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Government of Kerala

Manpower Study  
Series 59

REPORT ON THE WASTAGE  
OF SCHEDULED CASTE  
AND SCHEDULED TRIBE  
STUDENTS IN ENGINEER-  
ING COLLEGES AND  
POLYTECHNICS IN  
KERALA

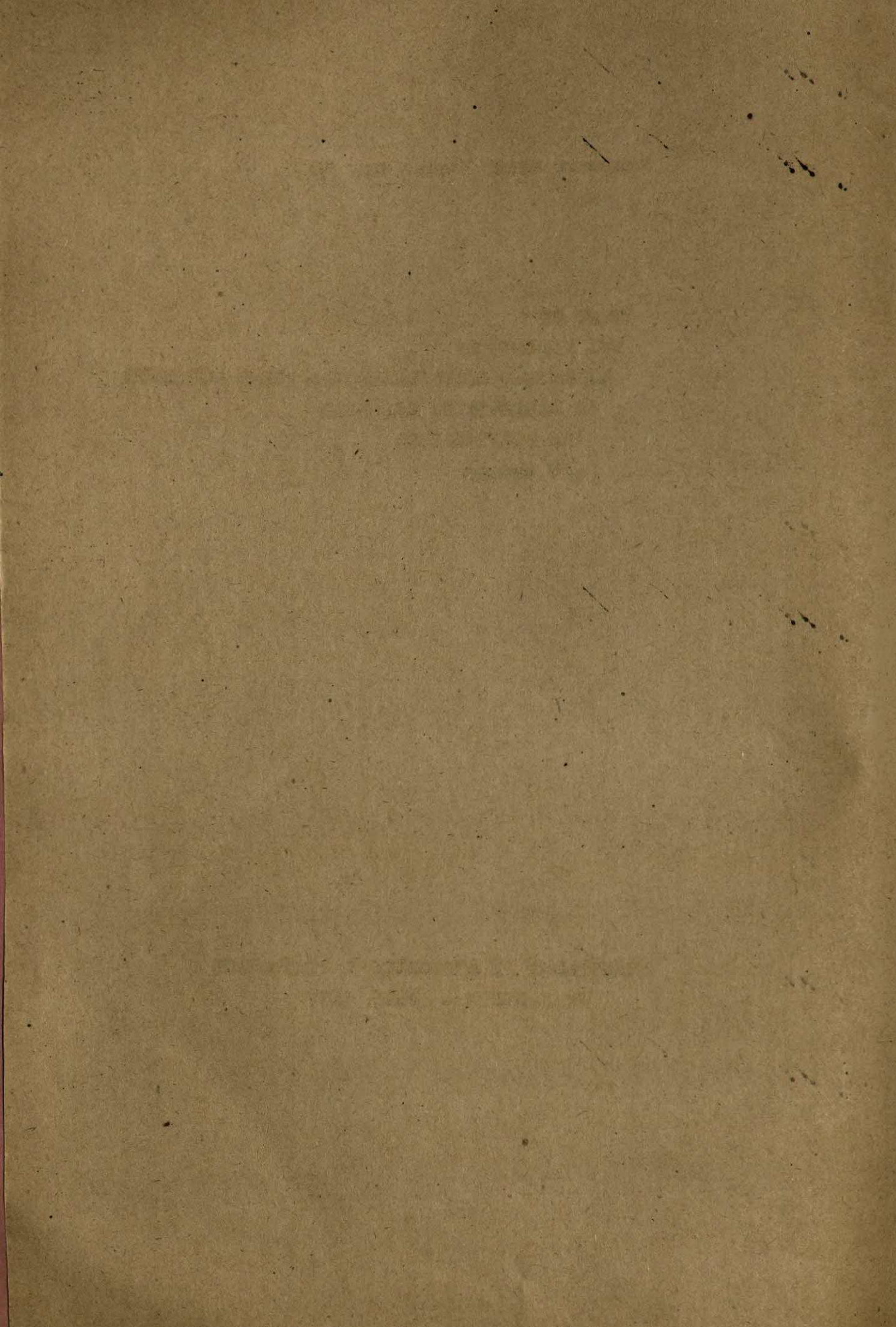
Department of Economics  
and Statistics  
Trivandrum



Manpower Study Series No. 59

STUDY ON  
THE WASTAGE OF  
SCHEDULED CASTE/SCHEDULED TRIBE STUDENTS  
IN ENGINEERING COLLEGES  
AND POLYTECHNICS  
IN KERALA

DEPARTMENT OF ECONOMICS & STATISTICS  
TRIVANDRUM - APRIL 1987



## P r e f a c e

A previous study on student wastage in technical institutions showed that there is some amount of wastage in the case of Scheduled Caste/Scheduled Tribe students also. Hence the present study was initiated to findout the extent of wastage and the reasons there of in respect of these students.

This study was conducted and report prepared by Shri.N.Sivadasan former Manpower Officer and finalised by Smt.P.D.Mariamma, present Manpower Officer in the Directorate of Technical Education. It is hoped that this study will be useful to the planners and Administrators in the field.

Trivandrum,  
7--4--1987.

K.Balakrishnan Nair  
Director of Economics  
and Statistics.



# Study on the wastage of scheduled caste/Scheduled Tribe students in Engineering Colleges and Polytechnics

## Introduction:

Technical education has a vital role in the modern society, which depends on fast changing technologies. Technologies with specialisation and super specialisation are emerging out. The comparatively high percentage of investment in the different sectors of education, especially higher education and technical education, reflects the anxiety of the State Government to build technical talents and to ensure adequate supply of technical and skilled manpower. But the outcome, compared to investment, is not upto the expectation at least in some respects.

The ideal situation in the field of education would be that all students should complete their courses within the stipulated period itself. But, unfortunately, such a situation does not exist in reality, due to many reasons. The report of the committee on wastage constituted by the Chairman of 'Southern Regional Committee on Education' suggested to conduct indepth studies on student wastage in technical education. An attempt in this direction has been made in an earlier study, viz. 'Indepth study on student wastage in Engineering Colleges and Polytechnics in Kerala' conducted by the Manpower Officer of Technical Education Department and published by the Manpower Division of the Department of Economics and Statistics. Students belonging to Scheduled Caste/Scheduled Tribe, are given special concessions by way of reservation and relaxation in marks, age etc. taking into account their social and economic backwardness. In the earlier study, it was found that preliminary and final wastages of students belonging to SC/ST are much higher than that of forward communities. Preliminary wastage was cent percent in degree courses in respect of SC/ST students, which shows that no student belonging to SC/ST completed the course and passed the examination in the normal course of five years. It was therefore decided to conduct a special study on the wastage of SC/ST students in Engineering Colleges and Polytechnics in Kerala with the following objectives.

## 2. Objectives

(i) The study is mainly intended to assess the rate of drop-outs and wastage of SC/ST students admitted in Engineering College (Full-time Degree Courses) and Polytechnics (Diploma Courses)

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(ii) to identify the reasons for the dropouts and wastages;

### 3. Coverage

The study covered all the Engineering Colleges & Government Polytechnics in the state 44 students belonging to SC/ST who were admitted during 1979-80 for degree courses from the four Engineering Colleges (2 Government Colleges and 2 Private Colleges) and 199 students from 18 Polytechnics (including 3 Women's Polytechnics and one Institute of Printing Technology) were contacted under the study.

### 4. Methodology:

Three proformae were designed for collecting the required information. Proforma I is concerned with the numerical data on dropouts and wastage, while proforma II is a questionnaire for identifying the reasons for discontinuance of studies and proforma III, a questionnaire for assessing the reasons for the wastage.

The data required for Proforma I were collected from the Institutions selected for the study. The information required for Proforma II and III were collected directly by addressing the persons concerned. Copies of the Proforma I, II and III are appended in the annexure.

The data received from the Institutions through proforma I, have been consolidated and analysed to find out the rate of dropouts and wastages. Causes of dropouts and reasons for wastage were assessed by analysing the data in proforma II and III.

### 5. Findings of the Study

#### (i) Dropout of students

Dropout means discontinuance of study permanently during the course of study. Discontinuance from a course of study may be either due to academic reasons or to non-academic reasons.

Analysis of Table I A shows that 5 students out of 44 SC/ST students studied (constituting about 11.42%) have discontinued their studies in their degree courses against the general rate of dropout of 2.75% revealed by earlier study, while the percentage of dropouts from 2 Government Engineering Colleges works out to 7.4%. The percentage of dropouts from 2 Private Engineering Colleges works out to 17.6. Branch-wise analysis of dropouts of Engineering students in Table I-B reveals that the only one student

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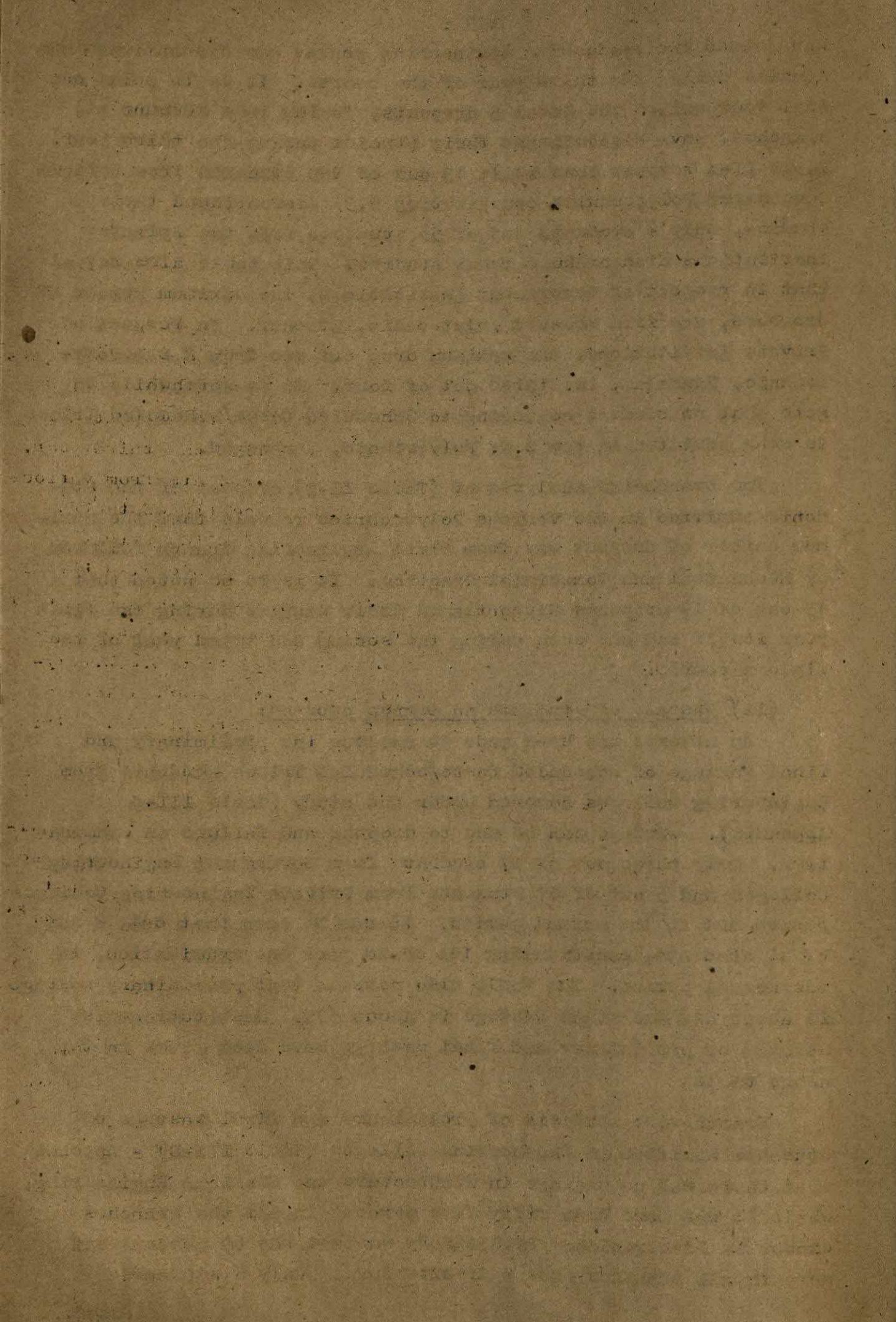
who joined the production Engineering course has discontinued his studies during the third year of the course. It is to point out that four out of the total 5 dropouts, taking into account all branches, have discontinued their studies during the third year. Table II-A reveals that while 13 out of 140 students from various Government Polytechnics, constituting 9.3% discontinued their studies, only 4 students out of 59 students from the Private Institutions discontinued their studies. This table also reveals that in respect of Government Institutions, the maximum number of dropouts, was from women's Polytechnic, Trichur. In respect of Private Institutions, the maximum drop out was from N.S.S. Polytechnic, Pandalam, i.e. three out of four. It is worthwhile to note that no student belonging to Scheduled Caste/Scheduled Tribes is seen admitted in the S.N. Polytechnic, Kanhangad.

The branchwise analysis of (Table II-B) dropout of the students admitted in the various Polytechnics reveals that the maximum number of dropout was from Civil Engineering Branch followed by Mechanical and Commercial Practice. It is to be noted that 15 out of 17 dropouts discontinued their studies during the first year itself and one each during the second and third year of the Diploma course.

(ii) Wastage of students in Degree courses:

An attempt has been made to analyse the preliminary and final wastage of Scheduled Caste/Scheduled Tribes students from Engineering Colleges covered under the study (Table III-A Appendix). Wastage can be due to dropout and failure in Examination. Only three out of 27 students from Government Engineering Colleges and 5 out of 17 students from Private Engineering Colleges passed out in the normal period. It can be seen that only 8 out of 44 students, constituting 19% could pass the examination, in the normal period. The Table also reveals that preliminary wastage is about 82% and final wastage is about 57%. Institution-wise details of preliminary and final wastage have been given in the above table.

Branch-wise analysis of preliminary and final wastage of students admitted in Engineering Colleges (Table III-B) - Appendix shown that there was no wastage in Architecture and Chemical Engineering, while it was more than fifty five percent in all the branches except in Electronics. Preliminary wastage was 60 percent and more in all branches except Architecture. Only 8 students



(3 students from Mechanical Engineering, 2 from Electronic Engineering and one each from Civil, Electrical and Architecture) have passed the examination within the stipulated period.

(iii) Wastage in Diploma Courses

Analysis of data relating to students admitted for diploma course in Polytechnics (Statement IV A of Appendix) shows that only 37 students (21 from Government Institutions and 16 from Private Institutions) i.e. 19% could pass the examination within the stipulated time. The final wastage in respect of Government Institutions i.e. 56%. It is highest in Government Polytechnic, Kalamassery (76.9%) and lowest (33.3%) in Government Polytechnic, Perinthalmanna. No scheduled Caste/Scheduled Tribe candidate is seen admitted for Diploma Course in S.N.Polytechnic, Manhangad during the year under study.

Regarding private polytechnic, the final wastage is highest in S.N.Polytechnic, Kottiyam (81.8%) and lowest 33.3% in N.S.S. Polytechnic, Pandalam. It is also seen that there was no final wastage in Carmel Polytechnic, Alleppey and S.S.M. Polytechnic, Tirur.

Branchwise analysis of preliminary and final wastage of students admitted for diploma courses (in Table IV B) show that only 37 out of 199 (18.6%) have passed out the final examination in the normal expected period. Compared to other branches, wastage was less in the Electronics Engineering group, followed by chemical Engineering. No one from Automobile, Textile Technology, Polymer Technology, Instrument technology and Printing Technology could pass the final examination in the normal expected period.

Final wastage was cent percent in Automobile and Instrument Technology, branches and lowest in chemical Engineering branch (50%) against the average final wastage of 51.8%. There was no final wastage in Electronics, Textile Technology and Polymer Technology.

An attempt has been made to estimate the preliminary and final wastage of degree and Diploma students admitted through the Government and private institutions. It can be seen that the preliminary and final wastage in Government institutions are



higher than that of private institutions. This may be due to the better maintenance of discipline in private Institutions.

(iv) Causes of Wastage:

For alleviating dropout and wastage, it is useful to note the causes of wastage. Three out of five students who dropped out from their degree courses have reported the following causes for their dropout. One got job, the second one discontinued his studies due to ill-health and the third one could not continue since he was de-barred from writing the examination in the first year itself.

Regarding diploma holders out of 17 dropouts contacted, only 4 have responded by recording the relevant entries in the questionnaire, while 2 students discontinued the course due to the ill-health of their parents and other domestic problems, the reasons reported by the other two are, securing of job and marriage.

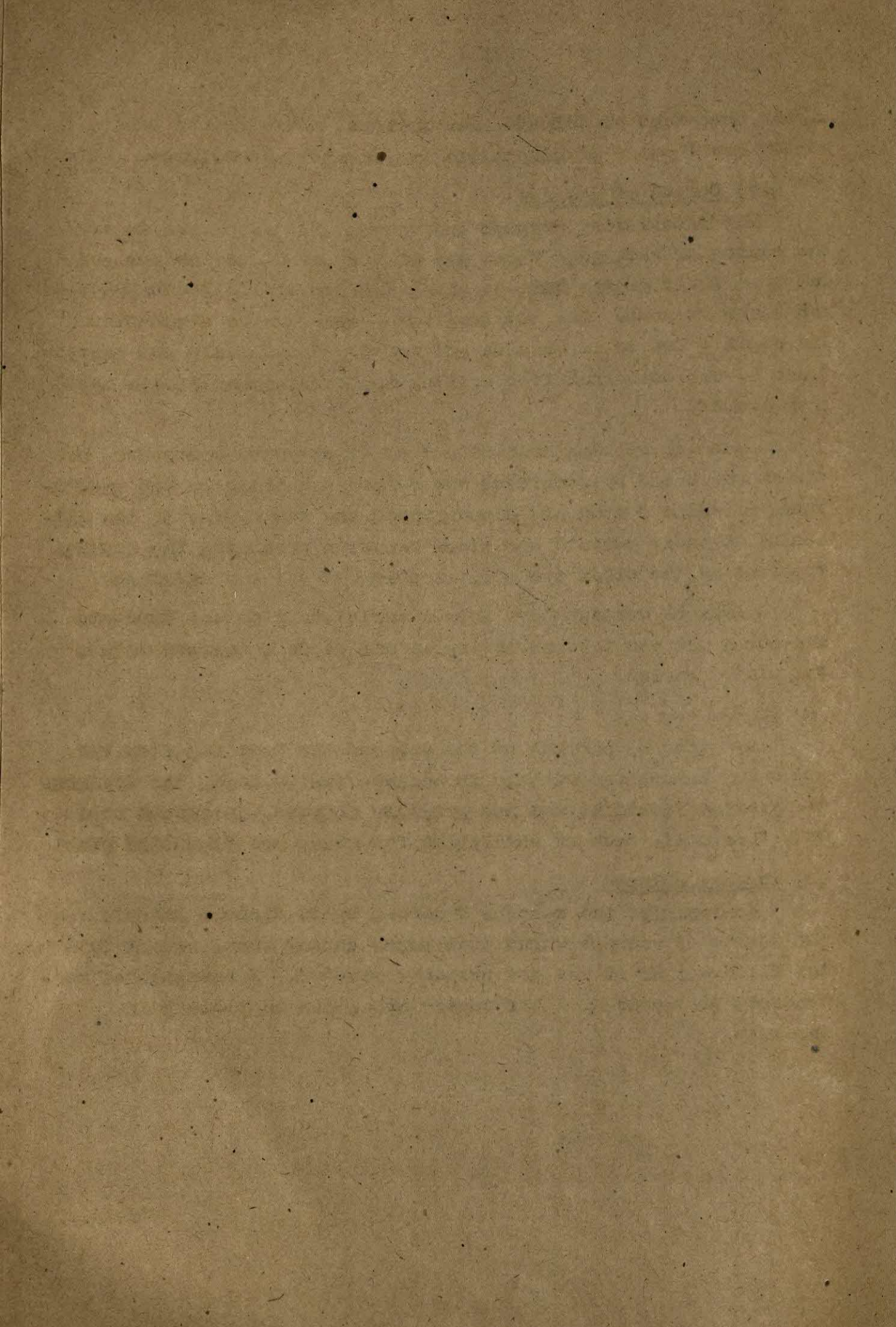
Causes of wastage have been ascertained from the students who could not complete their degree and diploma courses within the stipulated period.

(a) Degree course:

More than 60 percent of the respondents have reported the following causes for wastage in Engineering College, the syllabus too vast/difficult/it was not properly covered, questions asked were difficult, lack of facilities for study and financial problems

(b) Diploma Holders

Analysis of the reasons reported by 29 diploma holders for the causes of wastage shows that major causes were, either syllabus too difficult or it was not properly covered. Percentage of respondents in favour of other causes are given in Table V in Appendix.





SUMMARY OF FINDINGS AND CONCLUSIONS

1. 44 SC/ST students were admitted for degree courses in 10 Engineering Colleges during the period 1972-80. Out of these, 5 students discontinued their study.
2. It is observed that 4 out of five dropouts have discontinued during the third year of the degree courses. The student who joined for the 'Electronics' discontinued his study during the first year itself.
3. 199 students were admitted for diploma courses in various 18 polytechnics in Kerala. Out of this, 17 students discontinued their study.
4. Out of 140 students admitted in 12 Government Polytechnics, 13 students discontinued their studies. Out of 59 students admitted in 6 private polytechnics, 4 students discontinued.
5. It is observed that 15 out of 17 dropouts discontinued their studies during the 1st year itself and one each during the second year and third year of the diploma courses.
6. On branch-wise analysis of dropouts, it is observed that, out of 47 students in Civil Engineering, 5 discontinued, out of 26 students in Mechanical Engineering 4 stopped their studies and out of 36 students in Electrical Engineering, 2 discontinued and out of 25 students in commercial practice (DCP) 4 stopped and out of 12 students in Costume Design and Dress making 2 students discontinued their study during their course of study.
7. Out of 44 SC/ST students admitted for degree courses, only 8 students passed in the normal period i.e. 3 out of 27 from Government Engineering Colleges and 5 out of 17 admitted in private Engineering Colleges. Out of these 44 students admitted in degree courses, 25 did not pass the examination, i.e. 17 out of 27 from Government Engineering Colleges and 8 out of 17 from private Engineering Colleges i.e. nearly 61% of students could not come out successful in the examination from Government Engineering Colleges, while 47% from private Engineering Colleges.



8. On analysis of branch-wise wastage; it is seen that, 9 students from Civil Engineering out of 14 students, 8 from Mechanical out of 12, 8 from Electrical out of 9 students, 2 from Electronics out of 5 admitted in degree courses could not pass out. The only student admitted for production-cum-plant Engineering miserably failed to pass the degree course.
9. Out of 140 students admitted in various Polytechnics, 77 students could not pass in the final examination i.e. nearly 55% of students could not come out successful till date. Out of 59 students admitted in various diploma courses in private Polytechnics, it is seen that 26 students miserably failed in the examination, i.e. nearly 44%. On the whole, 103 students failed in diploma courses i.e. 52%.
10. On branch-wise analysis of Diploma courses, it is seen that 2 students in Civil Engineering out of 47 students, 28 students in Mechanical Engineering out of 56 students, 15 students in Electric Engineering out of 36 students, 2 students in Chemical Engineering out of 4 students, 2 students in printing out of 3 students, 16 students in commercial practice out of 25 students and 7 students in Costume design etc. out of 12 students failed in the examination. All the four students admitted in Automobile engineering failed and also in the case of Instrument Technology where as only one was admitted and he failed in the examination.
11. 7 students from the Engineering colleges and 29 students from polytechnics responded to the questionnaire on the causes of wastages.

7 students explained that main causes of discontinuance are either financial problems or the syllabus of the curriculum is not properly covered during the course of their study. While 6 students have opined that either the syllabus was too vast or the syllabus was too difficult for them to complete in the examination, Hence they found it very difficult to continue their course of study.



22 students from polytechnics were of the opinion that the syllabus was too difficult and 21 students pointed out that syllabus was not properly covered during the stipulated period. 17 students explained that the main causes for the drop outs were either the questions asked were difficult or there were lack of facilities for their study. 16 students were of opinion that the syllabus for the course of study was too vast and 15 students high lighted the financial problems for their discontinuance.



Table I.A. Statement showing the number and rate of dropout of SC/ST students admitted in four Engineering Colleges for Degree course, 1979-80.

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Name of Engineering College	No. of SC/ST admitted for degree course.	No. of dropout	Percentage of dropouts
1	2	3	4
<u>Government:</u>			
1. Engineering College, Trivandrum.	20	1	5.0
2. Engineering College, Trichur.	7	1	14.3
Total - Government :	27	2	7.4
<u>Private:</u>			
1. T.K.M. College of Engineering, Quilon	11	2	18.2
2. N.S.S. College of Engineering, Palghat	6	1	16.7
Total - Private	17	3	17.6
Grand Total	44	5	11.4

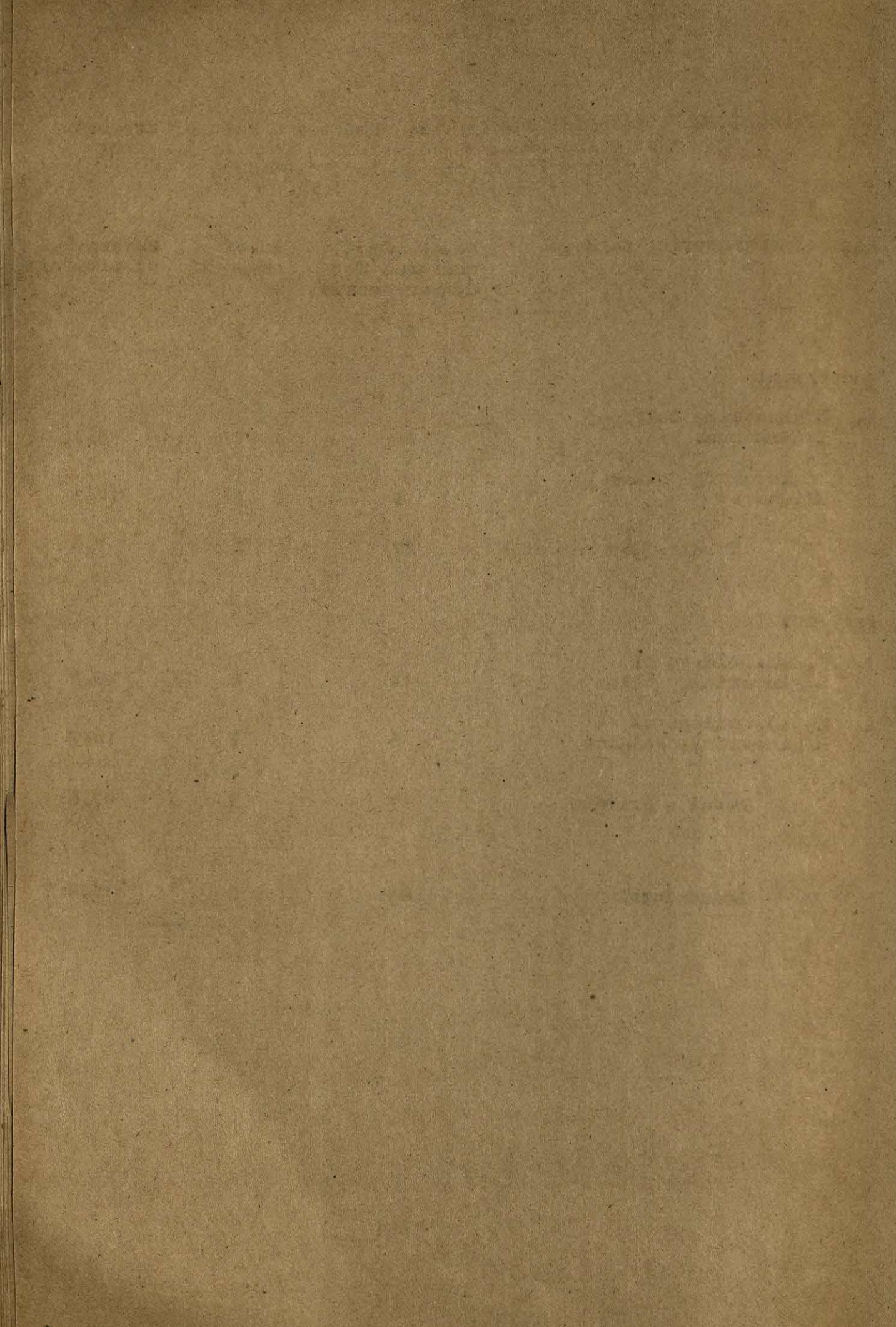




Table I.B. Statement showing the branch-wise and year-wise number and rate of dropouts of SC/ST students in Engineering Colleges.

Branches	No. of SC/ST admitted.	No. of dropouts (year-wise)				Total	Percentage of drop-outs
		1st year	2nd year	3rd year	4th year		
1	2	3	4	5	6	7	8
1. Civil Engineering	14	-	-	1	-	1	7.1
2. Mechanical	12	-	-	1	-	1	8.3
3. Electrical Engineering	9	-	-	1	-	1	11.1
4. Electronics	5	1	-	-	-	1	20.0
5. Architecture Engineering	1	-	-	-	-	-	-
6. Chemical Engineering	2	-	-	-	-	-	-
7. Production Engineering	1	-	-	1	-	1	100.00
<b>Total:</b>	<b>44</b>	<b>1</b>	<b>-</b>	<b>4</b>	<b>-</b>	<b>5</b>	<b>11.4</b>



Table II.A. Statement showing the number and rate of dropout of SC/ST students admitted in Polytechnics.

Name of Polytechnics with Management	No. of SC/ST admitted	No. of dropout	Percentage of dropout
<u>Government:</u>			
1. Central Polytechnic, Trivandrum.	17	..	..
2. Govt. Polytechnic, Kottayam	14	3	21.4
3. Govt. Polytechnic, Kalamassery	13	1	7.7
4. Maharaja's Technological Institute, Trichur.	17	1	5.9
5. S.R.Polytechnic, Valapad	5	..	..
6. Govt. Polytechnic, Perinthalmanna	6	..	..
7. Kerala Govt. Polytechnic, Calicut	26	..	..
8. Govt. Polytechnic, Cannanore	3	2	66.7
9. Institute of Printing Technology, Shoranur	3	..	..
10. Women's Polytechnic, Trivandrum	21	..	..
11. Women's Polytechnic, Trichur	11	5	45.5
12. Women's Polytechnic, Calicut	4	1	25.0
Total: Government	140	13	9.3
<u>Private:</u>			
13. S.N.Polytechnic, Kottiyam	22	..	..
14. N.S.S.Polytechnic, Pandalam	12	3	25.0
15. Carmel Polytechnic, Alleppey	9	..	..
16. S.S.M. Polytechnic, Tirur	9	..	..
17. Thiyagarajar Polytechnic, Alagappanagar	7	1	14.30
18. S.N.Polytechnic, Kanhangad	..	..	..
Total - Private:	59	4	6.8
Total of Govt. & Private	199	17	8.5

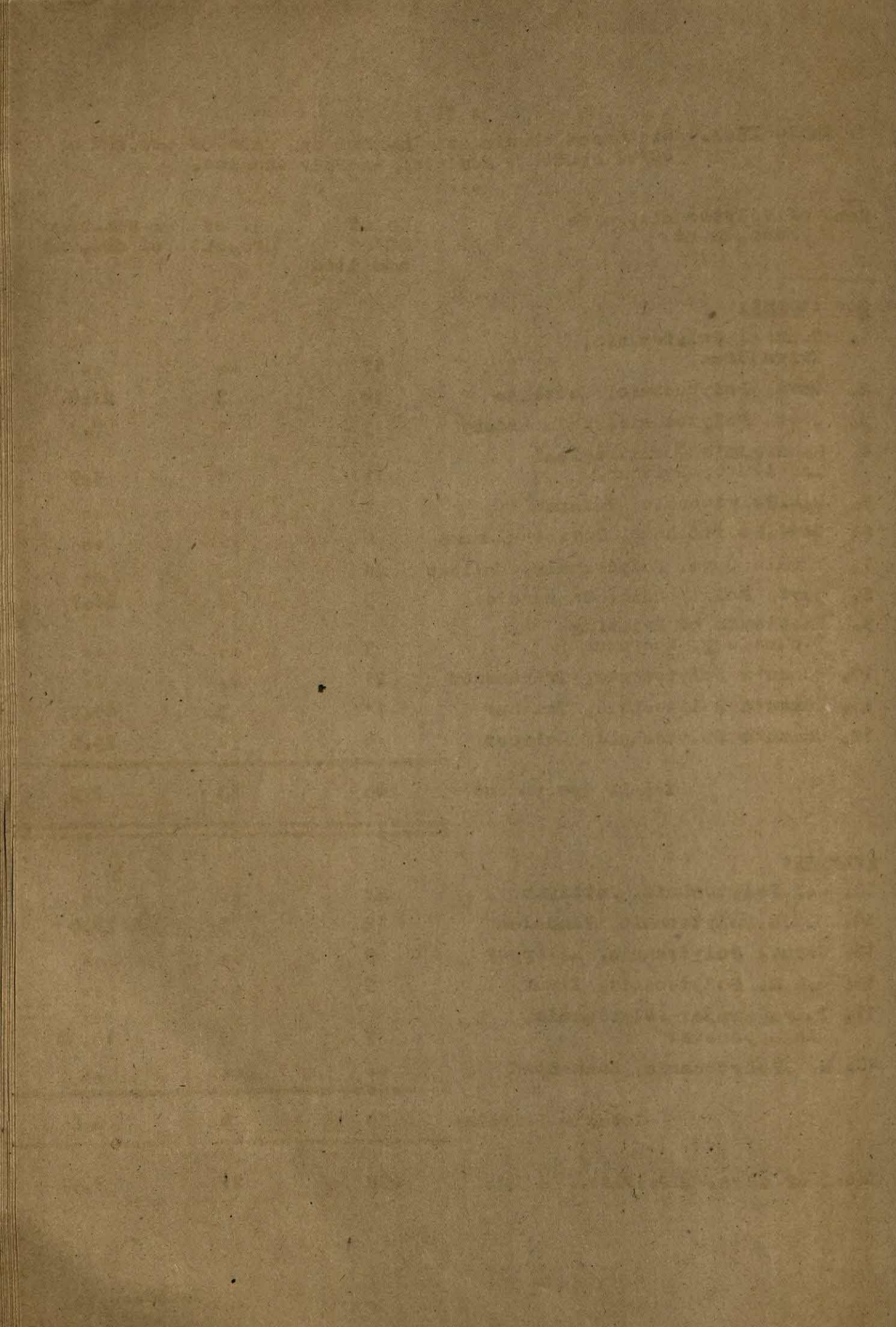


Table II.B. Statement showing the branch-wise number and rate of dropouts of Scheduled Castes/Scheduled Tribes students admitted in Polytechnics

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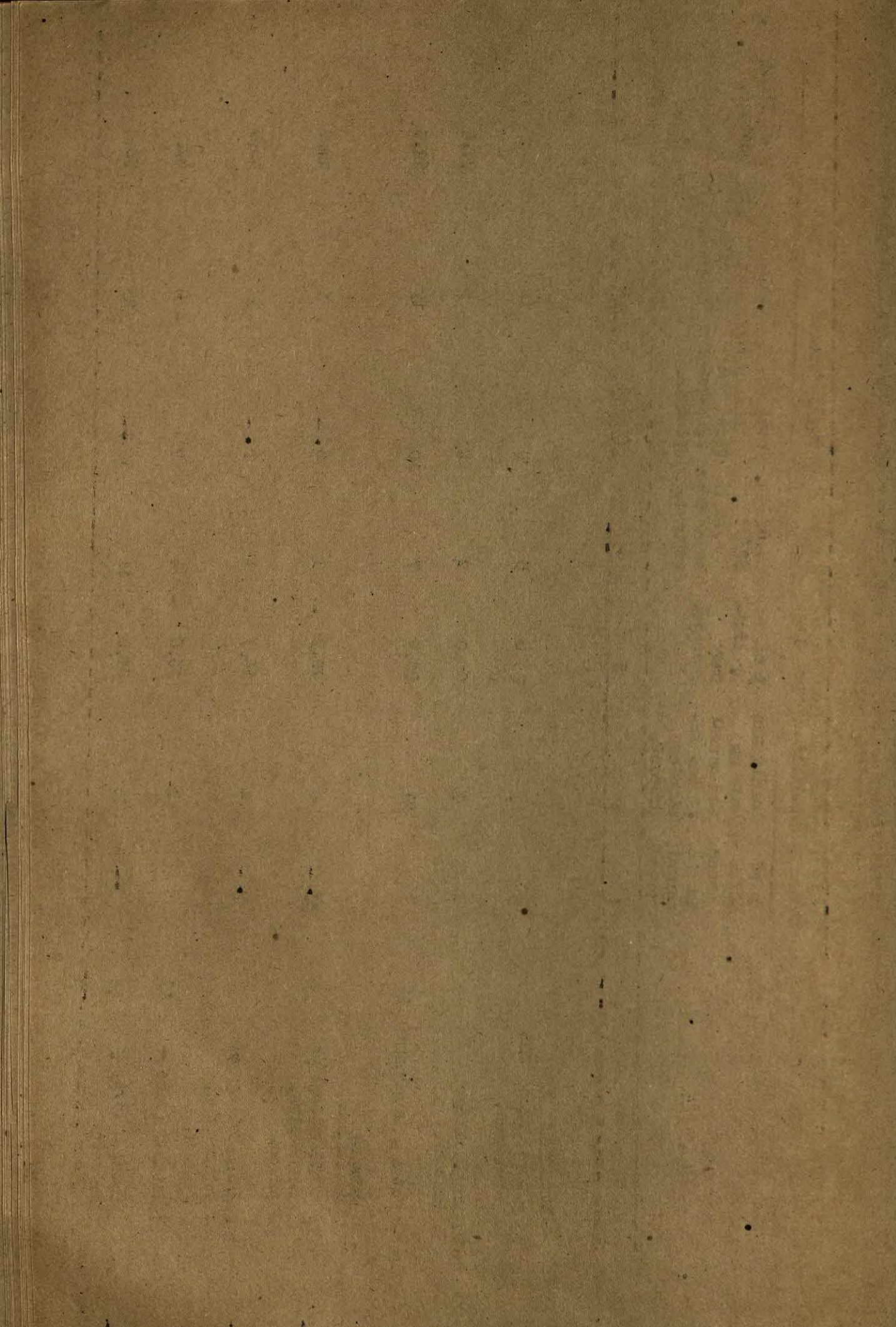
Branches	Total Number of SG/ST Admitted.	Year-wise number of dropouts				Percent of dropouts
		1st year	2nd year	3rd year	Total	
1	2	3	4	5	6	7
1. Civil Engineering	47	4	1	..	5	10.6
2. Mechanical Engineering	56	4	..	..	4	7.1
3. Electrical Engineering	36	1	..	1	2	5.6
4. Electronics	8	..	..	..	..	..
5. Automobile	4	..	..	..	..	..
6. Textile	2	..	..	..	..	..
7. Chemical Engineering	4	..	..	..	..	..
8. Polymer Technology	1	..	..	..	..	..
9. Instrument Technology	1	..	..	..	..	..
10. Printing Technology	3	..	..	..	..	..
11. Commercial Practice (DIP)	25	4	..	..	4	16.0
12. Costume design and Dress Making	12	2	..	..	2	16.07
<b>Total</b>	<b>199</b>	<b>15</b>	<b>1</b>	<b>1</b>	<b>17</b>	<b>8.50</b>

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Statement showing the Institution-wise preliminary and final wastage of SC/ST students admitted in Engineering Colleges.

Name of Colleges with memorandum.	Preliminary wastage.				Final Wastage.			
	No. of SC/ST admitted.	No. of SC/ST passed in the normal period.	No. did not pass in the normal period including dropout.	% of preliminary wastage.	No. of SC/ST passed in subsequent attempt.	Total No. passed in the first and subsequent attempts.	No. did not pass so far including dropout.	% of final wastage.
1	2	3	4	5	6	7	8	9
<b>Government</b>								
1. Engg. College, Trivandrum.	20	3	17	85.0	5	8	12	60.0
2. Engg. College Trichur.	7	-	7	100.0	2	2	5	71.4
Total - Government	27	3	24	88.9	7	10	17	62.9
<b>Private</b>								
3. P.K.M. College of Engineering, Quilon.	11	33	8	72.7	3	6	5	45.5
4. N.S.S. College of Engineering, Palghat.	6	2	4	66.7	1	3	3	50.0
Total-Private	17	5	12	70.6	4	9	8	47.1
Total - Govt. & Private.	44	8	36	81.8	11	19	25	56.8





(2 Government & 2 Private)

Branches	Preliminary wastage				Final wastage			Rate of final wastage.
	Total No. of SC/ST admitted.	No. passed in the normal expected time.	No. did not pass in the normal time (including dropout)	Rate of Preliminary wastage.	Number Passed in subsequent attempt.	Total No. passed including those passed in normal time.	Number did not pass including dropout.	
1	2	3	4	5	6	7	8	9
1. Civil	14	1	13	92.9	4	5	9	64.3
2. Mechanical	12	3	9	75.0	1	4	8	66.7
3. Electrical	9	1	8	88.9	3	4	8	55.6
4. Architecture	1	1	-	-	-	1	-	-
5. Production-cum-Plant Engg.	1	1	1	100.0	-	-	1	100.0
6. Chemical Engg.	2	-	2	100.0	2	2	-	-
7. Electronics	5	2	3	60.0	1	3	2	40.0
Total	44	8	36	81.8	11	19	25	56.8

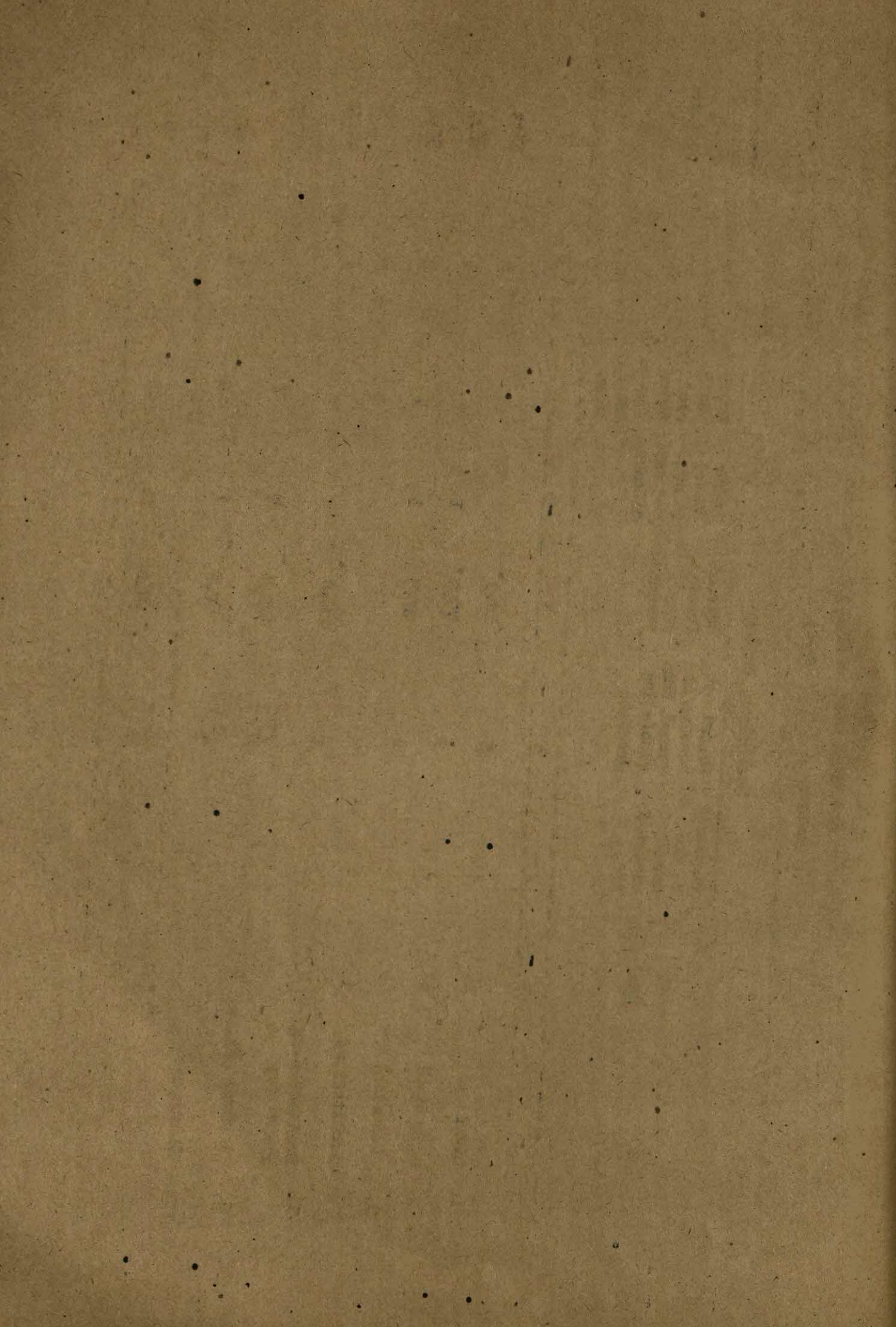


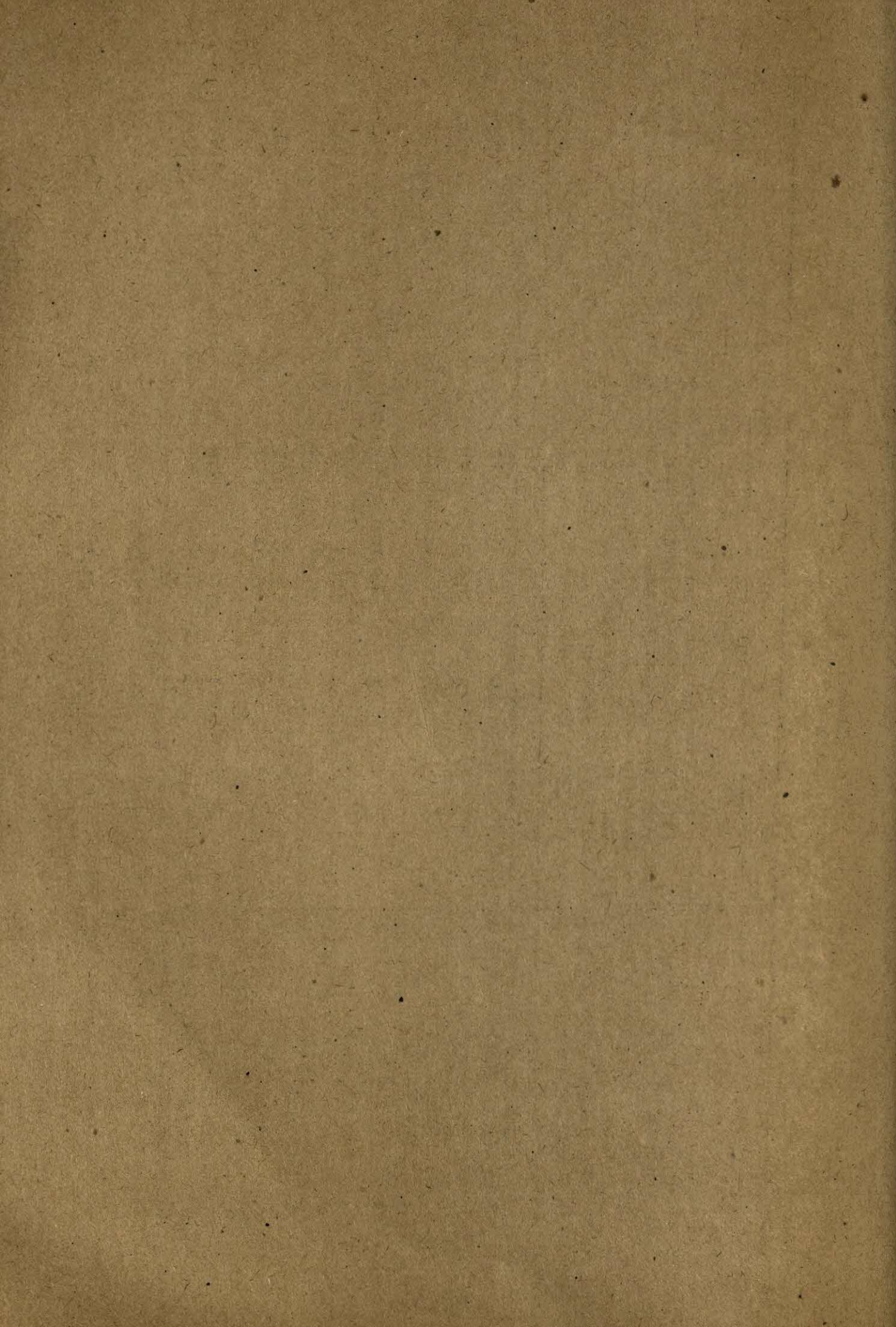
Table VI.A. Statement showing the Institution-wise preliminary and final wastage of SC/ST Students admitted for Diploma Course in Polytechnics.

Name of Polytechnics with Management.	Preliminary wastage						Final wastage		
	No. of SC/ST admitted	No. of SC/ST passed in the normal period (1st attempt)	No. did not pass in the normal expected period (1st attempt)	Rate of % of preliminary wastage.	No. of SC/ST passed in the subsequent attempt	Total No. passed including those passed in 1st attempt	No. did not pass in the final exam. including drop outs.	Rate of final wastage	
	2	3	4	5	6	7	8	9	
<b>Government</b>									
1. Central polytechnic, Trivandrum	17	-	17	100.0	8	8	9	52.9	
2. Govt. Polytech, Kottayam	14	1	13	92.8	8	9	5	35.7	
3. Govt. Polytech, Kalamassery	13	2	13	100.0	3	3	10	76.9	
4. M.T.I. Trichur	17	-	15	88.2	5	7	10	58.8	
5. S.R.P. Valapad	5	-	5	100.0	2	2	3	60.6	
6. Govt. Poly. Ferinjalamkur	6	3	3	50.0	1	4	2	33.3	
7. Kerala Govt. Polytech, Calicut	20	7	19	73.1	8	15	11	42.3	
8. Govt. Polytech. Cannanore	3	1	2	66.7	-	1	2	66.7	
9. I.P.T. Shornur	3	-	3	100.0	1	1	2	66.7	
10. Women's Poly. Trivandrum	21	1	20	95.5	4	5	16	76.2	
11. Trichur	11	4	7	63.7	2	6	5	45.5	
12. Calicut	4	2	2	50.0	-	2	2	50.0	
<b>Total Govt.</b>	<b>140</b>	<b>21</b>	<b>119</b>	<b>85.0</b>	<b>42</b>	<b>63</b>	<b>77</b>	<b>55.0</b>	



Table IV.B. Statement showing the Branch-wise preliminary and Final Wastage of SC/ST Students admitted for Diploma Course in Polytechnics

Branch	Preliminary Wastage				Final Wastage				
	No. of SC/ST admitted for Diploma Course	No. of passed in the final Examination in the normal expected period	No. did not pass the final examination in the normal period including drop-out	Rate of preliminary wastage	No. of passed in subsequent attempts	Total Nos. passed in the first and subsequent attempts including drop-outs	No. of SC/ST did not pass in the final Examination in the final wastage	Rate of final wastage	
	1	2	3	4	5	6	7	8	9
1. Civil Engineering	47	7	40	85.1	16	23	24	51.6	
2. Mechanical Engineering	56	13	43	76.8	15	28	28	50.6	
3. Electrical Engineering	36	7	29	80.6	10	17	19	53.8	
4. Electronics Engineering	8	4	4	50.0	4	8	-	-	
5. Automobiles Engineering	4	-	4	100.0	-	-	4	100.0	
6. Textile Technology	2	-	2	100.0	2	2	-	-	
7. Chemical Engineering	4	1	3	75.0	1	2	2	50.0	
8. Polymer Technology	1	-	1	100.0	1	1	-	-	
9. Instrument Technology	1	-	1	100.0	-	-	1	100.0	
10. Printing Technology	3	-	3	100.0	1	1	2	66.7	
11. Commercial Practice	25	2	23	92.0	7	.9	16	64.0	
12. Costume Design & Dress Making	12	3	9	75.0	2	5	7	58.3	
.Total	199	37	162	81.4	59	96	103	51.8	



Private Polytechnic

13. S.N.Polytechnic, Kottiyam.	22	1	21	95.5	3	4	18	81.8
14. M.S.S.Polytechnic, Pandalam.	12	4	8	66.7	4	8	4	33.3
15. Carmel Polytechnic, Alleppey.	9	4	5	55.6	5	9	..	..
16. S.S.M.Polytechnic, Tirur.	9	6	3	33.3	3	9	..	..
17. Thyagarajar Polytechnic, Alagappa Nagar.	7	1	6	85.7	2	3	4	57.1
18. S.H.Polytechnic, Kannangad.	Nil	..	..	..	..	..	..	..
Total - Private	59	16	43	72.9	17	33	26	44.4
Total - Govt. & Private	199	37	162	81.4	59	96	103	51.8





Table: IV-C. Statement showing the waste of SC/ST students admitted in Engineering Colleges and Polytechnics with types of Management.

1	No. of Engineering Colleges											No. of Polytechnics		
	2	3	4	5	6	7	8	9	10	11	12	13	14	
Type of Management of the Institutions	No. of SC/ST admitted for Degree Course in Engineering Colleges	No. of SC/ST did not pass the final Exam. in the normal period including drop outs (No. of preliminary waste)	No. of SC/ST did not pass the final Exam. so far including drop outs (Final waste)	Rate of (%) preliminary waste	Rate of (%) final waste	No. of SC/ST students admitted for Diploma Course in Polytechnics	No. of SC/ST did not pass the final Exam. in the normal time (preliminary waste)	No. of SC/ST did not pass the final exam. so far (final waste)	Rate of (%) preliminary waste	Rate of (%) final waste	Rate of (%) preliminary waste	Rate of (%) final waste	Rate of (%) preliminary waste	Rate of (%) final waste
Government Institutions.	27	24	17	88.9	62.9	140	120	77	85.7	55.0				
Private Institutions.	17	12	8	70.6	47.1	59	43	26	72.9	44.4				
Total:	44	36	25	81.8	86.8	199	163	103	81.9	52.3				

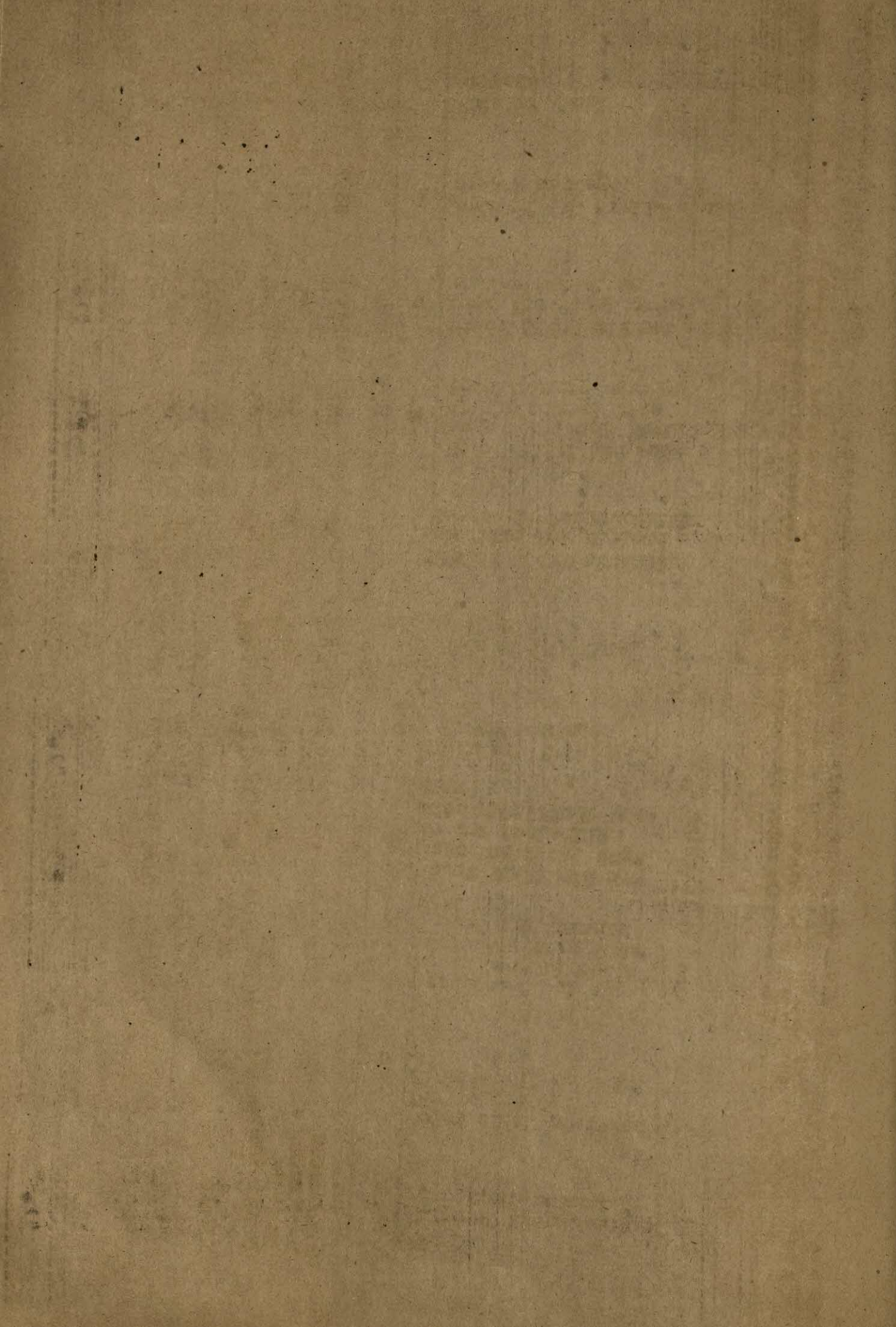
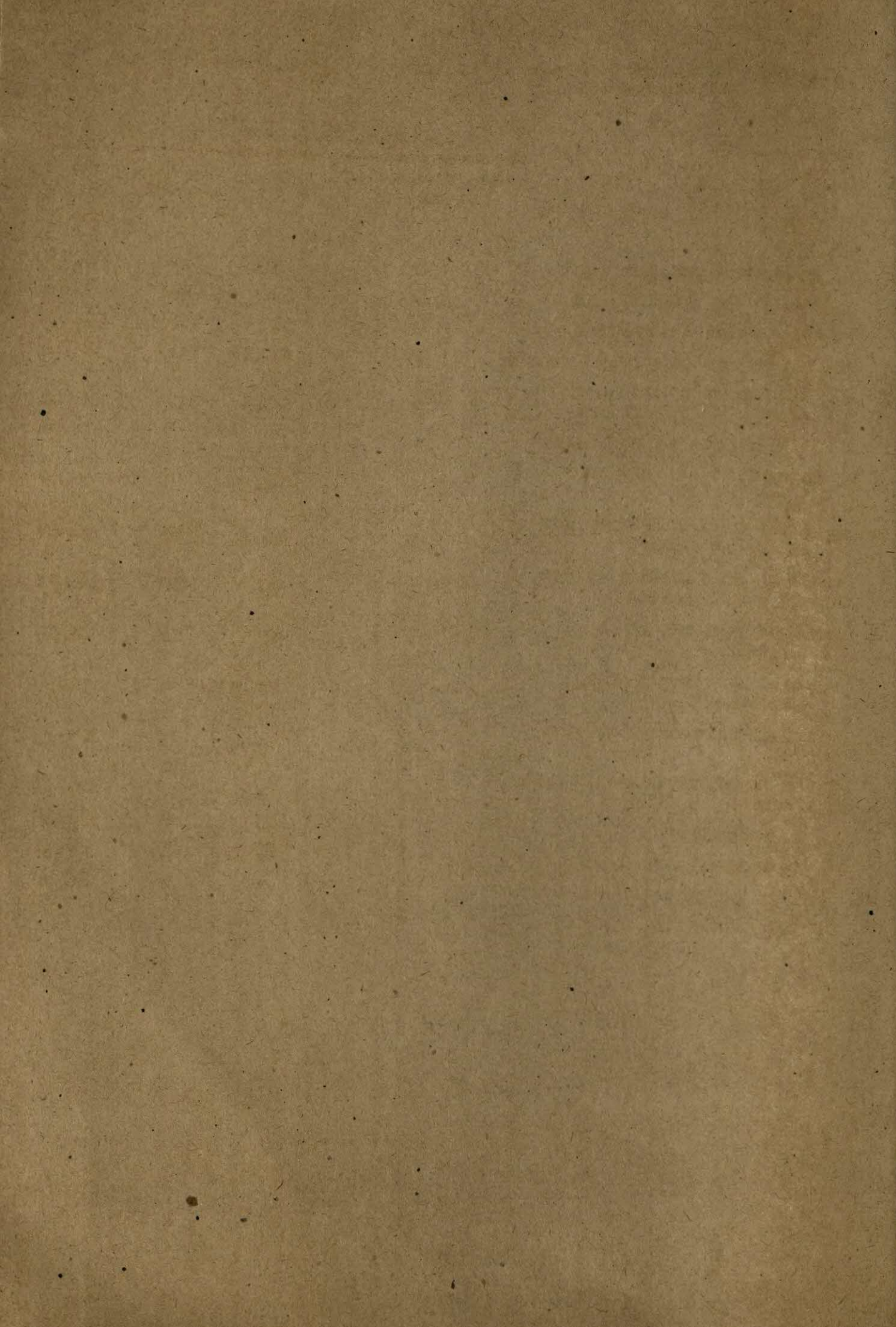


Table V. Causes of wastage in Engineering Colleges and Polytechnics.

Causes	Engineering Colleges		Polytechnics	
	No. responded (yes)	%	No. responded (Yes)	%
1. a. Syllabus was too vast	6	75	16	55.17
b.     "     difficult	6	75	22	75.86
2. Subjects not interesting	4	50	6	20.68
3. Syllabus not properly covered	7	87.5	21	72.41
4. a. questions asked were difficult	5	62.5	17	58.62
b.     "     out of syllabus	-	-	5	17.24
5. Absences in classes for too many days	1	12.5	5	17.24
6. a. lack of facilities for study at home	5	65.5	17	58.62
b. lack of facilities for study at hostel	2	25	10	34.37
7. lack of proper lab. facilities	4	50	8	27.58
b. lack of proper lab. training	1	12.5	10	34.37
8. lack of interest for the course	..	..	7	24.13
b. lack of aptitude for the course	..	..	7	24.13
9. a. ill health	2	25	10	34.37
b. Financial problems	7	87.5	15	51.72
10. General negligence in study	-	-	6	20.68
11. Other reasons	-	-	-	-



: 20 :

P R O F O R M A - I  
DEPARTMENT OF TECHNICAL EDUCATION  
STUDY ON WASTAGE OF SC/ST. STUDENTS

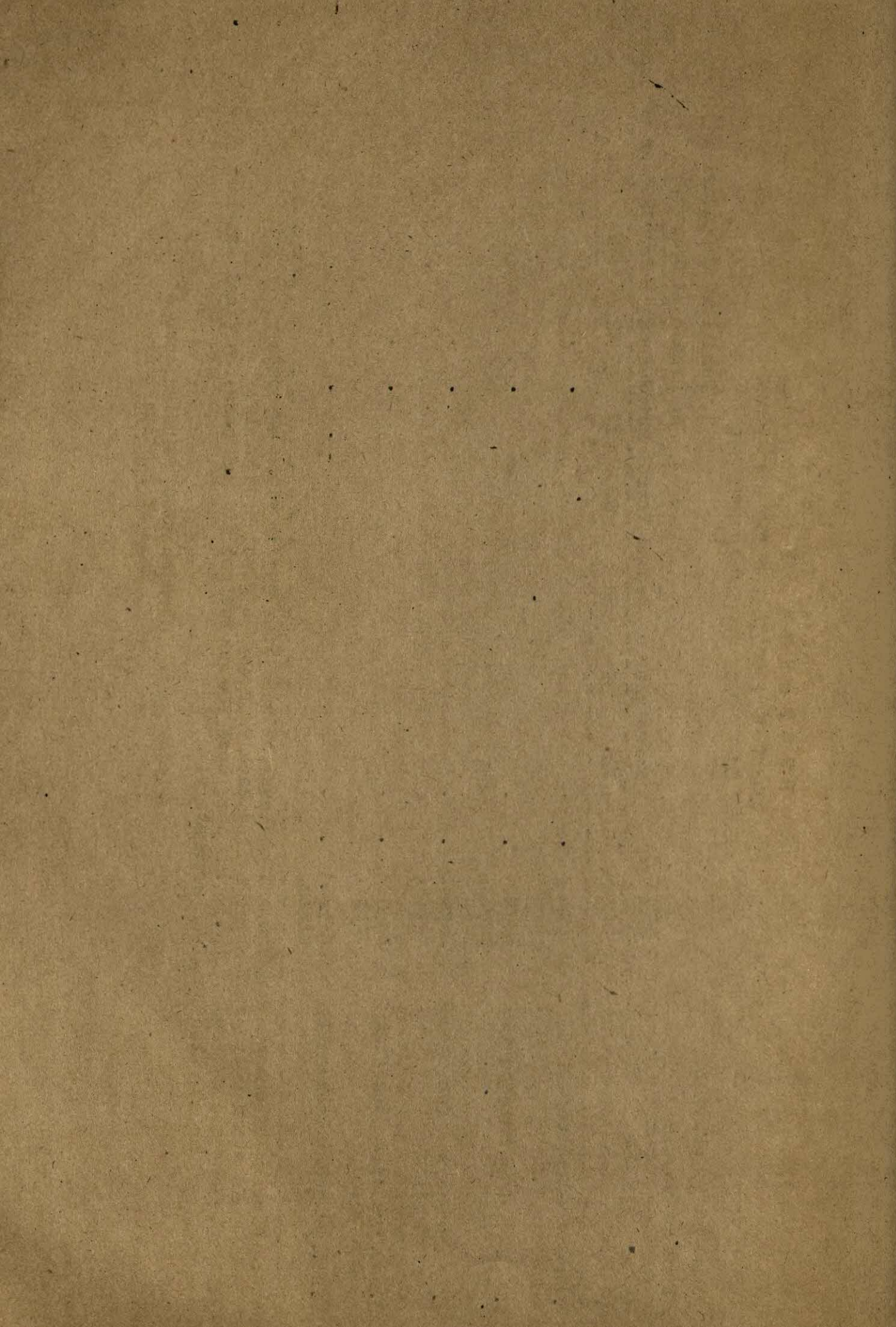
3. Duration of Course:

4. Branch of Course.

	Sex	First year		Second Year		Third Year		Fourth Year		Remarks
		SC	ST	SC	ST	SC	ST	SC	ST	
Name of Institution										
Name of Course										
Number admitted	Boys Girls.									
No. of drop outs during the year	Boys Girls.									
No. presented for annual examination	Boys Girls.									
No. passed in the first chances.	Boys Girls.									
No. passed subsequently	Boys Girls.									

- Note:-
1. List of drop outs (Name and address) of each year may be given separately.
  2. Name and address of those failed each year may be given separately.
  3. Name and address of those who completed the course but did not pass the final examination- so far may also be given separately.

Designation and Signature of  
Head of Institution.



P R O F O R M A II

DEPARTMENT OF TECHNICAL EDUCATION  
STUDY ON WASTAGE OF SC/ST STUDENTS  
QUESTIONNAIRE ON DROP OUT

1. Name & address

2. Year of discontinuous

First year/Second year/Third year/  
Fourth year

3. Whether passed any  
annual examination  
before discontinuance

Yea/No

4. Reason for discontinuing  
studies.

Lack of interest/domestic reasons/  
joined other course/got employ-  
ment/difficulties in adjusting  
coliege atmosphere/tough syllabus/  
repeated failure in examination/  
other reason (specify)

---

Delete whichever in applicable

Signature:

Name :





P R O F O R M A III

DEPARTMENT OF TECHNICAL EDUCATION  
STUDY ON WASTAGE OF SC/ST STUDENTS  
QUESTIONNAIRE ON WASTAGE

Note:- Answers should be given with reference to the subject/  
subjects in which you have failed. Please delete the  
answer not applicable.

Name of Student.....

Name of subject/subjects in which the student failed.....

S1. Reasons for failure  
No.

- |     |  |        |
|-----|--|--------|
| 1.  | Syllabus was too                             | Yes/No |
|     | (a) Vast                                     | Yes/No |
|     | (b) Difficult                                | Yes/No |
| 2.  | Classes in the subjects were not interesting | Yes/No |
| 3.  | Syllabus was not properly covered in Class   | Yes/No |
| 4.  | Questions asked were                         | Yes/No |
|     | (a) Difficult                                | Yes/No |
|     | (b) Out of syllabus                          | Yes/No |
| 5.  | Absence from the classes for too many days   | Yes/No |
| 6.  | Lack of facilities for study at              | Yes/No |
|     | (a) Home                                     | Yes/No |
|     | (b) Hostel                                   | Yes/No |
| 7.  | (This applies to Laboratory Exam. only)      | Yes/No |
|     | (a) Lack of proper facilities                | Yes/No |
|     | (b) Training in the Laboratory               | Yes/No |
| 8.  | (a) Lack of interest                         | Yes/No |
|     | (b) Lack of optitude for the course          | Yes/No |
| 9.  | (a) Reasons like ill-health                  | Yes/No |
|     | (b) Financial problems, etc.                 | Yes/No |
| 10. | General negligence in study                  | Yes/No |
| 11. | Others Reasons (specify)                     | Yes/No |

Note:- A candidate need not answer all questions above.  
Name and address of students may be indicated.

Signature :

Name & Address:



SUGGESTIONS:

As reported by respondents themselves, it is understood that the following are the main causes for wastage in degree and diploma courses. Some reasons put forward are that the syllabus is too vast, it is very difficult to understand, the syllabus was not properly covered, questions asked were difficult etc. In addition to these there is lack of facilities for study at home and there are financial problems for continuation of their study.

Based on these findings the following suggestions are made. Scheduled Caste/Scheduled Tribe students who have aptitude for higher studies in Engineering degree and Diploma courses shall be given intensive coaching classes in basic subjects viz. Mathematics, Physics, Chemistry etc. during the summer vacation, prior to the admission to the Engineering College or Polytechnics. This may be conducted before they seek admission to polytechnics or Engineering Colleges. The minimum qualification prescribed for the Degree in Engineering is Pre-degree S.C./S.T. candidates who have appeared for final Pre-degree examination may be given coaching in physics, Chemistry and Mathematics during summer vacation. These coaching classes will help the students to get higher percentage of marks in his entrance examinations. Those students who get admission to Engineering will also be able to follow the subjects easily.

In the coaching classes these students may be given incentives such as free hostel facilities in the camp, and pocket money.

These coaching camps for P.D.C. candidates shall be conducted in Colleges, Classes for S.S.L.C. candidates seeking admission to Polytechnic can be conducted in selected centres in each District. The Lecturers entrusted with these coaching camps may be paid additional remuneration.

In order to maintain the ratios of S.C./S.T representation in the intake of students in professional courses, instead of lowering the standards, it is advisable to raise the standards by intensive coaching classes in basic subjects as suggested above. This will go a long way in reducing the wastage in the professional courses.

