps, final year.

#### *Buildings and Site.*

##### (a) College Buildings.

The College site is a cramped one, overcrowded with buildings too small for their purpose. The main College buildings, though not

suitable for Drawing classes of about 50 students, but no large Lecture Rooms. There is also a lack of private room accommodation for the staff. Each Department should have a private room for its Head, and a common room for its junior staff. It is false economy to make a College comfortable for the staff. Where no place is provided for easy regular intercourse during the day's work the mutual understanding essential to proper coordination of the work cannot come into existence.

The College Hostels are especially inadequate, with no proper accommodation for students, superintendents, or servants. The detailed report on these will be found under its appropriate head.

(b) Museum.

The Museum is an excellent one, but it is much too small and crowded. Ten times as much floor space could very profitably be devoted to this purpose.

(c) Library.

The transfer of the Library to the room known as the Mechanics Laboratory, or the plan as detailed in the last Inspection Report has been effected, and a Librarian appointed. The Library consists of (a) a Reading Room, with seating accommodation for about 30 students at two long tables. Round the walls, on open shelves, technical periodicals and reference books are kept, (b) a Library, with locked book-cases, Librarian's table, etc. There is an admirable catalogue of the books on the card-index system; and a similar system is used for the issue of books. *The Engineer*, *Indian Engineering*, and *Engineering* have been bound for future reference, as was suggested, and *The Electrical World* and *The English Mechanic* are being taken. *The Builder Bengal Past and Present*, *Water and Water Engineering* are not as yet on the list of Periodicals. Certain of these periodicals are bought from the College grant; some are purchased by the students from the Hostel fund, certain are given by the Director of Industries, while others are circulated by him for perusal and return. Amongst these last are *Coal*, *Trade Review*, *Leather*, *Machinery*, *American Mechanical Engineer*, *Indian Engineering*, *Electrical World*. The Minutes of the Institution of Civil Engineers are now received. The annual Library grant is Rs. 1000 which permits of the purchase of about 54 new books yearly. Most of the obsolete technical books have been scrapped.

The Library is too small, and the grant too meagre, for a College of this standing. The grant should be at least double the present amount. As regards the Library arrangement, it would be preferable to have a three-fold division :—

- (i) A Reading Room, where periodicals might be consulted.
- (ii) A Reference Room, where Proceedings of Engineering Societies and Encyclopaedic works might be consulted but not borrowed.
- (iii) A Lending Library, on the open-access system, where students might themselves select the works they wished to take out.

Writing desks should be provided in the Reading and Reference Rooms.

#### LABORATORIES.

The Mechanics Laboratory contains a fairly complete set of appra-

ratus, but much of it is of very frail construction, unlikely to survive for long the rough handling it is likely to receive from the large number of elementary engineering students who must pass through the laboratory. Apparatus for elementary students should be strong and rugged. It would probably be better designed in the College and made in the College workshops.

The Hydraulics Laboratory under construction is well-planned, but is so far rather a Mechanical Engineering than a Civil Engineering laboratory. The apparatus strikes us as rather larger than necessary but not much so. We consider that this Department is under very competent direction in the person of Professor Tullis, and likely to be a useful addition when complete. Much the same applies to the Materials Section. Considerable additions may be made from the workshops now that the heavy items are provided for. There is as yet no provision for Heat Engines and Electrical Engineering apart from the Power Plant which, however, is not to be despised, and is useful as far as it goes for instructional purposes.

### WORKSHOPS.

These are good and well-organized, but much of the plant is now rather old, and, what is worse, a little old-fashioned. This is especially noticeable in the Foundry and the Machine Shop. Future developments in this direction should await the decision on the question of moving to Jamshedpur. We have seen a list of proposed new machines which contains somewhat large items capable of a big output. Our experience is that it is never possible to keep these going at full capacity. It is only under that condition that their possibilities can be demonstrated. But to do this involves a heavy expenditure in raw material and power, as well as a serious marketing problem. The work must all be done by learners if the machines are to serve their purpose, and is thus likely to have small, if any, market value. We think the College Workshops should be principally engaged on high precision work on a small scale and on the making and maintenance of Laboratory apparatus. Students should get their experience of commercial workshop routine in a commercial workshop. It should not be impossible to arrange for this, as the Province contained a number of important workshops. No College has ever succeeded or is likely to succeed in replacing the ordinary apprenticeship under ordinary workshop conditions. This applies as much to Civil as to Mechanical Engineering. Perhaps the most serious defect of the Bihar College of Engineering, as it exists at present, is the lack of organic connection with the industry of the Province. Without the sympathetic co-operation of the ultimate employers of most of the students it can never be what it ought to be.

#### *College Expansion.*

The concluding observations of the last Inspection Report referred to the inevitable expansion of the College. "The expansion of the Engineering College laboratories is being carried out within the old building and we think that the expansion of the building itself is inevitable in the near future. This expansion should present no difficulty and could be planned in keeping with the architecture of the existing building."

With these observations as a basis, Mr. Tullis has worked out carefully and in detail a scheme of expansion *in loco*. This has been appended to the Report (Appendix A).

#### *Transfer to Jamshedpur.*

A copy of the report of the Special Committee appointed to consider

the development of the Mechanical and Electrical Classes at a suitable site is appended (Appendix B.) On that and on the general question we offer the following comments :—

It cannot be successfully disputed we think, that University Education in India, is so far to a large extent a vicious circle. That this is so is not so evident now as it is likely to become later, when every locality is provided with it's own College. There is a fixed tendency for graduates to look for employment as teachers of the same purely theoretical knowledge that they have acquired themselves, and not to the wealth producing industry of the Country. Education under these circumstances is a growing burden that does nothing to support itself. The supply of competent teachers is only one of the functions of a University. In a time of expansion of educational facilities a large number of graduates may, no doubt, be absorbed as teachers, but the dog cannot for ever be fed on it's own tail.

It is very desirable that the Technical teacher in all cases should first, before taking up teaching, prove his ability as a practical man. Where the teachers are men recruited directly from other educational institutions run on the same lines, an academic succession diverging more and more from practice is bound to be established. This is the state of affairs in many if not all of the Indian Universities at present. There is a vicious circle that will not be broken without a determined and radical change of tradition and method.

The arguments that have been put forward in support of continuing the College on it's present site are :—

(1) "*Some saving on Buildings.*"

This is in reality a very small matter. The Patna University is expanding rapidly. It is certain that a use can be found for the existing buildings. The hostels and main building are quite as suitable for other classes of students as for engineers. Even the workshops after the machinery was removed could be readily adapted for other purposes.

(2) "*Within the University Area, and Influence of other Colleges.*"

This is almost entirely theoretical and imaginary, though it naturally appears to older and more philosophic men to have some weight. The Engineering student who is in his right profession desires nothing but engineering knowledge for the first few years of his life. The desire for a larger culture does not develop until long after his student days. It is worse than useless to try and force the desire until it emerges in the natural course of events. Observation of the present relations between the Engineering and other students will be conclusive on this point.

(3) "*More rapid expansion and saving of time.*"

There will be no saving of time if a radical mistake is made which the next generation will have to correct. On the contrary there will ultimately be a great loss of time. It is immensely more important that what is done should be correctly and finally done, than that much should be done.

(4) "*Piecemeal expansion.*"

This is not an advantage peculiar to the University Site. Piecemeal expansion is quite as practicable at Jamshedpur as at Patna. It is only

a way of saying that the slow progress possible at Patna would never be tolerated in the energetic atmosphere of Jamshedpur. In any case, arguments 3 and 4 are mutually destructive.

(5) " *Jobbing in Patna gives good instruction to Students.*"

Presumably this means jobbing work in the College workshop. It would ruin the University of Patna to provide a tenth of the workshop instruction that could be obtained for nothing at Jamshedpur.

The one disadvantage alleged against Jamshedpur is stated as follows:—

" University environments will be lacking, and the effect of associating with students of other professions will be lost."

The converse, namely, that there will be opportunities of meeting the greatest experts in the Country in a hundred branches of applied science only needs to be stated to show the hollow nature of this objection.

*Teaching Staff*

Principal	L. D. Coueslant (to join on 3-4-28.)
Officiating Principal	J. Tullis, B. Sc (St. Andrews).
Senior Professor of Engineering.	Vacant
Professor of Civil Engineering.	B Sanjana, B. Sc (Glasgow), L.C.E. (Bombay), M. R. San I.
Professor of Mechanical and Electrical Engineering.	S C Ghosh, B. Sc. (Glasgow), A M I C E.
Asst Professor of Civil Engineering	Rai Sahib Ramji Das Gupta.
Asst Professor of Civil Engineering	B Dayal, B. Sc (Patna), Asst. Engineer, Roorkee.
Lecturer in Mechanical Engineering (Supt of Mechanical Apprentices Class)	K. K Guha, M Sc. (California).
Lecturers in Civil Engineering	M K. Sen Gupta Harendra Nath Dutta M Saghiruddin. Jwala Prasad.
Lecturer in Science.	Tribeni Nath Das, M. Sc , B. L. (Patna)
Expert Draughtsman.	Amulya Ratan Paul.
Architectural Draughtsman.	Vacant.
Workshop Superintendent	Captain L. A Hearn (late R. E.).
Foreman Instructor.	R. C. Mukharji.
Asst. Foreman Instructor.	J C Guha.

There is also a number of Master Instructors in the Workshops.

We should like to emphasize as strongly as possible the loss in efficiency which the College has sustained as the result of the inexplicable delay in appointing a Principal, or, alternatively, a Senior Professor of Engineering. The vacancy caused by Mr. Walford's departure has existed since July, 1926. In other words, during a period of twenty months the Officiating Principal has had to attempt to combine the duties of Principal and Senior Professor of Engineering, at a time when the College, in its difficult transition stage, had greatest need of a strong senior staff. The delay in filling the appointment meant,

in effect, that for two College sessions there was no Senior Professor of Engineering. We would also draw attention to the similar delay in recruiting an Architectural Draughtsman. We understand that, although the appointment was made six months ago, the incumbent has not yet joined.

The Annual Report of the College for 1926-27 shows, however, that this state of affairs is not uncommon. It draws attention to the situation in the following words — "The commencement of the session saw the College in an unfortunate position so far as the strength of the staff was concerned. The post of Professor of Mechanical and Electrical Engineering was vacant, the candidate after being selected declining to accept it. Mr. Ghosh, B. Sc. (Glasgow), was subsequently appointed. Babu B. Das, Asst. Professor of Mathematics, retired with effect from 29th April, 1926. His place is still vacant. The teaching of Mathematics was carried on by the appointment of a temporary lecturer Babu Jwala Prashad, who was appointed to lecture on Civil Engineering on 12th July, 1926, could not join his post till September, thus putting more strain on the already overworked junior staff; while the absence on leave of the Principal, Mr. Walford, put an extra burden on the depleted senior staff. To their difficulties may be added the fact that orders had been left to readvertize the posts of Supdt. of the Mechanical Apprentices Department and Supdt. of the Workshop. The strained atmosphere existing through the uncertainty of office left a general feeling of unrest which was not conducive to organized efficiency. The death, on October 7th, 1926, of our lamented and respected colleague, Babu Deb Prashad, Lecturer and Hostel Superintendent, put an additional burden on those who were endeavouring to carry on."

Lest this condition of affairs should become chronic, of which there appears to be a danger, we draw the attention of those who control the College appointments to the matter. Such a loss in teaching efficiency should not be permitted.

#### *College Life*

Under the auspices of the Students' Union evening lectures and debates are arranged for frequently, and Hostel "At Homes" are also given. In Athletics there has been a great improvement in the status of the College, in both local and provincial competitions. In Football and Hockey the College holds its own with the neighbouring Colleges; while its students evince a markedly greater interest in its successes, a keener loyalty, a truer *esprit-de corps*.

The standard of Tennis has also improved. There are now two boats on the river, and the formation of a Boating Club is merely a question of time. Sports are held annually, evoking much enthusiasm. The lack of a Gymnasium is, however, keenly felt.

#### *Hostels.*

There are two Hostels, (a) the Engineers' Hostel, and (b) the Subordinates' Hostel.

##### (a) Engineers' Hostel.

This Hostel houses 84 of the 96 students on the roll of the Engineer classes, the remaining 12 residing with parents or recognized guardian. Of these 84 boarders, 81 are actually in the Hostel building, while 3 are in a separate ward of the Subordinates' Hostel. The Hostel charges are:—Admission fee, Rs. 4, Rent, 1 monthly, Light, 8 annas, Maintenance fee 2-8. The Rent and Light charges are credited to

Government ; and the Maintenance charges are utilized in meeting the recurring monthly expenditure, amounting to about Rs. 130. As the income is about Rs. 210 there is a considerable surplus which is expended in the purchase of furniture, medicines and general improvement.

Since the last inspection a second storey has been added to the Hostel, and there are now two prefects, occupying single rooms on the upper floor. A Gate Book has been provided, and Morning Roll-Call at 6 a m instituted.

One of the recommendations made in the last Report was that means should be devised for locking up the Hostel premises at night

It has been found that this cannot be done. The front door is locked, but the back door cannot be, unless extra servants' quarters are provided inside, or a boundary wall built on the south side of the Hostel. This is, however, only one of the very many undesirable features of the Hostel. It is true that an upper storey has been added, but the accommodation provided there is, in our opinion, unworthy of any residential College building. There is certainly, nothing similar to it in Patna. We found small cubicles, some of them windowless, partitioned off by wooden partitions, above which was wire netting. These badly-ventilated, makeshift, cage-like rooms, would reduce to utter despondency any one who lived in them for a fortnight. Yet they are the permanent home for four years of University students. Downstairs accommodation is somewhat more satisfactory, although the furniture in the rooms appeared to be too cumbersome and unwieldy for the purpose. The Common Room is pleasant and cheerful, and the Superintendent's office luxuriously spacious. But the whole Hostel is spoiled entirely by the cubicles above. Moreover, the windows upstairs make it impossible for the Superintendent to enjoy any domestic privacy whatever in his quarters. There is no Guest Room, and no Sick Room. The latrines are common to students and servants ; and the latter have insufficient outhouses. No quarters are provided for the Sweeper. The Kitchen and Feeding arrangements are, to say the least, unsatisfactory.

In this Engineers' Hostel, therefore, there is much to criticize. It is situated outside the College compound, and is not, clearly, an integral part of the College. It does not provide accommodation for all the students of the Engineer classes. Finally, it has not, and never has had, a drainage system, which alone condemns it as a residential building. The authorities of the College cannot be absolved from blame in this very important matter. It seems to us, then, that any scheme of local College expansion must include the provision, within the College area, of a new Engineers' Hostel, with proper accommodation for all the members of the Engineer classes, quarters for the resident Superintendent, and the other usual Hostel amenities.

#### (b) Subordinates' Hostel.

There are 99 students on the roll of the Subordinates' Department, and 48 on the roll of the Mechanical Apprentices' Department ; of whom 95 and 40 respectively live in the Subordinates' Hostel. The remaining 12 are with a recognized guardian. The fees are :— Admission, Rs. 2, Light, 8 annas ; Rent, Re. 1, Maintenance, Rs. 18. The average monthly income is about Rs. 150, and the expenditure Rs. 130, the savings being used for the purchase of furniture, medicines, and improvements of various kinds. Since the last inspection the whole of the double-storied block has been fitted with Electric Light, and the Drainage scheme has been improved. The filtered (Ganges) water is boiled for drinking purposes on the advice of the Hostel

Doctor; and the whistle fitted on the boiler causes thorough boiling. The Hostel buildings are on the whole satisfactory; and they lie within the College area. Apart therefore from the fact that they are accommodating certain students (the Mechanical Apprentices) who, as we have already pointed out, ought not to be members of this College at all, and in so far are shutting out from Hostel residence more suitable boarders, our chief criticism is directed against the Hostel latrines. The number of these is inadequate; they are of an antiquated pattern; and they make hideous the most desirable river-front site in the whole College area. It passes our comprehension that such a site should ever have been selected. New latrines should be provided at once; they should be furnished with an automatic flushing arrangement; and their site should be very carefully considered as an important part of any local expansion scheme.

#### *Conclusion.*

We should desire, in conclusion, to draw attention to the more important issues raised in this report, the delays in recruiting to vacancies on the College staff: the transfer elsewhere of the Mechanical Apprentices: the whole question of the expansion, *in loco* or elsewhere, of the College: and the unsatisfactory state of affairs in the Hostels.

We are indebted to the Officiating Principal and his staff for the ready assistance afforded us during our inspection.

The following note in connection with the above report submitted by the Principal of the Bihar College of Engineering is appended at the end:—

#### *Para (1) Administration*

All fines for non-attendance have now been abolished.

#### *Para (3) Departmental Organisation*

This has been done for existing departments.

#### *Admissions.*

The new plan was adopted in 1928, and seemed to work well.

#### *Mechanical Apprentices and Subordinates Transference elsewhere.*

Proposals to do this are under consideration.

#### *Workshops*

The comment is not quite fair. Both Civil Engineers and Mechanical apprentices get practical training outside. The Civils in P. W. D. and the Mechanical apprentices in various firms.

College Expansion is under consideration.

#### *Page (8) Engineering Hostel.*

The charge is just. The hostel is not fit to live in.

#### *Subordinates' Hostel.*

The report is just.

**APPENDIX A.****BIHAR COLLEGE OF ENGINEERING.  
EXPANSION SCHEME**

Now that the first batch of students of the Civil Engineering Department are finishing their college training and some experience has been obtained of this section of engineering instruction we must look to possible extension and development of this College.

From the chart showing the position and progress of the classes of the different departments it is obvious that the existing college does not afford sufficient accommodation for satisfactory instruction to different classes

The average number in each of the classes of the Civil Engineering Department is approximately 33, in each class of the Subordinate Department 45, and in each class of the Mechanical Apprentice Department 25. Thus we see that the total number of students for these departments will be approximately 140 plus 125 plus 75 making a total of 340 students and assuming that the classes are increased to 50 students this would give a total of 500 students.

For the existing number of students, class accommodation, laboratory equipment, and facilities for practical training in the college are inadequate, if a reasonable high standard of training is to be expected.

For the above reasons, a scheme has been prepared by the Offg. Principal and is intended primarily to form a basis for discussion and criticism and also to afford some skeleton on which a more detailed and accurate scheme can be worked out

The following drawings are now submitted in order to show diagrammatically the existing condition and to illustrate the main scheme for expansion.

Drawing No. 1 gives the plan of the Bihar College of Engineering and a part of the surrounding area.

Drawing No 2 is a plan and elevation of the existing college to which has been added the proposed extension of the main building It also includes a laboratory situated on the present site of the quarters of the Workshop Superintendent.

Drawing Nos. 3 & 4 show the workshop lay-out while Drawing No. 5 illustrates an arrangement of workshop equipment.

Drawing No 6 shows a general lay-out of the main laboratory.

**NOTE ON THE COLLEGE BUILDING.**

At present there are not sufficient class rooms and two of the present rooms are not large enough to accommodate the smallest class in the college. There is only one office room for the staff. This is being occupied by the senior Professor along with two other Professors.

The existing accommodation consists of —

Class Rooms	...	...	5
Small Rooms	...	.	2
Drawing Offices	...	...	2
Lecture Theatre	...	...	1

Various classes have to be carried out at the same time—drawing office work for surveying, estimating, theoretical and practical drawing, structural design, mechanical drawing etc. have to be done. Each class requires about 17 hours of drawing work per week which gives a total of 170 hours for all the classes. At present there are two drawing offices and working full time 35 hours each per week gives a total of 70 hours. The remaining 100 hours are spent in rooms which are not equipped for drawing work, in fact drawing office work is attempted so far as is possible in small tutorial class rooms with most unsatisfactory results.

An examination of the foundation of the North East and West Wings of the College by the Public Works Department, revealed that the existing foundation is inadequate to sustain the weight of an additional storey. This fact means that either the main building should be extended as shown in drawing No. 1, the architectural effect being clearly demonstrated by a model, or practically an entire new building be created on the existing site.

The estimated cost of the extension as shown by a model would be approximately Rs. 3 lacs

## LABORATORIES

The present laboratories are housed in two old class rooms. Obviously this is not a suitable accommodation for valuable testing and experimental machinery and does not reflect credit to a College of University standing. The proposed laboratory building is shown in skeleton design. It is proposed that the main laboratory should consist of a building approximately of 150' long by 120' broad divided into three bays.

The basement floor of the laboratory would be at ground level while the main floor of the laboratory will be 8' above the basement floor and actually form a large test bed floor

The North Wing is proposed to house machinery and equipment necessary for the testing of materials. This section would contain the 100 ton testing machine, impact testing machine, a torsion testing machine and a fatigue tester. In order to make the equipment for the testing of materials complete a torsion testing machine will have to be provided for in the near future

A part of the Materials Bay will contain the cement and Concrete section together with equipment for the testing of road materials.

The centre bay will contain the hydraulics section the general layout of which is shown in general drawing of this section. The hydraulics laboratory in addition to the equipment already in the college would also be adopted for experimental work in connection with the flow of water through the different types of channels.

It will be noticed that it is proposed to install in the laboratories an electrically driven and controlled turbine and pump plant for laboratory purposes with the object of bringing together various considerations regarding the transformation of energy and of enabling measurements in connection with the performances of the plant to be obtained with accuracy. The plant would be situated over a water tank diagrammatically shown on the accompanying sketch.

Power should be supplied from our own power plant to a variable speed motor of 30 B.H.P, capable of taking a 50 per cent. over load for a period of 30 minutes. The supplying voltage being 100 D.C.

This motor would drive a multi-stage pump capable of delivering against a 250 ft. head. This discharge from the pump passing through a Venturimeter together with another suitable meter in series to act as a check on each other. These meters are to be of the recording type.

From the Venturi meter the high pressure supply is connected to a re-action water turbine which will supply power to drive a dynamo, or the dynamo may be cut out and the power transmitted direct to a single stage pump which should be capable of discharging against a 75 ft. head.

The power generated by the dynamo should be so controlled that it can be fed back to the power supply lines which feeds the variable speed motor or it may be connected up to another panel on the switch board for the supply of power to other equipment in the laboratory.

A similar installation to this has been installed at a City and Guilds Engineering College, South Kensington. These pumps and turbines being designs by Escher, Weiss & Co, of Zurich while the electrical equipment was supplied by the Lancashire and Dynamo & Motor Co.

In connection with the design of this plant some-what similar arrangement to that of the pump plant already supplied by Messrs. Drysdale to this institution be adopted, i. e., the motor or the electrical equipment should be balanced by means of some special arrangement by which the actual torque is measured directly.

By this arrangement of plant it is possible after starting up, the power required for a test run is only that necessary to overcome the total loss measured between the motor and the dynamo. It will thus be apparent that with this plant designed for experimental purposes it will be possible to make all the measurements required to give an accurate knowledge of the performance of the pump and the turbine over the widest possible range of action.

The Southern section of the Laboratory building would be used as a Heat Engine Section which will be equipped with two vertical boilers and a loco type multitubular boiler, experimental compound steam Engine with a surface condenser, steam turbine, crude oil Engine, Gas Engine with a producer working on wood refuse, and an ammonia ice making plant. Students will carry out experiments on the fuel consumption, water rate, efficiency etc., and will be trained in the erection and running of the plant.

#### ELECTRICAL LABORATORY.

The electrical laboratory will be located in the existing carpenter's shop and store room. This will keep the equipment housed in a separate building free from vibration of machinery etc.

The laboratory will consist of direct current and alternating current generators, motors, transformer, motor-generator set and a switch board. These together with the necessary ammeters, voltmeters, wattmeters, and power factor meters will enable students to make experiments and test on shunt and series motors, shunt and series dynamos, motor generators, alternators, single and three phase induction motors, synchronous motors. It will be equipped with appliances and the instruments provided will comprise of a Potentiometer with necessary standard cells, resistances, volt boxes etc., Dynamometer and various standard ammeters, wattmeters, and voltmeters for the purpose of carrying out the test with a high degree of accuracy.

**WORKSHOPS.**

It is proposed that the existing workshop should be dismantled. The buildings are not suitable and the Inspector of Factories has informed us that an efficient ventilation system must be installed in the smithy.

It is proposed that the new workshop area should be to the East of Bihar College of Engineering foot ball ground. This land is going to be acquired for the Engineering College as notified in official correspondence.

Drawings and models of new scheme showing the general arrangement of the buildings together with a general scheme of the lay-out of machinery, have been prepared either of which will amply meet the requirements of the College.

In one scheme a power house is shown in the workshop area. While in the other scheme space is available either for a power house or if the power house is situated on the site of the house belonging to J. N. Sharma, it will be available for the expansion of the workshop buildings.

A list of additional equipment is also prepared together with a grouping of machines which would be followed in either scheme.

**HEAT ENGINE LABORATORY.****LIST OF MACHINERY.**

1. Marshall's 8 N. H. P. compound experimental steam Engine with high and low pressure cylinders, steam jacketed cylinder covers, 2 flywheels with water ended reims, rope brake and spring balance, pricking governor, complete with fittings and connections, foundation bolts, plates, surface condenser, and circulating pump with accessories  
Rs. 13,000

and piping, freight and erection @ 15/- per cent. 1,950

2. Marshall's 8 N. H. P. Locomotive multitubular boiler, suitable for a working pressure of 150 lbs per square inch, complete with a full set of high class fittings and mounting, injector and feed water tank  
Rs. 4,500

Piping and erection and freight etc. @ 15/- per cent. 675

3. Two present vertical boilers will remain as standby.

4. Hall's Ice making (NH 3) plant of  $\frac{1}{2}$  ton capacity with compressor submerged condenser, oil separated, delivery and suction pressure gauge, valves and other fitting complete with tank, pump and motor for driving the plant  
Rs 10,000

Piping, freight and erection 15/- per cent. 1,500

5. Ruston and Hornby 30 B H P gas Engine with a producer gas plant the Engine is fitted with special cylinder liver, separate gas, air and exhaust valves, electric ignition device and self lubricating arrangement

The producer is fitted with a generator, scrubber, vaporiser, complete with fitting and piping  
Rs. 15,000

Piping, freight and erection 2,250

6. 5 B H P Parson's experimental steam turbine with blades provided with removable liner and sleeves, centrifugal shaft, emergency governor, special turbine end, complete with fittings and accessories

Rs. 4000

Piping, freight and erection etc, 15/- per cent. 600

7. Existing 42 B H P crude oil engine with cold starter etc.

Re-erection charge Rs. 2,000

Say Rs. 60,000/-

Total Rs. 55,175
Add Contingencies 2,773

### PROPOSED ELECTRICAL LABORATORY.

- |     |   |       |
|-----|---|-------|
| 1.  | 75 K. V. A three phase, 50 cycles, primary 5000/3000 volts secondary 220/110 volts oil immersed self cooled transformer delta connected on high tension side and star connected on secondary side | £ 306 |
| 2.  | Switch board with high tension cubicle and low tension panels consisting of three power panels, one lighting panel and one main panel   | £ 434 |
| 3.  | 50 K. W. Motor Generator with three phase motor 200 volts, 950 R. P. M. and D. C. generator 230/115 volts complete with all fittings  | £ 423 |
| 4.  | Voltage Regulator   | £ 62  |
| 5.  | MOTORS  | £ 260 |
|     | (a) D. C Shunt motor 110 volts, 1½ H. P. and 1800 R. P. M.  |       |
|     | (b) D.C. Shunt motor 110 volts, 4 H.P. and 1500 R.P.M.  |       |
|     | (c) Induction motor, single phase, 50 cycles, 220 volts 3 H. P., 1420 R P M.  |       |
|     | (d) Induction motor, squirrel cage, three phase, 50 cycles 200 volts, 3 HP. 950 R P. M.   |       |
|     | Induction motor, slip-ring, three phase, 50 cycles, 220, 1420 R. P. M.  |       |
|     | Induction motor slip-ring, three phase, 50 cycles, 220 volts, 940 R P. M.   |       |
|     | (e) Synchronous motors, three phase, 50 cycles, 220, volts, 16 HP 1500 R P. M   |       |
| 6.  | ALTERNATORS.  | £ 420 |
|     | (a) 7 KVA alternator, single phase, 50 cycles, 220 volts, 1500 R. P M.  |       |
|     | (b) 11 KVA alternator, three phase, 50 cycles, 220 volts 1500 R P M   |       |
| 7.  | MOTOR STARTERS  | £ 70  |
|     | (a) For D. C Motors, semi-enclosed type fitted with no volt and overload releases   |       |
|     | (b) For single phase motors, with and without slip rings, no volt and overload releases.  |       |
|     | (c) For three phase induction motors star delta pattern and plain motor resistance.   |       |
|     | (d) For Synchronous motor amortisseur starter winding.  |       |
| 8.  | Types of ampere meters and volt meters suitable for general and precision work D C. and A.C with resistances  | £ 268 |
| 9   | Watt meters for D. C. and A. C. work  | £ 110 |
| 10  | Phase meters, three phase or single phase work  | £ 35  |
| 11. | Insulation testers both fixed and portable  | £ 70  |
| 12, | Bridge sets, slide wire, roller, metter, P. O. box Thomson and Standard bridges   | £ 17  |
| 13. | Galvanometer, of moving coil type with pointer and mirror   | £ 14  |
| 14. | Galvanometer scales, glass and celluloid and stands   | £ 20  |
| 15. | Potentiometer for D. C. work with rotary switches   | £ 3   |
| 16. | Potentiometer for A. C. work with vibration galvanometer and accessories.   |       |

16. Standard resistances, manganin, paraffin bath, precision, technical and simple	£	6
17. Contact keys and reversers	£	41
18. Standard induction, variable, self, and mutual induction apparatus for calibration	£	79
19. Precision standard mica condensers, ordinary and plug pattern	£	77
20. Mirror electro dynamometer, fixed and moving type	£	100
21. Bench pattern resistances, slider and lever contact	£	84
22. Frequency indicator, fixed pattern	£	13
23. Electrostatic potential indicator for use on primary transformer	£	8
24. Demonstration lecture table instruments of various types	£	125

Total ... .. £3,595/-

Say, Rs. 54,000

Furniture, fittings and erection charges ... .. Rs. 26,000

Total . . . Rs 80,000

## WORKSHOP EQUIPMENT.

### List of Machinery Required.

#### MACHINE SHOP.

##### *Grinding Machines.*

- Three Norton Double ended Floor Grinders 16" × 3
- One A. H. No. 4 Universal Tool and Cutter Grinder.
- Two A. H. 12" × 36" Universal Grinders.
- Two Linisher Emery Bands.
- One Heal No. 72 Internal Grinder with Motor.
- One No. 83 Lumsden surface grinder.
- Two No. 2 Universal cutter and Tool and drill grinders.

##### *Drilling Machines.*

- Four Sensitive bench drilling machine 2 F. Corona.
- Four No. 4 20" High Speed drills.
- Two Corona 36" Ball bearing sensitive radial drills.
- One A. H. 4' 9" Radial drills.

##### *Milling Machines.*

- Two Light type horizontal Milling machines Cat. Page 2.
- One A. H. No. 9 Plain Milling machine.
- One A. H. No. 3 Horizontal Milling machine.
- One Le Blond No. 3 G. H. Universal Milling machine.
- One A. H. No. 3 Vertical Milling machine.

##### *Lathes.*

- Eight 6½" Rdmn sliding surfacing and screw cutting lathes gap beds.
- Two 7" Holbrook tool room lathes.
- Two 12" × 14" Tangye sliding surfacing and screw cutting lathes.
- One 15" × 30" Le Blond Heavy duty lathe with sliding gap bed.
- Three A. H. No Capstan Lathes.
- One No. 3 Combination Turret lathe.

**Boring and Turning Mills.**

- One Single 20" Boring and turning mill Cat Page 389.
- One Duplex 18" Boring and turning mill Cat Page 388.

**Shapers.**

- One A. H. No. 14 Universal Shaper.
- One C. B. Engraving machine.
- Two Fellows High speed shapers No. 720.
- One 16" Tange Double traversing head shapers.
- One O. & S. High speed gear cranked shaping machine 20".

**Sawing Machines**

- Two A. H. No. 2 Heavy duty sawing machines with motors.
- One A. H. Circular cold sawing machine.

**MACHINE SHOP ( Continued ).**

- One Oil fired High speed steel hardening furnace H. S 3,
- One Oil fired hardening and annealing furnace H. S. D 4
  
- One Nut Facing and chamfering machine 1½".
- One Four spindle nut tapping machine 1½".
- One Heavy type rollong mill 10".

**Slotting Machines.**

- Two 6½" Atkins slotting machines.
- One 10" Slotting machine.
- One 12½" Slotting machine.

**Planing Machines.**

- Two 36" x 36" Heavy duty planing machines.
- One 20" x 20" Planing machine Cat Page 382.

**Punching Shearing and Misc. Machines.**

- One Double ended Punching and Shearing machine Punching ½ Shear ½".
- One No. 3 sheet metal cutting machine.
- One Hand lever punching machine P. 3.
- One Landes 1" Double ended bolt threading machine.
- One Landes 2" Double ended Pipe and Nipple threading Machine
- Two Polishing Lathes 360s.

**MOTOR SHOP.**

- One Norton Auto part Grinding machine
- One Sensitive Bench Drilling machine
- One No 4 20" High speed Drilling machine Corona 2, F.
- One Garage Milling machine
- One 6½" Redman sliding surfacing and screw cutting Lathe.
- One A. H. No 4 Universal Tool and cutter grinder.

**ELECTRIC SHOP.**

- One Combined Electric Butt and spot Welding machine.
- One Complete Cannings Electro-plating outfit
- Two 10" Polishing Heads

**SMITHY SHOP.**

- One 7 Cwt Massey Pneumatic Hammer.
- One 2 Cwt. Massey Pneumatic Hammer.

One Harsfalls Bolt Nut and River forging .....  
 One double ended Punching and Shearing machine Punching  $\frac{1}{2}$ "  
 Shearing  $\frac{1}{4}$ ".

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### FOUNDRY.

One 2 Ton Cupola preferable Titan (Thermic Steel Coy) with  
 spark arrestor.  
 One 1 Ton Cupola preferable Titan Cupolet.  
 One 60 lb. Tilting furnace.  
 One No. 1 Sand mixing machine  
 One No. 1 Jar Ram moulding machine.  
 Two Hand moulding machines No. 2 Britannia.  
 Two double ended 16" Lumsden heavy floor grinders.  
 One double cased Core drying stove 6' x 4' x 3' deep complete with  
 cocked firing arrangement and fitted with racks and  
 trays.  
 One Mechanical power riddle with motor for 110 volts D C.  
 One gas fired Crucible type of Brass furnace capacity 100 lbs.  
 One 1 Ton Ladle of steel 27" dia at top, 23" bottom, 24" deep.  
 One 10 Cwt. Steel ladle 19 $\frac{1}{2}$ " Top, 16" Bottom, 22 $\frac{1}{2}$ " deep.  
 One 5 Cwt. Pressed steel ladle 17 $\frac{1}{2}$ ", top, 13 $\frac{1}{2}$ " bottom 18" deep.

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### CARPENTRY AND PATTERN MAKING.

One each of Band saws 12", 14", and 16".  
 One No. 60 Oliver Universal Sawing machine.  
 One Frame Log sawing machine for logs up to 20" Dia.  
 One No. 90 Oliver universal sawing machine.  
 One No 36 Oliver swing sawing machine.  
 One No. 109 Oliver production double surfacer complete with  
 Motor grinder.  
 One No. 199 Oliver single surface planer.  
 One No 26 Oliver large Pattern makers Gap bed lathe.  
 One No 41 Oliver Double Disc sander 37".  
 One No 74 Oliver Universal and Horizontal Borer  
 One No. 92 Oliver power feed Mortising machine.  
 One No. 125 Oliver Universal Single ended Tenoner.  
 One Norton double ended Floor grinder.  
 One No. 585 Oliver variety oilstone tool grinder.  
 One J. Q. Band Saw filing machine.  
 One Band saw brazer.

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### COLLEGE EXPANSION SCHEME.

#### INCREASE OF STAFF.

##### Teaching

One Assistant Professor	(Civil Engineering)	400—600	Rs. 4,800.
One 1st Grade lecturer	(Geology)	350—500	Rs. 4,200.
One	" "	Estimating	250—400
One	" "	Architecture	250—400
One	" "	Surveying	250—400
Total			Rs. 18,000.

**Laboratory.**

One typist clerk & store-keeper for stores, records, instruction sheet etc.		
One Senior Demonstrator	Materials Section	250—400
One Junior	" "	150—250
One Senior	Hydraulics	250—400
One Junior	" "	150—250
One Senior	Heat Engine	( Holder of Bot. 1st class certificate ),
		50—500.
One Junior	" "	150—250
One Senior	Electric	(Testing experience essential)
		250—400
One Mistry-Carpenter		50—75
2 Mistries	Mason at 40-50	80—100
3	" Fitter	150—225
1 Mistry	Electrical	50—75
4 Bearer	(1 for Hydraulic, 1 material, 1 Heat Engine, 1 Electrical	80 1 Laboratory
4 Coolies	" "	64
1 Fireman	for Heat Engine laboratory	25
2 Sweepers		20
2 Chaprasies		24

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 Rs. 25,716

Estimated cost of :—

1	College building extension	300,000	
2.	Furniture	23,000	
3	Laboratories (Main Building)	200,000	
4.	Additional equipment :—		
	Material	23,000	
	Hydraulics	20,000	
	Heat Engine	60,000	
5	Laboratories (Electrical)	10,000	
6.	Equipment	80,000	
7	Hostel	two at 60	
8	Furniture	67,000	each
	} students each	4,000	each
9	Workshop (Buildings)	400,000	
10.	Equipment	607,000	

**PROPOSED WORKSHOP STAFF.****STATEMENT 'A'**

	Graded pay	( Machine Shop. ) Initial expenditure.
One Head Machinist	75 1 100	75 0 0
Two Lathe Hands	30 1 40	60 0 0
Two Machinist	30 1 40	60 0 0
One Tool Room Mechanic	50 1 60	50 0 0
One Crane Man	30 1 40	30 0 0
10 Coolies at Rs. 12	...	120 0 0
One Foreman for Machine Shop and Motor Shops	350 10 500	350 0 0
Two Overseers	75 1 100	150 0 0
		<hr/>
	<b>Total</b>	<b>Rs. 895 0 0</b>
		<hr/>

## STATEMENT 'B'

(Electric and Power House)

One Foreman (Power House and Electric Shops)	350	10	500	350	0	0
One Armature Winder	60	1	75	60	0	0
One Instrument Maker	60	1	75	60	0	0
One Electro Plating Attendant	45	1	60	45	0	0
One Welding Mistry	45	1	60	45	0	0
Two Switch Board Attendant	35	1	40	70	0	0
Five Coolies at Rs. 12	...	...	...	60	0	0
One Wireman	35	1	30	35	0	0
One Outside construction Wireman	35	1	40	35	0	0
Two Engine Drivers	75	1	100	150	0	0
Two Asst. Do.	35	1	40	70	0	0
Four Wiremen	25	1	35	100	0	0
Total				Rs. 1,080	0	0

## STATEMENT " C "

(CARPENTRY)

	Graded pay.			Initial expenditure.*		
	Rs.	Rs.	Rs.	Rs.	a	p.
One Foreman for Carpentry and Painting	350	10	500	350	0	0
One Head Carpenter	...	...	50 1 60	50	0	0
One Head Pattern Maker	...	...	50 1 60	50	0	0
Six Carpenters	...	...	30 1 40	180	0	0
Three Pattern Makers	.	...	30 1 40	90	0	0
One Machinist	...	...	40 1 50	40	0	0
Five Coolies @ Rs. 12	...	...	...	60	0	0
Total	...	...	...	820	0	0

## STATEMENT " D "

(MOTOR SHOP)

	Rs.	Rs	Rs	Rs.	a.	p.
One Overseer	...	...	...	75	1	100
One Head Motor Mechanic	..	...	...	60	1	75
Four Mechanics	...	...	...	40	1	45
Two rivets	...	...	...	25	1	35
One Vulcanizer	...	...	...	25	1	35
Four Coolies @ Rs. 12	...	...	...	48	0	0
Total	...	...	...	418	0	0

## STATEMENT " E ".

(PAINT SHOP)

			Rs.	Rs.	Rs.	Rs.	a.	p.
One Head Painter	...	...	45	1	55	45	0	0
Three Car Painters	...	...	35	1	45	105	0	0
Two Coolies @ Rs. 12	...	...				24	0	0
Total						...	174	0 0

## STATEMENT " F ".

(SMITHY)

			Rs.	Rs.	Rs.	Rs.	a.	p.
			Graded pay.			Initial expenditure.		
			Rs.	Rs.	Rs.	Rs.	a.	p.
One Foreman for Smithy and Foundry	...	...	350	10	500	350	0	0
One Overseer	...	...	75	1	100	75	0	0
One Head Mistry	...	...	35	1	40	35	0	0
Two Smiths	...	...	25	1	35	50	0	0
Four Hammermen	...	...	15	1	25	60	0	0
Two Coolies @ Rs. 12	...	...				24	0	0
Total						...	594	0 0 per month.

## STATEMENT " G ".

(FOUNDRY)

			Rs.	Rs.	Rs.	Rs.	a.	p.
One Overseer	...	...	75	1	100	75	0	0
One Head Mistry	...	...	75	1	100	75	0	0
Two Moulders	...	...	35	1	45	70	0	0
Two Furnace Men	...	...	25	1	30	50	0	0
One Core-maker	...	...	40	1	45	40	0	0
Ten Coolies @ Rs. 12	...	...				120	0	0
Total						...	430	0 0 per month.

*Miscellaneous Staff.*

			Rs.	Rs.	Rs.	Rs.	a.	p.
Four Chowkidars @ Rs. 15 each	...	...				60	0	0
Four Sweepers @ Rs. 8 ,,	...	...				32	0	0
1 Dome Sweeper @ Rs. 8 ,,	...	...				8	0	0
2 Water Bearers @ Rs. 10 ,,	...	...				20	0	0
4 Chaprasies @ Rs. 12 ,,	...	...				48	0	0

1 Gardener	@ Rs. 12	..	..	12	0	0
1 Artisan Teacher	@	..	75 5 100	75	0	0
2 Masons	@	..	30 1 35	60	0	0
4 Coolies	@ Rs. 12	..	..	48	0	0
1 Store-keeper	@	..	75 5 100	75	0	0
3 Asst. Store-keeper	@	..	40 1 50	120	0	0
2 Clerks	@	..	35 1 45	70	0	0
1 Time-keepr	@	..	35 1 45	35	0	0
10 Coolies	@ Rs. 12 each	..	..	120	0	0
1 Cooli Jamadar	@ Rs. 20	..	..	20	0	0
Total				803	0	0 per month

### APPENDIX B.

#### MEETING OF SPECIAL COMMITTEE TO CONSIDER THE DEVELOPMENT OF THE MECHANICAL AND ELECTRICAL CLASSES AT A SUITABLE CENTRE.

*Present :—*

Mr. C. A King.  
Mr. D C. Gupta.  
Mr. J Tullis.

*Absent :—*

Mr. B. Das.

The committee considered three different possible sites as a centre for training students in Mechanical and Electrical Engineering Science.

- (1) The College should be expanded on its present site.
- (2) The College should be removed to some other site i. e. Phulwari Site in the neighbourhood of Patna.
- (3) An Industrial Centre i. e. Jamshedpur.

The advantages and disadvantages of these sites have been set down in a tabular form to which the members of the committee may add, or recommend other alternative schemes,

J TULLIS,  
*Offg. Principal.*

#### SITE SELECTION.

1 Present Site	}	Typical Cases
2. Phulwari Site		
3, Jamshedpur Site		

#### PRESENT SITE.

##### ADVANTAGES.

1. Some saving on buildings.
2. Within the University area, and influence of other colleges.

##### DISADVANTAGES.

1. Necessarily a less ambitious Scheme.
2. Ideal lay-out difficult.

- |   |                                       |
|---|---------------------------------------|
| 3. More rapid expansion and saving of time.                   | 3. Lack of industrial environment.    |
| 4. Piecemeal expansion.                                       | 4. Serious limit to future expansion. |
| 5. Jobbing work in Patna gives good instruction for students. |                                       |

## 2. PHULWARI SITE.

### ADVANTAGES.

1. Some saving on buildings.
2. Within the University area, and influence of other colleges.
3. More rapid expansion and saving of time
4. Piecemeal expansion
5. Jobbing work in Patna gives good instruction for students.

### DISADVANTAGES.

1. Lack of industrial environment.

## JAMSHEDPUR SITE.

### ADVANTAGES

1. A good advertisement for the college.
2. Possibility of more support from industrial concerns.
3. Students trained would have a better standing with practical men, on account of being trained in a factory environment
4. Facilities for practical training of students in workshops.
5. Less cost of college workshops.
6. Industrial atmosphere
7. Large number of practical engineers engaged in the works would influence the teaching, but this must not be a reason of reducing the teaching staff in quantity or quality, but should rather encourage a higher quality of staff.

### DISADVANTAGES.

1. University environment will be lacking and the effect of associating with students of other professions will be lost.



# REPORT

ON

## PATNA LAW COLLEGE

**For the year 1927-28**

*Inspected by Messrs P. K. Sen and E. A. Horné on the  
11th February, 1928.*

### ADMINISTRATION.

1. The Governing Body for 1927-28 consists of the following ten members —

President

(nominated by the Hon'ble the Chief Justice)

- (1) The Hon'ble Sir B. K. Mullick, Kt., I C. S

Vice President  
(ex-officio)

- (2) The Vice-Chancellor, Patna University.

Members  
(ex officio)

- (3) The Principal, Patna Law College.

*(nominated by the Syndicate of Patna University)*

- (4) Mr J H. Thickett (in place of Mr. F B Whitmore).

- (5) The Hon'ble Khan Bahadur Khwaja Muhammad Nur

*(nominated by the Faculty of Law, Patna University)*

- (6) Mr. S. P Varma

- (7) Babu Baldeva Sahay.

*(elected by the teaching staff of the Patna Law College)*

- (8) Mr. Shiveshwar Dayal.

*(nominated by the Local Government).*

- (9) Pandit Shivanandan Roy.

- (10) Mr K. B Datta.

2. With the exception of (1), (4) and (7), the above were members of the Governing Body, when the college was last inspected, viz., on the 4th February, 1925.

3. The duties and powers of the Governing Body are as laid down for Government Arts Colleges in Articles 122 and 123 of the Education Code. The Governing Body has also acted, in the past, as a Selection Committee in connection with the appointment of members of the

teaching staff of the college. Recently, however, appointments have been made without calling for nominations from the Governing Body ; and as a protest against what they considered to be a reflection on the competence of the Governing Body, six members tendered their resignation. It is understood that it has now been decided to constitute a Selection Committee *ad hoc*, on which the Governing Body will be represented ; and the resignations have been withdrawn.

4. The number of meetings of the Governing Body, held since the college was last inspected, were as under. The meetings are now held at the college instead of in the President's chambers at the High Court, as previously, and this enables members of the Governing Body to make informal visits of inspection.

1925-26	3 meetings
1926-27	2 „
1927-28	
( up to the date of inspection )	7 „

5. There is now a college council, consisting of all members of the teaching staff. It was established in the month of July, 1926, and has met nine times since then.

6 The office staff is as follows :—

Head clerk, accountant and cashier Rs. 65-2-85 (Class II of the Ministerial Service)

Second clerk and librarian Rs. 35-1-45 (Class IV.)

Third clerk and typist do. do.

7. A whole-time librarian is badly needed, as will be evident from what is said on this point in paragraph 14 below. We recommend that a new post be created for the purpose in Class III of the Ministerial Service ( Rs. 50-1-60 ). The present Second Clerk will then be free to devote himself entirely to office work, and to relieve to some extent the over-burdened Head Clerk. It is clear that, in a college with over 500 students on the rolls, there is plenty of office work to occupy three-whole time clerks.

8 The registers enumerated in the annexure to the last Inspection Report continue to be maintained, with the exception of the despatch register, this having been incorporated in the register of letters issued

9. A sub committee of the Governing Body ( consisting, at present, of Mr. Shiveshwar Dayal and Pandit Shivanandan Roy, ) has been constituted to audit the college accounts ; and since January, 1926, when it was first constituted, has audited the accounts thrice. The last audit report covers the period April 1927 to January 1928. Students are supplied with fee books, in which they enter ( on the foil and counterfoil ) the tuition fee and other payments due from them each month, as notified by the college office. The foil then serves as a receipt, after the particulars have been checked by the clerk receiving payment of the dues. The auditors complain that the students are extremely careless in entering the particulars, with the result that many corrections are necessary and mistakes are liable to occur. They recommend accordingly that the fee payment forms should be made out by the office. We think that the present system ( which saves the office a considerable amount of clerical work ) may be given a further trial, a suitable penalty being exacted from students who are wilfully careless in filling up their forms. The auditors draw attention to the

somewhat anomalous practice, which permits of students attending Preliminary and Final lectures simultaneously ( about a dozen cases, in all ) on payment of the fee for one course only. In this connection, it may be pointed out that, although the complete course qualifying for the B. L. degree has been reduced from three to two years, the monthly tuition fee has remained unchanged. This means a saving to a student graduating in Law of nearly Rs. 100. Moreover, a student at the Law College now gets considerably more for his money, in the shape of systematic tutorial instruction and in other ways, than he used to do. We see no reason, therefore, why the fee should not be raised from Rs 8 to Rs 10, which is the tuition fee payable by post-graduate students in Arts and Science; and we recommend that this should be done. The additional fee income thus realised, amounting to some Rs 13,000 per annum, would go a long way towards meeting the cost of the six extra lecturers, whose services are required in order to give effect to the proposal contained in paragraph 22 below. At the same time, we have no desire to discourage the poor deserving student; and we therefore recommend that provision should be made for the granting of free-studentships, as in Arts Colleges

10. Much greater strictness is observed than was formerly the case, with regard to the punctual payment of fees. The day fixed for the collection of dues each month is notified, in advance, for the year. The fee-collection day in January, let us suppose, is the 17th. Students, who fail to pay their dues on that day, may pay them on the 24th, with a fine of Rs 8, or on the 31st with a fine of Rs. 1. After the 31st, their names are removed from the roll, and ordinarily they have to pay a readmission fee of Rs 8 in order to reinstate themselves

11. Particulars of income and expenditure will be found in Appendix I. From the figures for the last complete financial year ( 1926-27 ), it will be seen that the fee-income exceeded the total expenditure by Rs. 16,145. The year 1925-26 marked the final transition from a three to a two years' course, and was exceptional for that reason, the fee income being unusually large. In 1924-25, the fee income exceeded the total expenditure by as much as Rs 23,480

### BUILDINGS

12. In view of the recent decision to remove the College to a new site, it is unnecessary for us to enlarge on the manifold shortcomings of the existing college buildings. The hostel premises are, at best, a make-shift, and are totally inadequate, and there is no room on the present site to build a hostel, affording adequate accommodation. There are three lecture-rooms and five other rooms, in which tutorial classes can be held, and this just suffices for present requirements. It is difficult to see how some of the classes are to be accommodated, pending the completion of the new college buildings, when a portion of the two-storied building ( containing two lecture-rooms ), which abuts on the main road, has been dismantled in pursuance of the scheme for widening the latter.

### LIBRARY.

13. A set of the English Law Reports, the acquisition of which has been recommended in every Inspection Report since 1914, was acquired during the period under review, at a cost of Rs, 3 100. The amount spent on the Library in 1925-26 was Rs 905 and in 1926-27 Rs 732. The Library now contains 3,273 volumes; it is exclusively a collection of Law books.

14. It is to be regretted that better use is not made of the Library. In 1924-25 (when the college was last inspected), the number of books issued to members of the staff and to students, respectively, was 275

and 862. The corresponding figures for 1926-27 were 155 and 478; while this session, up to the 31st. January 1928, only 27 books have been issued to members of the staff and 133 to students. The Principal attributes this phenomenal decrease to the fact that the Library can be kept open only for short periods, the accumulation of office work making, every year, greater demands on the Librarian's time. We regard it as essential that the Library, in an institution such as this, should remain open throughout college hours, morning and evening, both for purposes of reference and the issue of books on loan. We have accordingly (in paragraph 7 above) recommended the appointment of a whole-time Librarian; and it should be possible to recruit an officer of sufficient qualifications on the pay we have suggested (Rs 50-1-60). We may add that the appointment of a special Library peon is also very necessary, if full and proper use is to be made of the Library.

#### TEACHING STAFF.

15 A full return of the teaching staff, giving particulars of pay, academic qualifications and length of service, is contained in Appendix II.

16 The following changes have taken place since the college was last inspected. Babu Ragho Prasad, who had served as a Lecturer for over 14 years, died in November 1926. Mr. Sri Narayan Sahay (a Lecturer for nearly 10 years) and Babu Nawal Kishore Prasad I (a Lecturer for 5 years) left on the 1st July 1926, and were succeeded by Mr. S. N. Datta and Babu Nawal Kishore Prasad II. Four new posts having been sanctioned, the following were appointed Lecturers, with effect from the 23rd June 1926 :—

Mr. Syed Yusuf Husain.  
 Babu Anand Prasad  
 Mr. Syed Hasan.  
 Babu Bhubaneswar Prasad Singh.

#### CURRICULUM AND TEACHING.

17. In Appendix III are shown the weekly number and description of periods of teaching work done by each member of the staff during the current session. The periods whether lectures (or moot courts) or tutorials, are of 50 minutes. From this return it will be seen that the Principal takes 18 periods of teaching in the week, which appears to us to be rather much, considering his multifarious administrative duties. The Vice-Principal takes 24 periods, and each of the part-time Lecturers, 14 periods (i. e., approximately two hours a day). In our opinion, the Principal should be relieved of 6 periods, and due provision should be made for this, when considering the number of extra lecturers required to complete the full strength of the teaching staff (see paragraph 22 below). We are inclined to think that the Vice-Principal should be afforded some relief also, in order to enable him to devote more of his time to fostering the corporate life of the college. We have received a copy of an application to Government by several members of the staff in which they make a representation that although according to the terms of their appointment they were to lecture for 12 periods a week, they have in fact been lecturing for 14 periods, and they request that they should be relieved of the two extra periods. This is a matter which hardly falls within the purview of our work. But we hope the Government will be in a position to decide the matter at an early date.

18. The frequent interruption of the college work, to which attention was drawn in the last Inspection Report, is now, to a very large extent, a thing of the past. In 1923-24, for example, the college was closed, on account of the University, Pledarship and Mukhtarship

Examinations, for 30 working days ; whereas in 1926-27 the college was closed, on this account, for one day only, and for only five days during the current session up to the date of inspection. The number of working days ( i e., days on which lectures were delivered, or moot courts or quarterly class examinations held ) has, in consequence, increased from 146 days in 1923-24 to 168 in 1925-26 and 189 in 1926-27. This is a striking improvement, and a very timely one, in view of the reduction in the length of the B. L. course.

19. The appointment of four additional lecturers, with effect from the beginning of the session 1926-27, has made it possible to increase very substantially the amount of tutorial instruction given. In the last Inspection Report ( for 1924-25 ), the inspectors wrote ; " with the present size of the Preliminary and Final Classes, it is only possible for a student to receive tutorial instruction, in batches of not more than 15 students at the rate of one tutorial class in each of the five subjects of his course, at intervals of fifteen weeks. This, in our opinion, is far from satisfactory ". Under present arrangements, every student receives tutorial instruction in each of his subjects twice a month. This is a great improvement, but it still falls short of the ideal, which is a weekly tutorial in each subject. It must always be remembered that a curriculum, which formerly extended over three years, has been compressed into a two years' course. In view of this, and of the wide range of subjects, somewhat intensive methods have clearly to be applied, if a decent standard of legal education is to be maintained.

20. Provision is made for formal lectures as below ( each class being divided into three sections ) ; and this appears to be the irreducible minimum, if the various subjects are to be properly taught.

Preliminary Class.	Subject	No. of lectures per week
1	Jurisprudence	Jurisprudence 2
		Ancient & Constitutional Law 1
2.	Roman Law	3
3.	Hindu Law	6
4.	Muhammadan Law	2
	Law of Persons	1
- 5	Criminal Law	Penal Code 2
		Code of Criminal Procedure 1

#### Final Class

1.	Land Tenure	..	Bengal Tenancy Act	2
			Regulations	1
2	Equity ...	...		3
3.	Evidence and Civil Procedure	..	Evidence	1
			Code of Civil Procedure	2
4.	Law of Property	...	Succession	3
			Transfer	3
5	Contract and Tort	...	Contract	2
			Tort	1

21. In each class, therefore, 18 lectures a week are necessary. If to this we add one tutorial a week in each subject, we have a total of 23 periods ( or allowing for two tutorials a month, as at present, a total of 20 periods ). This is not too much for the student specialising in Law ; but it is manifestly impossible for a student to attend 20-23 periods at the Law College, and to apply himself at all seriously, at the same time, to M. A. or M. Sc. studies elsewhere. This, however, many students are attempting to do. Out of 530 students on the rolls at the time of inspection, there were 107 M. A. ( Patna College ) and 6 M. Sc. ( Science College ) students, or 21.3 per cent. of the total

number. This has given rise to a serious problem, which has recently been examined by the Syndicate, with the assistance of a sub-committee appointed for the purpose. The Syndicate has accepted unanimously the recommendations of the sub-committee, according to which a student will be allowed to combine M. A. (or M. Sc.) and B. L. studies in his Fifth Year, but in his Sixth Year will have to devote himself exclusively to his M. A. (or M. Sc.) studies, taking an additional year to complete his Law studies. Furthermore, he will be exempted from attending tutorial classes at the Law College in his Fifth Year. This is obviously of the nature of a compromise; but it appears to be the only practicable solution, in the circumstances.

22. In order to provide for one tutorial a week in each subject for every student (other than those combining Preliminary Law with M. A. or M. Sc. studies), it will be necessary to strengthen the teaching staff considerably, and proposals to this effect are at present before Government. Allowing for a total of 540 students, of whom 60 may be supposed to be combining Preliminary Law with M. A. or M. Sc. studies (and so to be exempted from attending tutorial classes at the Law College), provision needs to be made for five tutorials a week for 32 batches (15 students in a batch), or 160 tutorials, in all. With the staff constituted as it is at present, provision can be made for 74, leaving 86 to be provided for; and allowing 14 periods per lecturer, this means the appointment of six more lecturers.

23. With regard to methods of teaching, we are inclined to think that a disproportionate amount of the lecture period is occupied with the mechanical dictation of notes, this, at any rate, is true of some members of the staff. Lectures are intended to stimulate thought, and to supplement private reading on the part of the student, not to take the place of it. A summary of the more important points discussed may usefully be dictated by the lecturer, but a student, whose mind is stuffed with lecture-notes, and of whom no independent effort and next to no private reading are required, will never possess any intelligent grasp of the subject.

24. There is also, we apprehend, a danger of tutorials becoming little more than a mere repetition of lectures. In a tutorial class, the students themselves should do most of the work; but this they can be made to do only if oral and written exercises (including legal problems), carefully devised, and informal discussion arising out of them, constitute the basis of all tutorial instruction. It is primarily with this end in view that the tutorial class is confined to a small and manageable number (which otherwise, would be an extravagantly wasteful arrangement); and it should not be difficult for the skilful teacher, by exposing the ignorance of the slacker and giving the diligent student every possible opportunity to exhibit his superior knowledge, to arouse that spirit of healthy emulation, which alone gives character and vitality to such a class. We are informed that members of the staff keep a record of the marks given for the work which is done in tutorial classes; but the Principal should satisfy himself that a mark of some kind, indicating the progress made by the individual student, whether it be noted orally or by means of a written exercise, is recorded at every meeting or the class. There can be no more valuable record. The Principal should satisfy himself also that written exercises, corrected by the teacher either at home or in the class according to the nature of the exercise form a regular part of tutorial instruction. We regard this as essential; and we regret to observe that the system of fortnightly written exercises, adopted some years ago, has been discontinued, in spite of the strictures contained in paragraph 27 of the last Inspection Report. The system of quarterly class examinations (three in the course of the session), lately introduced, is a poor substitute. Indeed, for post-graduate students, such examinations should not be necessary, always provided that the tutorial system functions

properly, both as a stimulus to the student to apply himself seriously to his studies and as a test of the progress which he is making. Finally, the Principal should refuse to send up for the University Examination any student who has wilfully scamped his tutorial work. This he clearly has the power to do under the University Regulations; and the exercise of this power, when necessary, would, we have not the least doubt, have a most salutary effect.

25. Leading cases, both civil and criminal, are taken up in moot courts. Preliminary students are required to attend 9 (out of 12) moot courts in each of the following subjects, viz., Hindu Law, Muhammadan Law and Criminal Law; Final students, 9 (out of 12) moot courts in each of their five subjects. We venture to suggest that these might be made at once more interesting and instructive if, from time to time, a distinguished visitor were invited to preside over the court, and if occasionally a fictitious action, based on a leading case, were substituted for the leading case itself.

#### NUMERICAL STRENGTH.

26. The total number of students on the rolls on the day of inspection (of whom 484 were present) was 530—viz., 291 in the Preliminary and 237 in the Final Class. It is worth noting that the number of Muhammadan students is relatively small, viz., 78 or 14·7 per cent. The corresponding total for 1925-26 and 1926-27 was 553 and 547, respectively. The slight decrease evident is to be explained by the fact that there was a considerable drop in the number admitted to the Preliminary Class in 1926. The number of students on the roll of this class on the 31st August 1925 was 327 (a record number), the corresponding figure for 1926 was 270. In 1927 there was a recovery, the figure being 293. Of those who took admission in 1927, (320 in all) 259 were graduates of Patna and 71, or 22·2 per cent., of other Universities (54 being graduates of Calcutta)

#### RESULTS IN UNIVERSITY EXAMINATIONS

27. The following is a summary of the results in the B. L. Examinations, both Preliminary and Final, during the last two years:—

	PRELIMINARY B. L.			FINAL B. L.		
	No of candidates who (1) appeared	(2) passed	(3) passed in the First Division.	No of candidates who (1) appeared	(2) passed	(3) passed in the First Division.
January 1925	120	101	6	152	132	18
July "	156	130	24	190	160	12
January 1927	145	74	7	98	56	3
July "	176	139	9	166	127	10
	<u>597</u>	<u>444</u>	<u>46</u>	<u>606</u>	<u>475</u>	<u>43</u>

28. From the above it will be seen that 74·4 per cent. of those who appeared at the Preliminary B. L. Examination passed (7·7 per cent. in the First Division) and 78·4 per cent. of those who appeared at the Final B. L. Examination (7·1 per cent. in the First Division). This points to a healthy reaction from the phenomenal figures for the years 1923-25 (quoted in paragraph 24 of the last Inspection Report), when the percentage of passes in the Preliminary was 92·6 (26·7 in the First Division) and in the Final 92 (12·9 in the First Division). If we omit the results for January 1927, however, the

percentage of passes still remains somewhat extravagantly high, viz, 81.9 in the Preliminary and 82.5 in the Final.

### COLLEGIATE LIFE.

29. Classes meet in the evening (4-45 to 7-15), as well as in the morning (7-15 to 9-45); and this interferes seriously with games and with other college activities. The Principal is president of the Athletic Club, and Mr. Syed Hasan is Vice-President. Cricket has been started this year; a number of students are keen on the game, and were joined by several members of the staff. Many friendly matches were played. Tennis is popular. The college possesses a hard tennis court; and there is a college tournament. This year the college entered for the Bihar and Orissa Tennis Tournament (one pair) and the Sir Fakhruddin Shield (two pairs). The college had a particularly active and successful football season, and carried off the Whitmore Cup, in the hockey season, enthusiasm languished. The Athletic Club is handicapped by lack of funds. The annual subscription is only one rupee, and there is no equivalent grant from the Director of Public Instruction, as in other Government colleges. In our opinion, the college has fully established its claim to such a grant. The Vice-Principal, assisted by Messrs. Bhubaneshwar Prasad Singh and Bhagwati Kumar Singh, is in charge of the Debating Society. There have been two debates during the current session, both on topics of legal interest. In an institution like the Law College, this ought to be a popular and flourishing society, and there seems no reason why meetings should not be held at least once a month, on fee-collection day, when lectures are suspended. Distinguished visitors might be invited, from time to time, to take part in the debates. There has been only one issue (a double number) of the College Magazine this year. The Vice-Principal and Mr. S. N. Datta are the Joint Editors. The Magazine would be improved by the addition of a table of contents.

30. The Vice-Principal is President of the Common Room, and Mr. Syed Yusuf Husain is the Vice-President. The annual subscription is Rs. 1/8. Substantial additions have recently been made to the library, and the books are in great request. Indoor games, such as ping-pong, carrom and chess, are popular as elsewhere. The following periodicals are taken. We may say that we do not consider "The News of the World" by any means a suitable paper for the Students' Common Room.

*Dailies:* Statesman, Englishman, Searchlight, *Weeklies:* Illustrated London News, Punch, News of the world, *Monthlies:* Nineteenth Century and After, Contemporary Review, Pearson's Magazine, Calcutta Review, Modern Review, Madhuri (Hindi), Moarif (Urdu), Bharatbharsa (Bengali).

31. Two successful social functions took place this session, viz., the Durbar Day celebrations and an afternoon party in honour of the Hon'ble Sir B. K. Mullick, the retiring President of the Governing Body.

### RESIDENCE OF STUDENTS

32. The hostel premises consist of two blocks, the old and the new. The latter, which has been provided recently with new furniture and electric light, is divided into a Hindu ward and a Muhammadan ward. There is accommodation for 26 boarders in the old block; in the new block, there were 21 Hindu and 5 Muhammadan boarders in residence, making a grand total of 52. In addition, 121 students were accommodated in hostels under the Inspector of Students' Residences, and 44 in non-collegiate hostels and unattached messes. From these

particulars it will be seen that there is a demand for hostel accommodation on the part of over 200 Law College students. The Principal is Hostel Superintendent, and is provided with rent-free quarters. The hostel dues ( inclusive of seat-rent ) are Rs. 3/6 a month.

33 There is no Students' Residence Committee, and no steps appear to be taken to investigate the conditions under which students ( of whom there were 226 on the 31st August 1927 ), who seek permission to reside with local guardians, are actually living, before the permission is granted. This is contrary to the University Regulations, and can only be defended on the plea that, in the absence of adequate hostel accommodation, the Principal can make no alternative provision for students of whose conditions of residence he disapproves. When, with the re-housing of the college on its new site, such a plea ceases to be valid, the college authorities will have to face more seriously than they have done in the past their responsibility in the matter of the conditions of residence of all students reading in the college.

#### DISCIPLINE.

34. There is no serious breach of discipline to record. We observed that, in one or two cases of minor offences, a student was punished by being suspended from college for three or four days at a time. We cannot regard such a punishment as appropriate. Suspension ( which is a milder form of rustication ) should, in our opinion, be reserved for more serious offences

P K. Sen,  
E. A. Horne.

## APPENDIX I.

*Return of Income and Expenditure.*

## (a) INCOME.

Year.	Fee-income.	Government grant.	Total.	Remarks
1	2	3	4	5
1924-25	58086/-	3514/-	61600/-	
1925-26	66520/- *	3483/-	70003/-	
1926-27	61859/-	3763/-	65622/-	
1927 28 ( 31st January )	47364/-	3332/-	50696/-	

\* The exceptionally large amount for this year was due to the fact that there was an additional class ( a special six months' course ), rendered necessary by the transition from a three to a two years' course

APPENDIX I.

*Return of Income and Expenditure*

(b) EXPENDITURE

Year.	Teaching Staff.	Clerical Staff	Mental Establishment.	Furniture	Library.	Hostel Con- tin- gencies	Common Room and Periodicals	Rents Rates and Taxes	Contract Con- trin- gencies.	Total.
1	2	3	4	5	6	7	8	9	10	11
1924-25	29380/-	1639/-	444/-		519/	722/-	270/-	752/-	1181/-	35,406/
1925-26	33956/-	1561/-	575/-	1000/-	905/-	383/-	270/-	726/-	1179/-	40,555/-
1926-27	40279/-	1584/-	420/-	...	732/-	364/-	270/-	701/6/-	1353/-	45,713/6/-
1927-28 ( 31st January )	27960/-	1397/5/	641/5/-	1627/8/-	3659/7/-*	272/-	270/-	351/-	1390/9/-	37,569/2/-

\* Includes special grant of Rs 3,100 for purchase of a set of the English Reports

## APPENDIX II.

*Pay, qualifications, etc, of Teaching Staff*

Name .	Post and Academic Qualifications	Period of Service in this College	Pay	REMARKS.
1 Mr. S. S Alam .	Principal, M A. ( Cantab ), L L B, Bar-at-Law	4 years.	725/-	Whole-time officer.
2 Mr. S. M Shareef .	Vice Principal, M A (Cantab), Bar at-Law.	4 years.	525/-	do.
3 B Shiveshwar Dayal	Lecturer, M A, B. L	12 years.	250/-	Pari-time officer.
4. Mr S A Manzar ..	Lecturer, B A. (Oxon.), Bar-at-Law.	3 years & 7 months.	250/-	do
5 B Bhagwati Kumar Sinha	Lecturer, B. A., B. L.	do.	250/-	do
6. Mr. S P Januar	Lecturer, M. A. ( Oxon. ), Bar-at-Law.	do	250/-	do
7 Mr, S N Datta	Lecturer, Bar-at-law	1 year & 7 months.	250/-	do.
8. B. Nawalkishore Prasad II	Lecturer, B. A., B L.	do	250/-	do.
9. Mr Syed Yusuf .. Husain	Lecturer, B. A. ( Alig ), Bar at Law.	do	250/	do
10 B Anand Prasad	Lecturer, B. A, B. L.	do.	250/-	do.
11 M, Syed Hasan ...	Lecturer, B. A., B. L.	do	250/-	do.
12. B Bhubaneshwar .. Prasad Singh	Lecturer, M. A., B. L.	do.	250/-	do.

## APPENDIX III.

Weekly number and description of periods of teaching work done by each member of the staff during the session 1927-28.

Serial No	Name & Designation.	Class and Section	Subject.	Weekly number of periods.			TOTAL.
				Lectures	Tutorials.	Moot Courts	
1	Mr S S. Alam Principal.	Preliminary Tutorial.	Roman Law.	...	1		18
		" " "	Jurisprudence.	...	1		
		Final Section A	Contract & Torts.	3	.		
		" " B	do.	3	...		
	" " C	do.	3	.			
	Final-Tutorial.	do.	...	7			
2.	Mr. S M. Shareef Vice-Principal.	Preliminary Tutorial	Jurisprudence		1		24
		" "	Mohammadan Law	.	1		
		" "	Roman Law.	..	3		
		Preliminary General Sec C.	Mohammadan Law	3	..		
		Final-Tutorial	Equity.	..	7		
	Final General Sec. A.	do.	3	.	72 in the course of the session, in lieu of lectures.		
" " B	do.	3	.				
" " C	do.	3	.				
3.	B Shiveshwar Deyal (Lecturer)	Preliminary General Sec. C.	Hindu Law.	6	..		14
		Preliminary Tutorial.	Hindu Law.	.	2		
		Final General Sec. C	Civil Pro. Code & Evidence.	3	..		
	Final-Tutorial.	do.		3			
4	B Nawalkishore Prasad (Lecturer)	Final General Sec C.	Transfer & Succession.	6			14
		Final-Tutorial.	do.		4		
		" "	Civil Pro. Code. Pleadings.		3		
5.	Mr S A. Manzar ( Lecturer ).	Preliminary Tutorial	Criminal Law	...	3		14
		" "	Mohammadan Law		2		
		Preliminary General Sec. B	" "	3			
		Preliminary General Sec. B	Criminal Law	3			
	Preliminary General Sec. C.	" "	3	..			
6	B B K. Sinha. ( Lecturer ),	Preliminary General Sec. A	Hindu Law	6	...		14
		Preliminary-Tutorial	" "	...	4		
		Final General Sec. A	Transfer.	3			
		Final-Tutorial.	Land Tenures	.	1		
7	Mr. P P Jamar ( Lecturer ).	Preliminary Sec. B	Jurisprudence.	3	..		14
		" " "	Roman Law.	3	...		
		" " C	Jurisprudence	3	...		
		" " "	Roman Law.	3	..		
		Preliminary-Tutorial.	Jurisprudence.	...	2		

Serial Number.	Name and Designation..	Class and Section.	Subject.	WEEKLY NUMBER OF PERIODS			TOTAL.
				Lectures	Tutorials.	Moot Courts.	
8.	B. B. P. Sinha.	Preliminary General Sec. B.	Hindu Law.	6	...	72 in the course of the session, in lieu of lectures.	14
		Preliminary-Tutorial	do.	...	1		
		Final-General Sec. C. Final-Tutorial.	Land Tenures. do.	3 ...	... 4		
9	M. Syed Hasan	Final-General Sec. A.	Land Tenures.	3	...		
		" " " "	Civil Pro. Code & Evidence.	3	...		
		Final-General Sec. B.	Land Tenures.	3	...		
		" " " " Final-Tutorial.	Civil Pro. Code. Land Tenures.	3 ...	... 2		
10.	B. Anand Pd.	Final-General Sec. A.	Transfer.	3	...		
		" " " B.	do.	6	...		
		Final-Tutorial. " "	do. Civil Pro. Code.	... ...	3 2		
11.	Mr. Syed Yusuf Husain ( Lecturer ).	Preliminary-General Sec. A	Criminal Law.	3	..		14
		Preliminary-General Sec A	Mohammadan Law.	3	...		
		Preliminary-Tutorial " "	Criminal Law Mohammadan Law.	... ..	4 4		
12.	Mr. S. N. Datta.	Preliminary-General Sec. A	Jurisprudence.	3	..		14
		Preliminary General Sec A,	Roman Law.	3	...		
		Preliminary-Tutorial.	Jurisprudence.	..	3		
		" Tutorial. "	Roman Law, Pleadings	... ...	3 1		
		" "	Civil Pro. Code	... ...	1 1		

# Report

ON THE

**NALANDA COLLEGE, BIHAR SHARIF.**

For 1927—28

Inspected by Mr E. A. Horne, on behalf of the University, and Maulvi Syed Muhammad Husain, on behalf of the Board of Secondary Education, on the 19th March, 1928.

## ADMINISTRATION.

1. There were 7 meetings of the Governing Body during the session 1926-27, and there have been 5 meetings during the current session, up to the date of inspection.

2. During 1927 there were 7 meetings of the Teachers' Association which embraces the teachers of both school and college classes; and there has been one meeting this year, up to the date of inspection

3. We inspected a number of registers. The attendance registers are carefully kept. At the foot of the columns in which the daily attendance is recorded, the teacher enters the total of students marked present, this serves as an additional check against any possible falsification of the registers.

## FINANCE

4. In the last inspection report, it was recommended that a small reserve fund should be formed, in order to obviate the necessity of borrowing to meet current expenditure. The need for this is further emphasized by the fact that in May 1926, the grant-in-aid from Government being two months in arrears, it was necessary to borrow Rs 1050, in order to pay the salaries of the staff Rs. 500, was advanced by the Sub-Divisional Officer, the President of the Governing Body, and this was repaid in the following July. The balance, Rs. 550, was advanced by the Secretary; of which Rs. 200 was paid back to him in October, 1927, while Rs. 350 still remains outstanding, after nearly two years. This is not at all a creditable manner of conducting the College finances.

5. The income from the Trust funds is payable on the 1st January and the 1st July, in two instalments of Rs 4000, and for several years now these instalments have been punctually realized. The payment of this income from Trust funds has again fallen into arrears, however. Of the instalment payable on the 1st. January 1928 only Rs. 461-3-0 was realized in January. At the date of inspection, Rs 2500 in all had been realized, leaving Rs. 1500 still outstanding. Strong representations on the subject should be made to the Trustees; otherwise, it is to be feared that things will fall back into the old irregular ways.

6. The following is a summary of income and expenditure, covering the period since the last inspection :—

(a) 1st July 1925 to 30th June 1926.

INCOME.			EXPENDITURE.		
	Rs.	as. p.		Rs.	as. p.
Opening Balance	4,093	6 6	Teaching Staff	18,747	8 6
Trust Fund	8,000	0 0	Clerk and Librarian	783	11 9
Government Grant	4,800	0 0	Servants	732	9 6
Fees and Fines	9,751	10 0	Library	345	5 3
Advances taken (May, 1926).	1,048	3 6	Prizes	349	9 6
Miscellaneous	137	3 3	Contingencies	223	7 3
			Hostel	670	0 0
			Buildings	724	7 6
			Furniture	209	1 0
			C. R. and Games	230	0 0
			Construction of Hostel	2,000	0 0
			Land for Hostel	250	0 0
			" " Play ground	250	0 0
			Optical lantern and slides.	1,386	6 0
			Advances repaid	225	0 0
			Miscellaneous	685	13 9
	27,830	7 3	Closing balance	27,813	0 0
				17	7 3
				27,830	7 3

The advances taken (in May 1926) are those referred to in paragraph 4 above. The advances repaid (Rs. 225/-) were originally borrowed from funds like the Games Fund and the Examination Fund.

(b) 1st July 1926 to 30th June 1927.

INCOME			EXPENDITURE		
	Rs.	As. P		Rs.	As. P.
Opening balance	17	7 3	Teaching staff	18,992	12 3
Trust Fund	8,000	0 0	Clerk and Librarian	742	5 6
Government grant	5,100	0 0	Servants	702	12 3
" (non recurring)	1,888	0 0	Library	534	15 9
Grant from Commissioner	700	0 0	Contingencies	420	9 6
Fees and Fines	10,851	14 6	Hostel	952	13 9
Advances recovered	435	0 0	Buildings	189	4 3
Miscellaneous	26	1 0	Furniture	1,450	10 9
			C. R. and games	240	0 0
			Land purchased for		
			Principal's quarters.	203	8 0
			Advances repaid	1,102	8 3
			" to teachers	726	0 0
			Miscellaneous	387	4 3
				26,645	8 6
			Closing balance	372	14 3
	27,018	6 9		27,018	6 9

The non-recurring Government grant was given for necessary

repairs to the King Edward Memorial Hall ( Rs. 1,000/- ) and for Hostel equipment. Rs. 850/- out of the grant of Rs. 1,000/ has been spent on materials ; but the repairs in question have not yet been begun. A special allotment was made by the Governing Body for furniture, both for the Hostel and class-rooms. The Commissioner's grant was for the Extension of the play-ground ( Rs. 500 ) and the purchase of historical slides (Rs. 200). The slides have been purchased (at a cost of Rs. 462-8-0) , the grant for the extension of the playground (sanctioned in March 1927) has not yet been used, as there is difficulty about a deed of gift of the land, which it is intended to add to the present playground and to level. The advances repaid were Rs. 500/- to the President of the Governing Body as mentioned in paragraph 4 above, and Rs. 602-8-3, originally borrowed from funds like the Games Fund and the Examination Fund. It will be noted that a sum of Rs. 726/- was advanced in loans to teachers; of which Rs 435/- was recovered in the course of the year. This is altogether irregular; and one would have thought that the state of the college finances would have precluded any such proceeding.

(c) 1st July 1927 to 31st January 1928.

(7 months)

INCOME			EXPENDIURE		
	Rs	a. p.		Rs.	a. p.
Opening Balance...	372	14 3	Teaching staff	12,079	4 6 (a)
Trust Fund ...	4,461	3 0	Clerk and Librarian ...	433	2 0
Government grant	4,725	0 0	Servants ..	405	12 0
Fees and Fines ...	7,728	2 9	Library ...	363	1 3
Advances recovered	350	8 0	Contingencies ...	212	4 9
			Hostel ...	215	0 0
			Buildings ...	675	6 0
			Furniture ..	74	12 0
			C. R and games	140	0 0
			Lantern slides ...	403	4 0
			Advances to teachers ...	250	0 0
			Advance repaid ...	200	0 0
			Miscellaneous ...	232	13 0
				15,684	11 6
			Closing balance. .	1,953	0 6
				17,637	12 0
	17,637	12 0		17,637	12 0

(a) Includes Rs. 140, being the allowance to the Hostel Superintendent

As already noted in paragraph 5 above, only Rs 451-3-0 was realized in January out of the instalment of Rs. 4,000, due on the 1st January 1928, of the income from Trust properties. It will be observed that further advances to teachers, amounting to Rs 250, were made during this period. Adding the advances made in the previous financial year, we have a total of Rs. 976; of which Rs. 435 was recovered

in that year and Rs. 350-8-0 in the present financial year, leaving Rs. 190-8-0 still outstanding on the 31st January 1928. The Government grant for 1927-28 is Rs. 6,300; this is the largest amount yet sanctioned. The expenditure on Teaching Staff included Rs. 439-7-6 and the expenditure on Clerk and Librarian Rs. 13-2-0 on account of contributions to Provident Fund.

7. The College accounts have not been audited since September 1925. The accounts should be audited annually. The College office has not yet been provided with a safe. It was noticed that in many cases students were two or three months in arrears in the payment of their fees. Attention was drawn to the practice of allowing arrears to run on in this way in the last inspection report; but there has been no improvement.

8. It was suggested in the last inspection report that the money belonging to the Teachers' Provident Fund might be invested to better advantage. Nothing has yet been done to give effect to this suggestion. If the money were placed on deposit account, it would earn 6 per cent. interest, as compared with the 4 per cent. allowed on current accounts by the local Central Co-operative Bank. The teachers, perhaps, prefer to have the money on current account, so that it can readily be withdrawn; and withdrawals, up to three months' pay, appear to be the rule rather than the exception. This shows very little appreciation of the true objects of a Provident Fund.

#### BUILDINGS.

9. The condition of the King Edward Memorial block, which consists of a central hall and four classrooms at the four corners, is dilapidated in the extreme. The building looks as if it had sustained a siege, and indeed, on one side, it has suffered a bombardment at very close range from the football ground, the goal posts of which are within a few yards of the building. To obviate the serious damage caused in this way, it is necessary to make the football ground run east and west instead of north and south, as at present, but this is not possible until the proposed extension of the playground has been carried out, a fact which renders this long-delayed improvement all the more urgent. The building presents a battered appearance, however, not on this side only, but on every side. Nearly every pane of glass is broken, most of the shutters are smashed, day light is visible between the frames of the windows and the surrounding walls, and the fanlights, above the windows, are in danger of falling in. The terraced roof is in need of extensive repairs, if not re-making. The roof leaks so badly that a number of ugly cracks have been caused in the walls, and it looks as if portions of the building would collapse, if repairs are not taken in hand at once. Many tiles need replacing in the tiled roof of the verandahs. It is clear that this building, which is the best the college possesses, has been allowed to fall into a state of complete disrepair. Even now no provision has been made for the repair of the roof; and although it is nearly two years since a Government non-recurring grant of Rs 1000 was sanctioned for other necessary repairs to this building, nothing has yet been done beyond the purchase of materials in the shape of timber and tiles. This is a matter which should receive the early and serious attention of the Governing Body.

10. With the increase in the numbers in the school classes, classes VIII and IX have been divided into two sections. In class X, the number on the roll, at the date of inspection, was 60; and unless there is considerable wastage between now and the end of the summer vacation, it will be necessary to divide this class also into two sections. The

authorities do not appear to have seriously considered how these larger numbers are to be accommodated. The King Edward Memorial block provides just sufficient accommodation for the I. A. classes. The middle block contains five classrooms; and three class-rooms are available in the old block, if we include one of the two rooms used for housing the library. Assuming that class X will have to be divided into two sections, the minimum accommodation required, as indicated below, is 10 class-rooms, while there are only 8 class-rooms available. It is clear, therefore, that some limit will have to be applied to the numbers admitted in the school classes; and at the same time that there can be no question, at present, of opening I. A. classes in Hindi as a principal subject.

Class.	No. of sections.	Min. accommodation required
VIII	2	2
IX	2	2
X	2	4
XI	1	2

11. In the last inspection report, it was pointed out that a much-needed improvement was the enlargement of the Students' Common Room. In the state of things described in the preceding paragraph, this is manifestly impossible.

#### LIBRARY.

12. The improvement of the library, noted in the last inspection report, has been maintained. Last year the amount spent on the library was Rs 535, and this year, up to the date of inspection, Rs. 363. Special attention was devoted to the improvement of the Hindi section. The number of books, which have been added to the library in the different subjects during the past two years, is as under. The library now contains 2,268 volumes.

English	Sanskrit	Hindi	Urdu	History	Other subjects	Total
114	27	148	38	32	25	384

13. On the whole, not quite as good use appears to have been made of the library by the I. A. students as in previous years. Thus the number of books issued to 2nd year students in 1924-25 was 237 in 1926-27, with just double the number of students, it was only 126. The corresponding figures for the 1st year students show some improvement, however. The actual figures are 242 and 182, but the number of students was smaller by one-third in the latter period.

14. The following periodicals are obtained for the Common Room.—

*Dashes* : Statesman, Leader, Searchlight;

*Weeklies* Times of India (illustrated)

*Monthlies & Quarterlies* Vishwa Bharati, Modern Review, Review of Reviews, Saraswati, Madhuri, Chand, Balak, Vishal Bharat (Hindi), Humayun, Nigar (Urdu)

#### TEACHING AND TEACHING STAFF.

15. A real effort is being made to improve the standard of teaching.

The teacher is required to prepare a detailed outline of the course to be covered, and to keep a daily record of the work actually done. Regular home work and home exercises are prescribed, and there is a weekly test in one subject in the I. A. course, so that there is a complete periodical examination every month. Historical and astronomical slides are shown in the magic lantern, from time to time.

16. A number of changes in the I. A. staff have taken place since the date of the last inspection. Babu Nirmalendu Das Gupta, Lecturer in History, who had been a member of the staff since the college classes were opened in 1920, resigned (on preferment) in August 1926. His place has been taken by Babu Benmadho Agarwala, who is an M. A. [Class II] of the Allahabad University. A second Lecturer in History was employed for a time, a post of History teacher in the school classes being converted into a lectureship. This arrangement was approved by the Governing Body, in order to provide for a reserve in the event of a member of the College staff taking leave. The first incumbent of this post was Pandit Vidyand Mahay, M. A. (Punjab) and on his resignation in June 1926, he was succeeded by Babu Harish Chandra Mandhata, M. A. (Allahabad). The Education Department, however, disallowed the arrangement, whereby the pay and status of this post had been raised, and as he was unwilling to accept the status of a school teacher, Babu Harish Chandra Mandhata resigned in July 1927. Moulavi Nurul Hasan went on leave, preparatory to retirement, on the 1st September 1927, and the new Persian Lecturer, Maulvi Ahmad Hasan, M. A. in Persian (Class I) of Patna University, joined on the 17th October 1927. Pandit Dinanath Razdan, Lecturer in Logic, who was appointed in August 1925, resigned in September 1927, and his place has been taken by Babu Kanaihya Prasad Sinha, who is an M. A. (Class II) of Benares University and a graduate of Patna University. Pandit Adityanath Upadhyaya, Lecturer in Sanskrit since the opening of the College, died in January of this year. His place has not yet been filled. The Principal was on leave from the 11th February to the 22nd July 1927. Babu Benmadho Agarwala, Lecturer in History, was in charge of the College during his absence.

17. It may be noted that the members of the I. A. staff give considerable assistance in the teaching of the school classes. Thus, in the present session (July to December 1927), the History Lecturer took 5 periods in History and 3 periods in English in the school classes, the Logic Lecturer, 11 periods in English, the Persian and Sanskrit Lecturers 9 and 11 periods, respectively, in those subjects.

#### NUMERICAL STRENGTH.

18. The strength of the I. A. classes, at the 31st December in each year, is shown below. The reduction in numbers is accounted for by the fact that no Matriculates of the Calcutta University appear now to be seeking admission. Of the 19 new Entrants in 1926, 8 were from the school department, 3 from the Patna District High School, and 8 from other High Schools in the Province. In 1927, the corresponding figures were 5, 1, 10, out of a total of 16.

Year	2nd Year class.	1st Year class.	Total.
1925	32	34	66
1926	42	20	62
1927	32	18	50

19. The total number of students in the school classes, on the 31st December 1927, was 221, making a grand total of 271. The corresponding figures, as at the 31st December 1926, were 205 and 267. At

the date of the last inspection (21st December 1925), the total number of College and school students on the rolls was 257.

### UNIVERSITY RESULTS.

20 Below is an analysis of the results at University Examination in 1926 and 1927. Allowing for two chances in many cases, the college was able to pass 50 per cent of the candidates sent up for the I A., both in 1926 and 1927. For the Matriculation, a rather better result than this was secured in 1926, but in 1927 the results, as a whole, were poor. It is satisfactory to note that out of 18 candidates who passed the Matriculation in 1926, 7 passed in the 2nd Division, in 1927 4 out of 13 passed in the 2nd Division.

#### MATRICULATION --

			1926	1927
1.	No. sent up for Annual	...	24	21
2.	„ passed at	..	12	11
<hr/>				
3.	No. sent up for Supplementary	...	7	11
4.	„ who reappeared at „	...	9	8
5.	„ „ passed at „	...	6	2
<hr/>				
6.	Total of 1 & 3	...	31	32
7.	Total of 2 & 5	...	18	13
<hr/>				
8.	Percentage of passes ( 7 of 6 )	...	58	40

#### INTERMEDIATE IN ARTS.—

1.	No. sent up for Annual	...	14	26
2.	„ who passed „	...	4	13
<hr/>				
3.	No. sent up for Supplementary	..	6	10
4.	„ who reappeared at „	...	7	9
5.	„ who passed at „	..	6	5
<hr/>				
6.	Total of 1 & 3	...	20	36
7.	Total of 2 & 5	...	10	18
<hr/>				
8.	Percentage of passes ( 7 of 6 )	...	50	50

#### COLLEGE LIFE

21. There is a Literary and Debating Society, which is supposed to meet weekly. During the current session, its meetings have been somewhat intermittent. Three of the seven meetings held between the 17th September 1927 and the 25th February 1928 were in February. There were four debates, two in Hindi; and three meetings, at which essays and poems were read. It would probably be better to aim at a regular meeting once a fortnight. There are two troops of Boy Scouts, the Scout Masters being Babu Jagat Kiren Sen (who is also the Hostel Superintendent) and Babu Bindeshwari Prasad Thakur.

## RESIDENCE.

22. The hostel was at last ready for occupation in February 1927. It is an attractive building; and the rooms are well-lighted and well-ventilated. There are three further improvements, however, which are needed. The first is to provide the Principal with quarters adjoining the hostel. Land has been acquired for the purpose; and the quarters should be built as soon as possible. It is desirable, on other grounds, that the Principal should live in the college compound; and the four-seated room in the hostel, now occupied by the Hostel Superintendent, will be available for boarders when Principal is able to take personal charge of the hostel. There is, at present, accommodation for 28 boarders. This is fully taken up, and 13 students are accommodated in two attached messes (one being in a house just outside the college compound, the other in the town), of which, by an informal arrangement involving no expenditure on the part of the college, two of the teachers are Superintendents. In the college hostel all the boarders, except three, belong to the school classes, and there is no Muhammadan boarder, in the attached messes, all the boarders are school students. The second improvement, which is needed, is to replace the rough brick-on-edge floor of the hostel by artificial stone. The third is to provide the boarders with good reading-lamps. At present, they provide their own, in the shape of hurricane lanterns; a very poor light to read by.

23. The charge levied is Rs. 3 a head per month, half being nominally for seat-rent and half for maintenance. With 28 boarders, this provides a monthly income of Rs. 84, which, for ten months, amounts to Rs. 840. The cost of the hostel establishment is Rs. 816 (viz., wages of two cooks, at Rs. 16 each per month, for twelve months; and of three ward-servants, at Rs. 12). Apart from an allowance to the Superintendent of Rs. 20 a month, the hostel is therefore self-supporting. The college continues, however, to make an allotment for the hostel (apart from the Superintendent's allowance) of Rs. 30 a month, this appears to be unnecessary.

23. A laudable attempt has been made to give effect to the recommendations, which were made on the subject, in the last inspection report, by the constitution of a Students' Residence Committee and sub-committees. It is not sufficient, however, to constitute such committees, and define their duties, they must be caused to function, and this they have not yet done. It is understood that every student is now required to submit for approval a proper local guardianship form unless he is living with his parents or in the college hostel.

## DISCIPLINE

24. The Principal, on occasion, is a strict disciplinarian. Several cases of cheating having occurred at the Annual Examination in December 1926, the culprits were fined Rs 10 and detained. More recently, there were cases of brawling, when the Principal offered rustication or a caning as the punishment. The offenders chose the second alternative.

## RECOMMENDATIONS.

25. The following are our main recommendations :—

(1) No effect has yet been given to numerous recommendations contained in the last inspection report; which, so far as appears from their proceedings has never seriously been considered by the Governing Body of the College. Inspection reports, endorsed by the authority

of the University, are not intended merely to be filed, for future reference; and this fact may be brought to the notice of the Governing Body.

(2) The precarious condition of the King Edward Memorial block calls for the prompt and earnest attention of the Governing Body. If the necessary repairs to the building are much longer neglected, the consequences are likely to be extremely serious.

(3) As pointed out in paragraph 9 above, the need for an extension of the playground is urgent. Moreover, the surface is very rough and stony; and the students have made a written representation on the subject, in which they complain that any player who falls is cut and hurt. The ground needs to be ploughed up, and a sufficient top-dressing or new soil applied. There is also need of an additional playground, and it has been proposed to secure a piece of land known as Deviserai, which belongs to the Raja Bahadur of Amawan. It is about a mile from the College; but this is not too far, and every effort should be made to carry out this much-needed improvement.

(4) The building of the Principal's quarters should be taken up without delay.

(Sd.) E. A. Horne

(Sd.) Md. Husain.



# REPORT

ON THE

**Prince of Wales Medical College, Patna,**

for the year 1927—28.

Inspected by Colonel W. S. Willmore, I. M. S., Inspector-General of Civil Hospitals, Bihar and Orissa, Lt Col. C A. Sprawson, I. M. S., Principal of the King Georges' Medical College, Lucknow University and Dr. K. S. Caldwell, Principal of the Science College, Patna University, on March 30th, 1928.

The Governing Body is elected every year by the Government and the following have been appointed for the term of one year from November 1st, 1927

- |  |  |
|--|--|
| 1. The Commissioner of the Patna division. | President<br>ex-officio.                     |
| 2. The Principal of the College.           | Vice-President and<br>Secretary, Ex-officio. |
| 3 The Professor of Surgery of the College  | Ex-officio.                                  |
| 4 The Warden of the College Hostel         | do.  |
| 5. Dr. Pares Nath Chattarji.               |  |
| 6. Mr. Sayid Md. Athar Hossain, M. L. C.   |  |
| 7. Mr. B. N. Misra, Bar-at-Law             |  |
| 8 Babu Mithila Saran Sinha, Wakil.         |  |

A sub-committee consisting of the last 4 members together with the Principal will select candidates for admission. Every effort has been made in the past and will continue to be made in the future to meet the claims of the various communities for a reasonable proportion of admission whilst bearing in mind the previous academic attainments of the candidates. The total number of admissions during any one year has been fixed at 40.

2. Generally speaking the buildings afford suitable accommodation to the various departments

The following recommendations are made.—

A. The building in which the departments of Organic Chemistry, Biology and Pharmacology are housed is very cramped. A special lecture theatre is required for this block. There is ample space to the south of the building and a theatre erected here would improve its appearance. If possible, a few rooms should be added to the block to allow these important departments to expand and to enable their activities to be carried out more comfortably.

This proposal might be taken up after the question of the provision to be made for pre-medical studies has been finally decided.

There are no lavatories to the block and these are almost a necessity.

B. The new Physiology block is being built, it will constitute a great advance. That part of the building which is at present occupied by the Public Health Department is badly required and the University

might well press Government to provide for the Public Health Laboratories elsewhere to enable the Medical College to take over these.

C. The Hospital Venereal block lies to the west of the pre-medical subjects block. It is too near these junior laboratories and could advantageously be moved to some other site.

D. The College site in general is bare and uninviting. The plots of land lying between the scattered buildings should be converted into lawns and small shrubs and trees planted to keep down dust and to give the surroundings a more pleasant appearance.

E. The number of menials responsible for cleaning the laboratories and their surrounding lecture theatres and drains is not adequate. The question of adding to their numbers should be considered.

F. The inspecting officers considered that in many of the rooms the ventilation was inadequate. This results not only in vitiation of air but also in unnecessary heat. Such conditions prevent both teachers and students from giving their best.

The question of improvement of ventilation requires systematic consideration.

G. The departments of Physiology and Pathology are very cramped in their present quarters.

H. At the time of inspection the Sceptic tank and filter beds were not functioning.

The immediate attention of those responsible should be called to this serious nuisance.

3. The Staff—There are few changes from the preceeding year. Lt. Col., H. R. Dutton, I. M. S., Principal and Professor of Medicine was on leave on medical grounds in continuation of the College vacation for a period of about six months. During his absence Major R. R. M. Porter, I. M. S., Professor of Surgery acted as Principal of the College and Major A. N. Bose Professor of Pathology as Professor of Medicine.

During the year there have been two additions to the teaching staff

Dr. T. N. Seth—Lecturer in Bio-Chemistry

Mr. M. N. Rudra—Demonstrator in Organic Chemistry.

The following transfers have been made during the year :—

Dr. G. B. Sahay, Assistant to Professor of Anatomy has been transferred to Nawadan Dispensary in Gaya.

Dr. S. M. Ghoshal, Demonstrator of Anatomy has been appointed as Assistant to the Professor of Anatomy in place of Dr. G. B. Sahay transferred.

Dr. G. K. Ghosh, M. B., of Aurangabad Sub-divisional dispensary in Gaya district has been appointed as Demonstrator of Anatomy in place of Dr. S. M. Ghosal appointed as Assistant to Prof. of Anatomy.

Dr. Shidheswar Prasad, M. B., a supernumerary duty officer at the

Patna General Hospital has been appointed temporarily as Assistant Surgeon attached to Pathological Museum in place of Dr. Sheonandan Prasad Sinha transferred.

Dr. Badri Narayan Prasad, Assistant to the Professor of Physiology, has been transferred as Teacher in Physiology at the Orissa Medical School.

Dr. Basudeva Narayan, Demonstrator of Physiology has been appointed as Assistant to Professor of Physiology in Place of Dr. Badri Narayan Prasad transferred

Dr. Bhubendra Nath Banarji has been appointed as temporary Assistant Surgeon and posted here as Demonstrator of Physiology in place of Dr. Basudeva Narayan appointed as Assistant to Professor of Physiology.

All the Professors—except officers of the I. M. S. and 1 Lecturer (Dr. T. N. Seth)—have been appointed on 5 years' contract.

The demonstrator in Organic Chemistry has also been appointed for 5 years at present.

Demonstrators and Assistant to Professors ( of Assistant Surgeon class ) are transferable after 3 and 5 years respectively

A statement showing names and qualifications of teaching staff is attached.

4. There are good residences for the Principal and all the Professors with the exception of the Professor of Surgery for whom a residence is under construction There is a students' hostel.

5. The Library is large, well-lighted and well equipped. Practically all of the important current journals are taken. Many back numbers and reference books are necessary if full facilities for research are to be provided

The number of books in the library on the date of inspection was 1083.

The number last year was           ..           ...           ... 1033.

The number of journals is           ...           ...           ... 47.

The instrument and appliances are adequate in all departments.

During the past year a large number of microscopes have been provided and the numbers now allow every student a separate instrument to work with.

6. The regulations of the University are being followed as regards the courses of study, the number of lectures delivered on each subject, the general routine of work and facilities for exercises and tutorial assistance.

The students are permitted to use the library daily from 10 to 4 and to take out books on loan.

7. The staff is well qualified and has been carefully selected for the work entrusted to each member.

More assistance is necessary in the case of the Pathology depart-

ment and in the clinical teaching of Medicine and Surgery. There are proposals before Government for the augmentation of the staff in order to meet the requirements of the General Medical Council. The most important of these is for the appointment of whole time professors in Ophthalmology and Gynaecology.

8. We have examined the College registers and they appear to be kept accurately by those responsible. This being the only Medical College the question of the transfer rules does not arise.

9. The average roll numbers and daily attendance is shewn below:—

	No. of students monthly average.	Daily attendance monthly average.
1926-27	1799	154 2
1927-28	183 7	164 6

10. The results of the University Examinations are shewn in tabular form below:—

Examina'tion	No. of students monthly average.		Daily attendance monthly average.	
	No. appeared.	No passed.	No. appeared	No passed.
	March 1927.		December 1927.	
1st M. B., B. S. ...	10	6	36	26
	March 1927.		October 1927	
2nd M. B., B. S. Part I	51	23	25	21
2nd M. B., B. S. Part II	13	7	13	6
Final M. B., B. S., Part I	30	17	14	5
Final M. B. B. S. Part II	16	5	15	6

11. The state of discipline as ascertained from the Principal and by inspection of the punishment books appears to be excellent. There have been no serious delinquencies during the past year.

12. The College is not well supplied with playing grounds. It is hoped to provide a new one in connection with the acquisition of ground for the projected new hostel. There is a fair amount of athletic spirit among the students who hold annual sports and participate in the local football, hockey and tennis tournaments. The common rooms are not well equipped with appliances for indoor games. Theatrical performances are occasionally held and a stage can be extemporised in the Examination Hall.

13. There are no College clubs such as literary, debating etc. One reason for this is probably the proximity of the Bihar Young Men's Institute to the Hostel.

14. There is a fine hostel well placed opposite the main hospital building. It is, however, too small for the College. By accommodating 3 students instead of 2 in each room 140 students are accommodated.

The ultimate normal number of students excluding failures will be 240.

Temporary arrangements are being made to provide temporary lodgings for students who cannot be given seats in the hostel. They will be under the Inspector of students' residences. There is a Warden for the Hostel.

A proposal for the construction of another hostel to accommodate 110 is under consideration and an excellent site close to the College will probably be available.

15. We have inspected all the Accounts Registers and all those required by the rules are maintained.

The students' Conduct register should be maintained in a larger book and so arranged as to give a better idea of the offences and punishment inflicted.

The present Cash book could be improved to show classification of receipts and expenditure.

We think some form of Card index should be maintained which would show each student's school history. This should include examination results, his conduct, etc , etc.

The book containing the proceedings of the Governing Body is very inadequately maintained.

16. The office establishment appeared to be inadequate. It consists of the following—

1 Head clerk	90-5-125
1 Second clerk	60-2-80
2 Clerks	30-2-50

We consider that a properly qualified accountant is necessary for an institution of this size.

17. General remarks—This is the second inspection report and we draw attention to the report of February, 1925, which contains further information which we have not considered it necessary to repeat.

The College is now in full running order and we consider the administration very satisfactory. We were especially pleased to note the research in progress in the Physiology and Pathology departments and on a smaller scale in the Pharmacological and Anatomical departments

We consider that every effort should be made to conform to the requirements of the General Medical Council in order that the students who pass out of this College will have the very considerable benefits which will ensue from recognition. We understand that Government is giving its special attention to this question.

**List of staff of the Prince of Wales Medical College, Patna.**

		Present Pay.	Special pay, com- pensatory allow- ance.
1. Principal,	Lt. Col. H. R. Dutton, M. R. C. P., ( Lond. ) M. R. C. S., (Eng.) D. T. M. & H (Camb.), I. M. S. Overseas pay £ 30 p. m. ... ..	1700	250
2. Professor Medicine.	Professor Lt. Col, H. R. Dutton, I. M S, ... ..	...	250
3 Surgery.	Major R. R. M. Porter M. C , M. A., M.B., F. R. C. S., (Ed.) I M. S. Overseas pay £ 30 p. m. ... ..	1100	250
4 Obstetric Medicine.	Professor Lt. Col., D. Coutts, M. B., I. M. S. (and Civil surgeon Patna). ... ..	Part time	250
5. Pathology	Professor Major A. N. Bose, M. B. E., M. B., (Cal.) M. R C. P., (Lond. and Edin) D. T. M. & H., (Camb.), I. M. S; Overseas pay Rs. 300 ... ..	1200	
6. Pharma- cology.	Professor T. N. Banarji M. B., (Cal.) M. R C. P., (Lond. and Edin) D. T. M. & H. (Lond.)	1200	...
7. Anatomy.	Professor H. Hyder Ali Khan F. R. C S. (Edin) M. R. C. S. (Eng) ... ..	1250	150
8. Physio- logy.	Professor E. W. H. Cruickshank M. D (Aber.) D Sc. (Lond); Ph. D (Camb.) & M R. C P. (Lond.) Overseas pay £ 25 ... ..	1250	150
9. Biology.	Professor S. S. Choudhury M. A , B Sc. ( Allahabad) M. Sc. (Luck.) ... ..	350	...

**LECTURERS.**

Forensic Medicine.	Assistant Surgeon Dr. Jafar Hassan, Police Surgeon, Patna.	50 lectures @ Rs. 32 per lecture (Part time).
Hygiene & Public He- alth.	Major S. L. Mitra, Allax. M. B., Ch B (Edin.) B. Sc, D. P. H., (Edin. & Glasg) D. T. M. & H, (Edin.) J. M S. Assistant Director of Public Health, B & O.	30 lectures @ Rs. 32 per lecture (Part time).
Diseases of Eye, ear, nose and throat.	Raj Bahadur Dr. S. N. Ghosh, Assistant Surgeon.	50 lectures @ Rs 32 per lecture (part time).

## LECTURER.

		Present pay.	Special pay	Compensatory allowance.
Mental diseases.	The Superintendent, Indian Mental Hospital, Kanke, Ranchi.	20 lectures	@ Rs. 32 per lecture	(Part time).
Organic Chemistry.	Rai Sahib Dr. K. N. Bagchi B. Sc., M. B., D. T. M (Cal.) F. C. S	9 months	@ Rs. 150 per month	(Part time).
Radiology.	Dr. P. B. Mukharji, B. Sc., M. B., (Cal.) F. R. C. S., (Edin) D. M R E. (Camb.)	6 lectures	@ Rs. 32 per lecture	(Part time).
Bio Chemistry.	Dr. T. N. Seth, M. Sc., Ph. D., (Camb.)	500		

## DEMONSTRATORS.

Biology Botany.	Mr A. C Ghosh, B. A (Cal) M Sc (Agric Corn.)	185		
Zoology.	Mr. M. A. Majid, M. Sc (Luck.)	185		
Organic Chemistry.	Mr. M N Rudra, M. Sc	170		

## ASSISTANT TO PROFESSOR.

Pharmacology	Assistant Surgeon Dr. P C. Roy, L. R. C. P. and S (Edin.) L. R. F. P. and S (Glas).	375	150	75 Hostel allowance.
Physiology.	Assistant Surgeon Dr. B. N. Prasad, M Sc., M. B., D. T. M. (Cal.)	225	150	75 non-practising allowance
Anatomy.	Dr. S. M. Ghosal, M. B. (Cal.)	200	150	75 do.
Pathology.	Assistant Surgeon Dr S. K. G Dastidar, M B., D. T. M. (Cal)	225	150	100 Provincial laboratory allowance.

## DEMONSTRATORS (MEDICAL MEN).

Physiology.	Assistant Surgeon Dr. 200	75	Compensatory allowance.
	B. Narayan M. Sc.,	50	non-practising allowance.
	M. B (Cal)		
Anatomy.	Assistant Surgeon Dr. 200	75	Compensatory allowance.
	G. K. Ghosh, M. B.	50	non-practising allowance
Pathology.	Assistant Surgeon Dr. 200	75	Compensatory allowance.
	S. P. Varma, B. Sc ,	50	Provincial laboratory allowance.
	M. B. (Cal.)		
Pathological Museum.	Assistant Surgeon Dr. 200	75/-	allowance.
	Sidheswar Prashad,		
	M. B (Cal.)		

# Report

ON THE

**Tej Narayan Jubilee College, Bhagalpur**

( Science Side ) for the year 1927-28

*Inspected by Dr. K. S Caldwell on April 10, 1928.*

The Science laboratories of this College were constructed according to plans drawn by Dr. Caldwell in the year 1913 and were designed for the purpose of teaching the subjects of Physics & Chemistry up to the Intermediate Science standard to classes of 32 students in each year, i.e., 64 students in all.

The actual number of Science students now on the rolls of the College is as follows :—

I. Sc.	1st year—49	}	115
	2nd year—66		
B Sc.	3rd year—9	}	24.
	4th year—15.		

The only extra accommodation over and above that provided for in the 1913 plans is supplied by 3 rooms measuring 35' x 25', 30' x 25' and 35' x 30', which formed part of the Arts block and are now used by the Physics Department as a lecture theatre, preparation room and B. Sc. laboratory respectively, and a workshop in a separate building specially constructed for the purpose.

It is clear therefore that either the original plans were extravagant in the matter of accommodation or the present building is now overcrowded. The original plans were designed as part of a scheme for improving the quality of the science teaching throughout the province. According to this scheme the B. Sc. and post-graduate classes were, on account of expense, to be concentrated in Patna (& in Cuttack for B. Sc. classes) while the other colleges were to teach science up to the I Sc. stage only.

It was, however, realised that the I. Sc work was at least as important as the more advanced work and required the best qualified staff available. It was also realised that such a staff, even if obtained could only remain efficient if given proper facilities for continuing the study of the subject.

The laboratories were therefore planned with the idea that in these I Sc laboratories both students and staff should work under conditions as good as those at the central university and that the general quality of the work should be improved uniformly throughout the province.

Owing to the long delay in constructing the Science laboratories at Patna and the consequent demand for accommodation in B. Sc. classes these ideals have been forced into the background. The result has

been an increase in the quantity at the expense of the quality of the work done. The chemical staff laboratory has been converted into a B. Sc. laboratory for students, accommodation in the I. Sc. chemical laboratory has been more than doubled by the simple process of partitioning the bench cupboards, cutting the doors in half and using the rubbish box spaces as extra cupboards. The result is that the chemical staff could not do serious work if it wished to and the I. Sc. students cannot learn the fundamental lessons connected with the proper care of apparatus and clean and accurate methods of work. Even under these conditions it is possible to teach students to pass the I. Sc. examination, but it is not possible to lay a proper foundation for further scientific work nor will it be possible to raise the standard of our I. Sc. work and therefore of the science teaching as a whole.

The chemical laboratory staff especially is working under very discouraging conditions. These conditions will be improved when the rooms formerly occupied by the workshop and still are adequately fitted up as staff laboratories, the work is in progress.

Now that the new laboratories at Patna are nearing completion and will be in full working order next session it is time to take up the question of the Bhagalpur laboratories and draw up definite plans either for reducing the number of I. Sc. students or extending the buildings. The extension of teaching up to the B. Sc. standard in a laboratory designed for I. Sc. work necessitates not only the provision of extra room for B. Sc. practical work but also increased accommodation in store-rooms and lecture preparation rooms. This appears to have been overlooked. The lecture preparation room remains as before and the store-room space is actually less as one of the chemical store-rooms has been converted into a Physical Chemistry laboratory, the store being transferred to the original Physics lecture preparation room. The result is lack of sufficient store-room space and a tendency for lectures to be illustrated on the blackboard rather than by means of experiment.

When the laboratories were designed for I. Sc. work the possibility of further extension for B. Sc. classes was not overlooked. The general idea was that for this purpose an additional lecture theatre with a preparation room would be constructed either north or south of the existing one and the necessary extra practical rooms would be added either by extending the wings or enclosing the courtyards on the east and west. These demands have to a certain extent been met by taking over the three rooms in the Arts block by the Physics side for use as a lecture room, preparation room and B. Sc. laboratory, by enclosing verandahs and by constructing a separate workshop whereby the room in the main laboratory originally designed as a workshop has become available for other purposes on the Chemical side. This with careful planning would have made a fairly satisfactory arrangement had there not been the large increase in numbers in the I. Sc. classes.

If the present numbers are to be continued additional constructional work is necessary and the College authorities should be asked to draw up and submit plans for this purpose.

The Inspector's general ideas concerning the arrangement of the rooms and the necessary extensions assuming that the Physics side is to continue in occupation of the rooms in the Arts block are as follows:—

#### CHEMISTRY.

##### *Lecture Theatre*

To be used solely for Chemistry lectures. At present three

English lectures are also held here. According to the time table 19 chemistry lectures are delivered *viz.* I Year—3, II, Year—4, III Year—6. IV Year—6. In my opinion 4 lectures in each year are sufficient all of which should be experimental. This is possible, given the necessary preparation room accommodation and whole-time use of the lecture theatre. Under present conditions it is quite impossible to conduct the Chemistry Lectures in a proper manner

#### *Lecture Preparation Rooms.*

Both the present preparation room and the room originally designed as a preparation room for Physics and now used as a Chemical store-room should be used as preparation rooms for Chemistry lectures and suitably equipped for this purpose. If the lectures are properly given these rooms will be fully utilised.

#### *Store-rooms.*

Both the original store-rooms for apparatus and chemicals should be used for the purpose for which they were originally designed, suitable extensions being made to the shelf space.

The original still room now used as the Professors' Room and the original workshop now known as the Combustion room should be used as a staff laboratory and study. A combustion furnace could be fitted up in one of these rooms.

#### *Extra accommodation required*

A second I. Sc. laboratory sufficiently large to accommodate the number of students over and above that for which the original I. Sc. laboratory was designed.

A B Sc laboratory sufficiently large to accommodate the numbers it is decided to take, the present B. Sc. Laboratory being used for Physical Chemistry — or, if the present number in the B. Sc. class are not to be exceeded the B. Sc. laboratory might remain as it is and an additional room 20' x 20' be built for Physical Chemistry.

I do not consider that a separate lecture theatre for B Sc work is necessary

As I have no plan showing all the buildings on the site I can make no definite suggestions as to the best method of extending the existing building for this purpose, but I suggest that by extending the west wings and building across the west end of the courtyard suitable arrangements could be made.

### PHYSICS.

Assuming that the Physical side is to continue in occupation of the three rooms in the Arts block very little extra accommodation is required if the present numbers are not to be exceeded.

I suggest that present needs could be met by extending the verandahs on the East giving increased accommodation for electrical work on the North-East and extra room for staff work on the South-East. I do not, however, think it necessary that the accommodation need be such that the whole B. Sc. class should be able to do the same kind of practical work at the same time.

It will be noticed that I have made no suggestion for separate rooms for Science libraries. In a compact building of this kind where the Arts and Science Blocks are close together there is little inconvenience involved in using the general College library for the purpose, a selected number of books to which reference is frequently made being kept in bookshelves in the Professors' Rooms.

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In addition to the above general remarks the following may be added on points of detail

### CHEMISTRY.

**Water Supply:**—The present arrangement is not very satisfactory. When funds permit arrangements should be made for a suitable water tower and pump.

#### *Distilled Water :*

A new plant will be necessary shortly.

#### *Lecture theatre.*

There is no arrangement for darkening the room when required.

#### *Apparatus.*

The following apparatus is required:—

1. One Induction Coil,
  2. One potentiometer,
  3. One galvanometer,
  4. One resistance box,
  5. One thermostat, electrically controlled.
  6. One analytical balance with weights,
  7. Lecture diagrams.
- 

### LIBRARY.

The following books might be purchased —

1. Comey—Dictionary of Chemical Solubilities,
2. Mellor—Treatise on Inorganic Chemistry,
3. Mulliken—Identification of organic compounds
4. Ostwald—Physico-Chemical measurements,
5. Beilstein—Handbuch der Organischen chemie,
6. Richter—Lexicon.

Numbers 5 & 6 are only useful in connection with research work in organic chemistry and need not be purchased until there are facilities for such work.

### WORKSHOP.

In the original design the workshop was situated in a central position convenient for the use of both the Chemical and Physical laboratories, the idea being that a workshop is equally necessary for both. With the removal of the workshop to a separate building the custom

seems to have grown up of regarding the workshop as part of the Physics laboratory, little or no chemical work being done there.

There is at present only one mechanic whose time is largely taken up in the power house. There is certainly a case for the appointment of a second mechanic on whose services the Chemistry Department should have first claim. It should then be possible to carry out a number of minor improvements and alterations on the spot.

## PHYSICS.

### *Apparatus.*

The following additional apparatus is required.

				Nos. required.
Ammeters	...	...	...	2
Voltmeters	...	...	...	2
Galvanometers	...	...	...	2
Post-office boxes	...	...	...	3

### *Library.*

There are no back numbers of journals on Physics. The reading of original papers is an important part of the training of students and suitable sets of the Philosophical Magazine and Science Abstracts, Part A, should be purchased if possible.

## APPARATUS—GENERAL.

There is a tendency in this College & elsewhere to regard Chemistry & Physics as two water-tight compartments as regards apparatus. There are certain advantages in this arrangement in connection with the responsibility for the care of apparatus, but it may easily lead to unnecessary duplication and expense especially, in the present case where both laboratories are conveniently situated in the same building. The more expensive kinds of apparatus not in constant use should be freely shared by both departments.

Both laboratories have applied for a special grant for projection apparatus. The purchase of one, to be shared by the two departments, is recommended.

There should also be one good vacuum pump in the laboratories.

### NOTE OF DISSENT ON PARA 3, 1st SENTENCE, ON PAGE 2.

I disagree with Dr. Caldwell's remark that the laboratories in the Science College being almost completed the T. N. J. College should revise its plans. I think any opinion on the laboratories and their working should be based on the adequacy or otherwise of the arrangements in the college. I feel the arrangements which have been allowed by the University Inspectors' Committee and the Syndicate should not be set aside because a particular college has been improved and expanded.

Sd. D. N. SEN.

3-8-28.

## PATNA UNIVERSITY.

## FORM C.

*Abstract of Expenditure on Science.*

ANNUAL GRANT. (1926—1927)

Apparatus, Chemicals and Contingent for Physics Laboratory and Workshop.

Recurring	...	...	Rs. 3,000/-
Non-Recurring	...	...	Rs. 1,116/-
Total	..		<u>Rs. 4,116/-</u>

## EXPENDITURE.

Chemicals	..	...	...	Rs. 87/-
Apparatus	...	...	...	Rs. 2,887/-
Workshop	...	...	...	Rs. 281/-
Contingent expenses	...	...	...	Rs. 845/-
Total	...			<u>Rs. 4,100/-</u>

## FIRMS DEALT WITH.

Name of Firm.	Cost of Goods supplied.		
Messrs Scientific Inst. Co. Ltd.	...	...	Rs. 1,752/-
„ Adair Dutt & Co. Ltd.	...	...	Rs. 639/-
„ T. E. Thomson & Co. Ltd.	...	...	Rs. 228/-
„ Electrical Trading Co.	...	...	Rs. 40/-
„ W. Leslie & Co.	...	...	Rs. 5'8/-
„ B. N. Baijal & Co.	...	...	Rs. 6/-
„ Lalji Saha & Sons.	...	...	Rs. 24/-
„ F. E. Becker & Co.	...	...	£ 20/

Dated 14-12-1927.

## PATNA UNIVERSITY.

## FORM C.

*Abstract of Expenditure on Science*

ANNUAL GRANT. (1925—1926)

Apparatus Chemicals and Contingent for Physics Laboratory and Workshops.

Recurring	...	...	Rs. 3,000/-
Non-Recurring	...	...	Rs. 1,750/-
		Total	<u>Rs. 4,750/-</u>

## EXPENDITURE.

Chemicals	...	..	...	Rs. 329/-
Apparatus	...	...	...	Rs. 2,571/-
Workshop	...	...	...	Rs. 411/-
Contingent expenses	...	...	...	Rs. 872/-
		Total		<u>Rs. 4,183/-</u>

## FIRMS DEALT WITH.

Name of Firm	Cost of Goods supplied.		
Messrs. Scientific Inst. Co. Ltd.	...	...	Rs. 1,127/-
„ Adair, Dutt & Co. Ltd.	...	...	Rs. 156/-
„ F. E. Becker & Co. ..	...	...	£ 64/-
„ T. E. Thomsons & Co. Ltd.	...	...	Rs. 395/-
„ India School supply Depot	...	...	Rs. 30/-
„ Electric Trading Co.	...	...	Rs. 30/-
„ B. K. Dutta & Co. ...	...	...	Rs. 31/-

## PATNA UNIVERSITY.

## FORM D.

Return of the Pay, Qualifications, etc., of the Teaching Staff.

Name	Post, Academic Qualifications (Degrees, class and year).	Period of Service in this College (Years and Months )	Pay.	REMARKS.
S. N. Banerji.	Professor of Physics M. Sc. ( Class II ). 1918.	6 years, 5 months.	250/-	
S. C. Pramanik.	Lecturer in Physics M. Sc. ( Class II ). 1921.	4 years, 5 months.	155/-	
P. B. Gupta.	Lecturer in Physics M. Sc. ( Class II ). 1922	4 years, 5 months.	155/-	
U. P. Choudhary.	Assistant Demonstrator, in Physics B. Sc. Hon. ( Class II ) 1920.	3 years, 4 months	80/-	Appointed in a pos created in 1927.

## FORM E.

Particulars as to *changes in the teaching staff* since the date of the last Inspection.

Name of officer relieved ( and post which he held )	Date of his leaving.	Reason for his leaving	Name of relieving officer.	Date of his joining.
N change				

## PATNA UNIVERSITY

FORM F

A detailed return of *Weekly Curriculum* in all subjects

## SUBJECT PHYSICS ( 1927-28 )

Class	Name of teachers	No of lectures	No of Practical Periods	No of students in class	No. of Practical batches.	REMARKS
4th Year	S N Bannerji, Esq	2	6)	16	1	
	S. C Pramanik, Esq	2	0			
	P B Gupta, Esq	2	0)			
3rd Year	S. N Bannerji, Esq	0	0)	9	1	
	S. C Pramanik, Esq.	2	0			
	P. B Gupta, Esq	3	6)			
2nd Year	S N Bannerji, Esq	3	0)	64	2	
	S C Pramanik, Esq	0	4)			
	P B Gupta, Esq	3	4)			
1st Year	S N. Bannerji, Esq	3	0)	49	2	
	S. C Pramanik, Esq	2	8)			
	P B Gupta, Esq	0	0)			
4th Year		( 1926—27 )				
4th Year Pass.	S N Bannerji, Esq	2	6)	10	1	
	S. C Pramanik, Esq					
	P B Gupta, Esq	2	)			
3rd Year						
3rd Year Pass.	S C Pramanik, Esq	2	.)	8	1	
	P B Gupta, Esq	2	6)			
2nd Year	S N. Bannerji, Esq	2	2)	77	2	
	S C Pramanik, Esq	2	4)			
	P B Gupta, Esq.	.	4)			
1st Year	S N. Bannerji, Esq	2	...)	49	2	
	S. C. Pramanik, Esq.	2	8)			



**PATNA UNIVERSITY.**

**FORM D.**

Return of the Pay, Qualifications, etc of the Teaching Staff

Name.	Post, Academic Qualifications (Degrees, class and year)	Period of Service in this College (years and months.)	Pay	Remarks.
Prof. H. L. Das Gupta	Professor of Chemistry. M A. ( class II ) 1911	15 years 6 months	375/-	
" I. B Biswas.	Lecturer in Chemistry. M Sc. ( class II ) 1921 Special subject Physical chem	4 years 5 months	155/-	
" R R Bhattacharva.	Lecturer in Chemistry. M Sc ( class II ) 1924 Special subject organic	3 years 5 months	140/	
Mr S N Banerji	Demonstrator in Chemistry B Sc with distinction 1920	3 years 4 months	80/-	
" G C Misra	Laboratory Assistant in Chemistry Read up to B A with Mathematics and Chemistry	9 years 5 months	55/-	

**FORM E**

Particulars as to *changes in the teaching staff* since the date of the last inspection

Name of officer relieved (and post which he held)	Date of his leaving	Reason for his leaving.	Name of relieving officer	Date of his joining.
Mr. P L Chatterji, B A, Demonstrator in Chemistry.	Jan 1924	Illness, leading to death.	..	
Mr. S. Sahaya Guha Sircar	July, 1924	... .	Mr. R R Bhattacharya, M Sc.	8th August, 1924.

## PATNA UNIVERSITY.

## FORM F.

A detailed return of *Weekly Curriculum* in all subjects.

## SUBJECT CHEMISTRY, 1927-28.

Class.	Name of teacher.	No. of lectures	No of tutorial (or practical) period.	No. of students in class	No of tutorial (or practical) patches	Remarks.
4th year Honours.						
4th year Pass.	Prof. H Dass Gupta.	2	...			
	" I. B. Biswas.	1	6	15	1	
	" R. R. Bhattacharya	3	...			
3rd year Honours.						
3rd year Pass.	" H. Das Gupta.	3	...			
	" I. B Biswas	1	6	9	1	
	" R. R Bhattacharya	2	...			
2nd year.	" I. B. Biswas.	2	...			
	" R. R Bhattacharya.	1	10	66	3	
	Mr. S. N. Banerji.	...	15			
1st year.	Prof. H. Das Gupta.	3	8	49	2	
	Mr. S. N Banerji.	...	8			

# Report

ON

## Ravenshaw Law Classes at Cuttack for the year 1927-1928.

Inspected by Mr S S Alam

*Introduction*—It would considerably simplify matters and at the same time make the report for the present year intelligible if a brief history of the Law classes attached to the Ravenshaw College were set out

The teaching of Law at Cuttack commenced in the year 1920 with the opening of the 1st year Law Class with one lecturer, as a part of the Ravenshaw College under the control of the Principal of that College. In the succeeding years 2 other classes *viz*, Intermediate and Final were gradually opened. In the year 1923 an additional Lecturer was appointed who with the previous incumbent managed the 3 classes. The general superintendence still continues in the Principal as before, this is the position as I understand up to the year under report.

*Administration*—(1). The Governing Body for 1928-1929 consists of the following 7 members. —

1	Divisional Commissioner	<i>President</i>
2	The Principal of the College	<i>Secretary</i>
3	S C Tripathi Esqr	} <i>Representing the teaching staff</i>
4	B K Chatterjee Esqr	
5	Raja of Kanika	} <i>Non-official members</i>
6	L Mahanti Esqr.	
7	Syed Tajammul Ali Esqr	

(2) There is no separate Governing Body for the Law classes

2. The duties and powers of the Governing Body are the same as in other colleges and as laid down in the articles 122 and 123 of the Education Code.

3. The number of meetings of the Governing Body held since 1920, the year the Law Classes came into existence, are as follows. —

1920-21	. 7 meetings
1921-22	. . 5 meetings
1922-23	. 8 meetings
1923-24	. 3 meetings
1924-25	. 4 meetings.
1925-26	. 4 meetings
1926-27	. 3 meetings
1927-28	. 5 meetings.

4. There is a clerk in class II of the Ministerial Service who, as it appears from the statements supplied by the Principal, "does part of the work of the college." I take this to mean that there is no clerk solely for the Law classes. The accounts of the Law classes, fee receipt books, contingent accounts etc are maintained in the General

College office by the college clerks as part of the general college accounts.

*Library*—The Library contains 1467 volumes of Law Books. This includes the Law Reports as well. There is a separate annual grant of Rs. 500 for the Law classes. There is no separate Library for the Law Classes but the Law Books form a part of the College Library. The following statement will show the number of books added each year since the session 1923-24 excluding the Law Reports

1923-24	97
1924-25	18
1925-26	15
1926-27	63
1927-28	63

The number of Law books issued to students are as follows —

1923-24	195
1924-25	317
1925-26	300
1926-27	301
1927-28	143

The Law Lecturers take out books on slips of papers which are returned to them on their returning the book. No other record is kept of the number of books issued to them. The approximate number of books taken out by them is 300 per year. It would be better to keep in a register a record of the books lent to the Lecturers as is done in the case of loan of books to students. The number of books issued in the year under report is small as compared with the number in any previous year. But it must be noted that law reports and reference books numbering about 700 cannot be taken out by students but may only be read in the library, and in 1926, a restriction was also placed upon the issue of books of more than one volume. The latter number about 300.

*The Teaching Staff*—Full particulars as regards the academic qualifications, length of service and pay of the teaching staff are given in Appendix II.

The following changes have taken place since the creation of the Law classes in the year 1920. Mr S S Alam, was appointed in the year 1920 as a whole time Professor and continued till April, 1923. On his appointment as Vice-Principal, Patna Law College, he was relieved by B Charu Chandra Ganguli who worked for 3 months from the 9th July, 1923 to the 9th October, 1923 and was relieved by Hafiz Shamsuddin Ahmad who joined on the 5th November, 1923. In April 1927 he was transferred to Patna College and was relieved by B Hari Das Dutta, whole-time temporary lecturer in Law. B Hari Das Dutta was relieved by Babu Suresh Chandra Chakravarti who joined on the 21st July, 1928, and continues to hold the appointment. Babu Chintamani Acharya was appointed in the year 1923 as part-time lecturer and continues to hold that appointment.

*Curriculum and Teaching*—The work done by each lecturer of Law classes is shown in Appendix III. B Suresh Chandra Chakravarti, a whole-time Professor, and B Chintamani Acharya, a part-time Lecturer, are each doing 17 periods of work, both general and tutorial.

From an examination of the time-table it would appear that 12 periods of general lectures per week is being given in each of the

**Preliminary and Final Law Classes** Considering that there are 5 subjects in each of these classes and each subject is fairly comprehensive it seems difficult to understand how it is possible to cover the whole course in each of the subjects within a year. It has to be remembered also in this connection that at least 12 Moot Courts have to be held in each subject excepting Jurisprudence and Roman Law, in each session. Only 10 periods per week of tutorial work is being done in both the classes. It seems that the Preliminary class for tutorial work is split up into three groups and the Final into two. Each group receives two tutorial lectures per week. Having regard to the fact that there are 5 subjects in each class the tutorial work seems insufficient. Unless it is feasible to have a larger number of tutorial periods, it would be better to devote the whole time to general lectures so as to fairly cover the entire course. It is, however, desirable that the staff should be strengthened so as to allow of an adequate number of tutorials being arranged. It would perhaps be better, considering the negligible quantity of tutorial work that is done, to dispense with it altogether and devote that time to the general lecture so as to enable the lecturer if possible to cover the course.

The following statement will show the number of general lectures in each subject per week

#### PRELIMINARY

Jurisprudence	.	3 a week
Criminal Law		2 a week
Roman Law		3 a week
Hindu Law		2 a week
Mohammadan Law		2 a week
	Total	12 a week

#### FINAL

Civil Procedure		3 a week
Equity		2 a week
Land Tenure		2 a week
Contract		2 a week
Transfer	.. ..	3 a week
	Total	12 a week

The distribution of lectures over the various subjects in both the classes seems somewhat disproportionate, e.g., in the Preliminary class 3 periods per week are given to Roman Law while only 2 periods to Hindu Law and Criminal Law which are much more comprehensive subjects. The number of lectures per subject should be the number prescribed in the Law College, viz

#### PRELIMINARY

Jurisprudence		3 per week
Roman Law	.	3 per week
Hindu Law	..	6 per week
Mohammadan Law	..	3 per week
Criminal Law	...	3 per week
	Total ..	18 per week

## FINAL

Land Tenures	...	3 per week
Equity	..	3 per week
Civil Procedure	..	3 per week
Transfer	..	6 per week
Contract	..	3 per week
Total	..	<u>18 per week</u>

The periodical examinations are being held three times during the session but they are very poorly attended. It would be better to substitute regular written exercises during the course of the year for the Examinations

6. There is no Sub-committee of the Governing Body to audit the college accounts, the audit is done by a member of the Governing Body

7. Particulars of income and expenditure will be found in Appendix I (a) and I (b)

8. The classes are held in the morning from 7-15 to 9-45 and two rooms in the Ravenshaw College are utilised for the purpose

*Numerical Strength*—The total number of students on the rolls on the day of inspection was 66 viz, 22 in the Final and 44 in Preliminary classes. No student has been refused admission either this year or in the previous years. The number of students admitted in each session since 1920 is

Year	Preliminary	Intermediate.	Final	Total
1920-21	12	Nil	Nil	12
1921-22	2	8	Nil	10
1922-23	26	7	1	34
1923-24	40	22	6	68
1924-25	36	32	20	88
1925-26	35	1	65	101
1926-27	37	Nil	31	68
1927-28	26	Nil	33	59
1928-29	45	Nil	24	69

The following statement will indicate the number of students on the roll on the 31st August of each year

Year	Preliminary	Intermediate	Final	Total.
1920-21	12	Nil	Nil	12
1921-22	7	2	Nil	9
1922-23	26	8	1	35
1923-24	38	22	6	66
1924-25	36	22	19	87
1925-26	30	Nil	Old 27 New 30	87
1926-27	27	Nil	31	58
1927-28	14	Nil	29	43
1928-29	45	Nil	24	69

The number of students who combined Law with M A in 1926-27 was 15 and in 1927-28 was 14

*Collegiate Life*—As already indicated the Law classes form part of the Ravenshaw College and the students belonging to these classes take part in the activities of the college

*Residence of Students*—The following statement sets out the details regarding the residences of students reading in the Law classes

	Preliminary	Final.
No of students living in hostels ..	13	10
No of students living with parents ..	11	1
No of students living under guardians	21	13
Total ..	45	24

*Discipline*—The discipline is quite satisfactory

*Results of University Examinations*—The results of University Examinations for the B L degree are given in Appendix VI The results on the whole are satisfactory

APPENDIX 1 (a)

Return of Income Receipts.

Year	Opening balance	From endowment.	From the funds of management	Fee Income	Government & other grant		Other sources including subscription	Total
					For capital expenditure	Recurring.		
1.	2	3	4	5	6	7	8	9
19262-7.			.	6485	178	.	...	6663.
1927-28				529 <sup>c</sup>	1663	..		6958

APPENDIX 1 (b)

Return of Finance Expenditure.

Year	2	3	4	5	6	7	8	9	10	11.	Total.
	On teaching staff	On clerical staff	On essential establishment	On furniture	On Library	Hostel contingency	Newspapers and periodicals	Common Room.	Rent, rates and taxes	Contract Contingency	
1											12.
1926-27	5169/5/-	659/11/-	181/5/-	.	422/9/-	5/5/-	74/6/-	..	..	150/-	6662/9/-
1927-28	383/11/-	679/-	164/5/-		500/-		75/-	..	..	150/-	6958/-

## Appendix II(a)

## PATNA UNIVERSITY

*Return of the Pay, qualifications etc. of the teaching staff.*

Names	Pay academic qualifications, degrees, class & year	Period of service in this college	Pay	Remarks.
B Chintamani Acharya (Part-time Lecturer)	M. A., Oriya Class 1 B L.	From July 9th, 1923, up to now-4 years and 8 months	250	
B Hari Das Datta, (Whole time lecturer- temporary)	M A., English II 1920, B L 1st class, 1921	From 15th July, 1927 8 months.	250	
S C Chakravarti (whole- time lecturer)	M. A., B. L. Advoca- cate.	..	400 25-500	

## Appendix II(b)

## PATNA UNIVERSITY

## FORM E

*Particulars as to the changes in the teaching staff since the date of the last inspection.*

Name of officer relieved ( and post which he held )	Date of his leaving	Reason for his leaving	Name of relieving officer.	Date of joining.
S S Alam Esqr. Professor of Law.	April, 1923.	Transferred to Patna Law Col- lege as Vice- Principal	Charu Chandra Ganguli.	9-7-23.
Charu Chandra Ganguli,	9-10-23	Terminated	Hafiz Shamsuddin Ahmad.	5-11-23.
Hafiz Shamsuddin Ahmad whole-time Lecturer in Law.	April, 1927.	Transferred to Patna College	B Hari Das Datta whole-time tempo- rary lecturer in Law.	15-7-27.

Appendix III.

TIME TABLE OF LAW CLASSES FOR 1928-29.

Preliminary Class			Final Class				
Days	7 15-8 5	8 5-8 55.	8 55-9 45.	Days	7, 15-8 5	8 5-8 55.	8 55-9. 45.
Monday	Jurisprudence, S C. C.	Hindu Law C M A	Tutorial A S C C	Monday	Civil Proce- dure C. M. A.	Contract and Torts S. C. C.	Tutorial A. C. M. A.
Tuesday.	"	"	Tutorial B S C C	Tuesday	"	"	Tutorial B. C. M. A.
Wednesday.	"	Tutorial A. C M A	Tutorial C. S. C. C Tutorial B. C M A	Wednesday.	"	Tutorial A. S. C. C.	Nil
Thursday	Criminal Law C M A	Roman Law S C C.	Tutorial C. C M A	Thursday	Equity S C C	Transfer of Property. C M A	Tutorial B. S. C. C.
Friday	"	"	Mohamedan Law. S. C. C	Friday.	"	"	Land Laws C M. A.
Saturday	Roman Law S C C	Mohamedan Law. S. C. C	Nil	Saturday.	Land Laws. C M A	"	Nil.

## Appendix IV

The teaching staff in each subject and the amount of work done per week by each member of the staff in each subject and to each class during the year of inspection.

Serial No.	Teacher's name and designation.	Class and section	Subject	No of period per week			Total.
				Lecture period	Tutorial period	Moot court period	
1	B Chintamani Acharya M A B L Vakil	1st Year	Hindu Law	4		Moot court lectures are converted into Moot court whenever necessary, 12 moot courts being held in each subject in the session except Jurisprudence and Roman Law	
			Law of Crimes	2	2		
		2nd Year	Land Tenure	3			
			Transfer of Property	3	2		
		Civil Procedure	2				
2	B Hari Das Datta, M A B L.		Jurisprudence	3			
			Roman Law	3	2		
			Mohamedan Law	2			
		Equity Contract and Tort	3	2			
3							

Each year is divided into two groups for purposes. Each group will meet each lecture once weekly, i.e. each student will have two tutorials weekly. Subjects are taken up by turns by lecturers in charge of the same.

## Appendix VI

## University Results

Name of examination		No of candi- dates who deposited Exa- mination fees	No of candi- dates who sat for the Examination	No passed			REMARKS
				I Class	II Class	Total	
July 1921.	Preliminary.	2	2	..	2	2	
July 1922.	Preliminary	6	6	..	3	3	
	Intermediate	1	1	.	...		
January 23	{ Preliminary	1	1		1	1	
	{ Intermediate			..			
	{ Final			...	..	.	
July 23	{ Preliminary	14	14	2	10	12	
	{ Intermediate	7	7	3	1	4	
	{ Final	.	.	.	.	.	
January 24.	{ Preliminary	3	3		3	3	
	{ Intermediate	3	3	1	1	2	
	{ Final	1	1	1		1	
July 24	{ Preliminary	33	33	2	22	24	
	{ Intermediate	11	11		7	7	
	{ Final	4	4	.	.	.	
January 25	{ Preliminary	9	9	2	5	7	In additional subjects
	{ Intermediate	32	32	2	9	11	
	{ Final	7	7	1	6	7	
July 25	{ Preliminary	27	27	1	12	13	In additional subjects
	{ Intermediate	6	6	1	2	3	
	{ Final	9	9	2	6	8	
January 26.	{ Preliminary	15	15	...	12	12	
	{ Intermediate	6	6	2	2	4	
	{ Final	20	20		17	17	
July 26.	{ Preliminary	27	27	3	15	18	
	{ Intermediate	2	2	...	2	2	
	{ Final	27	27	1	17	18	
January 27.	{ Preliminary	13	13			.	
	{ Intermediate	.	.	...	...	.	
	{ Final	14	14	1	4	5	
July 27.	{ Preliminary	27	27	..	12	12	
	{ Final	20+2	20+2	...	13+1	13+1	
January 28.	{ Preliminary	20	17	...	14	14	
	{ Final	10	10	1	6	7	













