TWENTYFOURTH ANNUAL PASSING-OUT CEREMONY OF THE PAKISTAN FOREST INSTITUTE, PESHAWAR.

The twentyfourth annual passing-out ceremony of the Pakistan Forest Institute held on 30th September, 1972. Arbab Sikandar Khan Khalil, Governor, N.W.F.P. presided over the function and gave away the degrees, medals and prizes. The proceedings started with a recitation from the Holy Quran. After that Mr. S.M. Ishaq, Director General, Pakistan Forest Institute welcomed the Governor and other guests. The welcome address of the Director General is reproduced below:—

Mr. Governor, distinguished guests, ladies and gentlemen:-

It is my proud privilege and pleasant duty to extend a cordial welcome to you, Sir, and to the distinguished guests who are attending the Twenty-fourth Passing-Out Ceremony of the Pakistan Forest Institute. We are particularly indebted to you, Sir. for having kindly consented and found time to preside over this function despite your multifarious preoccupations and pressing engagements. Your presence in our midst is a great source of inspiration and encouragement to all of us, especially to the entire forestry service.

Forests play a vital role in our national economy and development efforts. They are indispensable not only in meeting the urgent needs of timber, fuelwood and raw material for wood-based industries, but also for checking floods, mitigating drought and affording protection to land. Their role is essentially national in character and necessitates their management on national plane rather than on regional basis. The science of forestry occupies a pivotal position in the land-use pattern. The necessity to coordinate the use of natural resources with the needs of the people has created a new concept of land management by forester. The forester no longer sees himself carrying out the role of tree growing and harvesting, but operates as a land manager in the widest sense with responsibilities for many aspects of national well-being. Modern forestry includes not only physical and biological sciences but also the human and social sciences, economics and engineering technology. The development of large forest areas calls for the use and application of new engineering techniques. Consideration must be given to the social and economic problems of the people living in and around forests who are likely to be affected by the management plans and logging practices.

Forestry is a multi-disciplined science and its scope is expanding every day to meet the new challenges it is called upon to face. Since the industrial revolution, environmental pollution has been growing as a menace to the very survival of man. With industrial expansion and advancement in technology, the severity of this threat is increasing day by day. In the past foresters have been concentrating their efforts for supplying economically and perpetually the forest produce, preserving it at the same time the non-wood values of forests for the welfare of mankind. With the growing appreciation of the problem of pollution all over the world, foresters are now called upon to contribute their bit in fighting this menace. Trees play crucial role in fighting air pollution. It has been established that trees not only reduce the high ambient temperature in cities and produce a cooling effect, but also dampen noise and screen out air-bornes olids. As most water ways rise and flow through forest lands, well-managed forests minimise soil erosion and sediment production ensuring proper distribution of high quality water.

Like human beings, wild creatures need a home and in our woodlands they find the environmental conditions which provide both food and shelter, so essential for their preservation against the onslaught of the disturbing influences of the technological age. The management of trees and open space areas to provide social amenities, presents yet another challenge to the forester. This task is becoming more and more complex every day as the world needs for wood and industrial raw material are expanding. There is increased pressure to divert land now under forests to food production. The demand for establishing new forests is growing for providing environmental protection and outdoor recreation. The role of trees for wildlife sanctuaries and for providing amenities in urban environments is becoming important. All these factors are dictating, as never before, the need for tree improvement technology on a large scale and for a variety of purposes.

The present gap between the production and demand of goods and services from forests in Pakistan is alarming. As is well-known, West Pakistan is extremely deficient in forest resources. Out of atotal area of 310,400 square miles in West Pakistan, hardly about 29,000 square miles or roughly 9.4 per cent area is under the control of the Forest Department in various provinces. Of this, about 58.4 per cent accounts for rangelands, leaving a meagre figure of only 3.9 per cent as the actual forest area. If blanks and unproductive tracts are further eliminated, the really wooded area is reduced merely to about 2.4 per cent of the total land area. This dismal forestry situation makes it incumbent on us not only to zealously guard and conserve the extremely scarce forest resource, but also to launch on an intensive forest management programme to maximise production and ensure protective functions. The present landuse situation in the country does not permit requisite expansion in the forest area. That leaves us with the only alternative to raise the yield from existing forests by sound and intensive management based on scientific principles and by rational and economic utilization of the available produce. The recent cessation of supplies of pulp and paper products like newsprint, wrapping and other kinds of paper and manufactured goods like matches and plywood from East Pakistan has further aggravated the situation resulting from the paucity of timber resources in West Pakistan. To cope with this situation the pattern of production being followed in irrigated forest plantations in the plains must be changed by replacing the conventional species by fast-growing trees needed to meet the urgent demand of industrial wood. The ultimate solution of our timber problems lies in encouraging farm forestry wherever practicable. Development of forests must envisage a new approach in forest management and harvesting techniques.

There is an urgent need for dynamic forestry today than it ever existed before. Problems of forestry must be viewed and resolved in the overall perspective of national economic progress and the new role assigned to trees. Trees do not just suddenly appear in our highly sophisticated landscape, but require constant research and developmental efforts for their establishment. There is considerable time lag from the birth of an idea to the physical production of the required commodity. Behind all these efforts there have to be properly educated and trained forest scientists with specialization in various disciplines to achieve these objectives. In the modern times of fast changing science and technology, forest education has to be a dynamic process involving constant endeavour to improve the courses by periodic review and revision.

It is in these problem areas that the vital role of the Pakistan Forest Institute can be properly appreciated. Our efforts are directed towards the training of technical personnel needed by the Forest Service and the wood industries. The research activities of the Institute are concentrated in finding solution of the technological problems in the field of forestry and forest products. Forestry Research Division is engaged in problem oriented studies relating to the growth, management and improvement of forests. Techniques for raising suitable fast growing species like eucalypts, poplars and pines have been evolved. Experiments are being conducted to evolve genetically superior strains of multi-purpose indigenous trees like shisham and kail. New volume and yield tables of commercially important tree species have been constructed to help scientific and planned management of our forests. New volume tables and yield management rules will enable the forest departments and the timber trade to accurately estimate actual volume of standing trees and felled logs. Realising the importance of scientific management of our watersheds to save rivers and costly dams from being silted up, investigations are in progress on various aspects of this problem. Research is also being carried out to find ways and means for proper management and utilization of rangelands which constitute more than 65 percent of the total area of West Pakistan. Project concerning the utilization and improvement of commercial timbers, including reduction and utilization of wood waste generated at various stages of the processing of timber from an important part of our research programme. The provision of technical guidance and advice needed by wood-using government organizations is an essential part of the functions of the Forest Products Research Division. The branches dealing with the supporting sciences such as botany, entomology and chemistry are actively cooperating with the Divisions of Forestry and Forest Products in providing technical assistance in research investigations connected with these fields. For this Purpose, the system of problem oriented research programme has been introduced to ensure efficient conduct of research leading to results capable of practical application, fixing simultaneously the responsibility for performance on particular researcher or group of workers.

Equally important are that steps that have been taken at this Institute to improve the quality of forest education and widen its scope to suit modern needs. To make courses more purposeful, new subjects such as human relations, sociology, wildlife management and forest economics have been introduced. Besides emphasis on the traditional wood production, the curricula in Forest Education have been expanded to orient it towards conservation, better environment and social well-being. With more diversification and sophistication in the wood processing industries equal attention has been paid to forest utilization and timber technology. Special arrangements need to be made for the regular training of forest workers employed by the private contractors who generally learn their trade while serving on the job. Public service requires a high sense of duty and responsibility, involving both professional integrity and good conduct. These qualities are inculcated in the trainees to prepare them for the great task they are required to perform in the service of forestry and the nation.

Let me take this opportunity to say a few words to the trainees who are passing out today to embark on an active and eventful career. Forestry is a dynamic science and must be moulded for the development and management of forest resources to suit the national needs. You must accept challenges facing the country with a bold and open mind and give a good account of your performance. The education you have received just provides a foundation. It is for you to build up the superstructure by active interest and honest endeavour. It is only with a high sense of purpose and discipline that you can live up to traditions of this vital job, blazing a path for others to follow and setting an example for them to emulate. In congratulating you on your success I wish to remind you that you owe an intellectual debt to your alma-mater and to your teachers. We shall always look forward to hear about your achievements and take pride in your success in discharging your duties in the service to the country and its people.

In the end, I once again heartily welcome you, Sir, and other distinguished guests who have spared their valuable time to make the function a success. I will now request the Director of Forest Education to present his report.

Dr. M. Sharif, Director, Forest Education Division then presented his report.

Mr. Governor, distinguished guests, ladies and gentlemen:

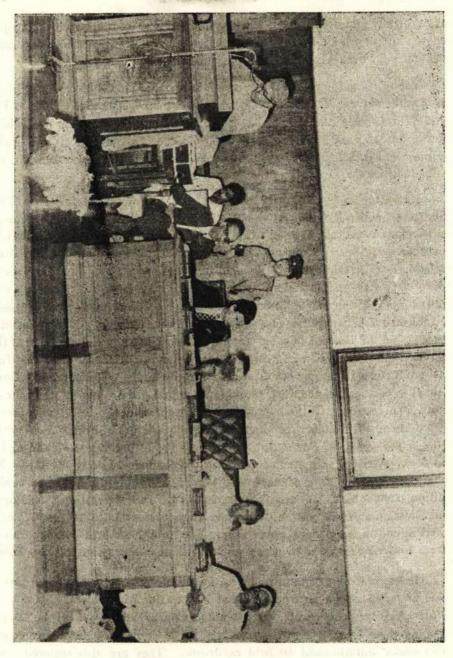
It gives me great pleasure to welcome you on behalf of the Faculty and students of the Pakistan Forest College to the Twenty-Fourth Annual Passing-out Ceremony. We



Mr. S. M. Ishaq, Director General,

Pakistan Forest Institute

reading his report



sports, ordered and physical bearings. The regional will leave a social con-

Arbab Sikandar Khan Khalil, Governor, N. W. F. P. delivering his address.

are specially grateful to you, Sir, for gracing the occasion with your presence. By consenting to preside over this function you have given tremendous encouragement and inspiration to members of the faculty as well as the outgoing students.

Today's function marks the successful completion of the last and the beginning of the next academic year of the Pakistan Forest College: a Division of the Pakistan Forest Instituute. This College is the only seat of learning in the country in the field of forestry, forest products and allied disciplines. Two parallel courses are offered leading to B. Sc. (Hons.) and B. Sc. degrees in Forestry. For the purpose of examinations, the College is affiliated with the University of Peshawar.

Reviewing briefly the activities of the Pakistan Forest College during 1971-72, I would like to report that the year was one of critical analysis and thorough appraisal of College curricula. As a result, areas of recent developments in forestry, technological advancement in professional practices and closely allied courses were identified and added to the forestry syllabi. Equally rewarding was the realization of new concepts and advances in the fields of forestry management and research. Accordingly, the College curricula were revised to reflect the growing emphasis on the multiple use of forest lands and refinements in the established forestry techniques. The conventional forestry puts maximum premium on production of timber and other forest products often at the expense of the significant services and functions performed by forest lands. Recently the latter functions such as production of usable water, forage for livestock, wildlife preservation and recreational aspects have acquired prominance equal to or greater than the conventional uses. To incorporate these progressive concepts and the latest advances, and to integrate them with timber production, the old syllabi in Forest Ecology, Silviculture, Forest Management, Forest Soils and Forest Protection were reviewed and brought upto-date. Aerial Photogrammetry, Forest Economics, Forest Research Methods and Statistics, and Wildlife Management were developed into full-fledged subjects. In addition, new subjects of Park Management and Forest Recreation, (Sociology, Public Administration and Extension, Forestry Mathematics and Soil-Plant-Water relationship were added to the College curriculum. The tours, lectures and laboratory schedules were likewise reoriented to accommodate the new dimensions of the syllabi.

In the process of overall modernization, a long outstanding issue about the academic awards was also settled. The required qualifications for admission to the Pakistan Forest College are F. Sc. for the "Diploma Course" and B. Sc. for the "Degree Course". During their 2-year stay, the students study 23 subjects, undertake 5 major tours of 1 to 8 weeks duration and 60 field excursions. They are also required to participate in sports, athletics and physical training. This rigorous and heavy schedule leaves no time for summer vacation and other seasonal holidays common to other academic institutions. In spite of such an elaborate course of training, the Forest Rangers were, however, awarded a Diploma-in-Forestry. This had resulted in discontentment as the Forest Rangers found themselves discriminated against their counterparts in

sister departments of Animal Husbandry and Agriculture. The need and time for change were ripe, and the case was initiated for proper recognition of the scope and importance of the Forest Rangers course. I am happy to report that the University of Peshawar has agreed to the award of the B. Sc. degree in forestry instead of a Diploma. As a result of this sagacious decision the Forest Ranger trainees passing out today are the first batch of students to receive the degree of B. Sc.-in-Forestry. To the satisfaction of the alumni of this College, the University of Peshawar has also agreed to treat the Diploma-in-Forestry, granted since affiliation, as equivalent to B. Sc.-in-Forestry. It is quite logical that the benefits of this change should automatically accrue to all Forest Rangers who passed this course either from Dehra Dun or from the Pakistan Forest Institute.

At the initiative of the Board of Studies for Forest Education, the University has also recognized the need for specialization in forestry and allied subjects. The exising course for Assistant Conservators of Forests has been accepted, in principle, for extension to a 3-year period. After completing the B. Sc. (Hons).-in-Forestry in two years, the students would be allowed, during the 3rd year, to specialize in a particular area of forestry, for M. Sc. degree. For these pragmatic decisions I congratulate the University of Peshawar.

As to the performance of the students of the College, they have acquitted themselves admirably within the country and outside. It would not be out of place to mention on this occasion that our alumni have excelled in various fields of forestry while pursuing advanced studies at the well known Universities of America and Europe. They have also been readily accepted for employment as professional foresters by foreign governments and international agencies. This is a recognition of high academic standard maintained at this College which is a matter of pride for all those associated with this Institute.

It gives me pleasure to announce that all the outgoing students have passed. Five students have completed their B. Sc. (Hons.) and four have earned B. Sc. in Forestry. Mr. Ali Akbar Khan and Mr. Zahoorul Haque stand first in B. Sc. (Hons.) and B. Sc. courses respectively. The high pass percentage and excellence in training was made possible by the hard work and devotion of the College faculty. The specialized subjects were taught by the experts working in different Branches of the Institute. The Director, Forest Products Research Division and the Watershed Management Officer delivered lectures to the Honours class in their respective fields. The Forest Entomologist, Forest Botanist, Range Management Officer, Forest Chemist and Plant Pathologist covered the related subjects with both the classes. Special lectures were also delivered by Forest Geneticist and Wildlife Specialist. In spite of their research engagement, all of them extended full co-operation and assistance for making the training programme a success. To all of them, I express my sincere gratitude. Of the external organizations which participated in the training programme, special mention must be

made of the Military College of Engineering, Risalpur, and the Soil Survey Project of Pakistan, Lahore. We are thankful to them for their assistance and co-operation.

To our young friends who are passing-out today, I extend my hearty congratulations. The profession you are entering is very challenging, but the rewards are pleasant and plenty. You may find some what hard and difficult in the beginning, but I am sure, you will learn to enjoy it because of the charms this profession offers. You may have to face conflicting situations sometimes, but you can always handle them successfully with a keen sense of devotion to duty. I would advise you to remain mentally alert, intellectually honest and dedicated to your job. Only then you will be able to serve the cause of forestry and interests of the nation. We also wish you a successful and prosperous life.

I would now request you, Sir, to kindly give away the Degrees, medals and prizes.

The names of successful candidates were announced by Mr. Mohammad Afzal, Reader-in-Forestry and the Governor gave away degrees, medals and prizes to the successful candidates. The list of awardees of academic medals and that of winners of sports, game, prizes etc., for the sports tournaments, 1972 are given in appendices "A" and "B". Arbab Sikandar Khan Khalil, Governor, N.W.F.P. then delivered the following address:—

Director General, Members of the Faculty, Ladies and Gentlemen:

I am happy to be amongst you today on the occasion of the Passing-out Ceremony of the Pakistan Forest Institute. It is a welcome opportunity for me to learn about the progress this Institute is making in the field of forestry research and forest education. It is gratifying to know that the management and improvement of forest lands is a matter that is kept under constant study and review. The application of the principle of multiple use of forests is a recognition of the variety of services that this important natural resource is capable of rendering.

All living and inanimate things amongst which man dwells are part of one and the same elaborate system. Man has no other place to fall back upon if he upsets the equilibrium of this complex through neglect and misuse. He has the basic right to use the resources he has inherited from nature for his welfare. At the same time he also carries the responsibility of ensuring that these are not abused in any way to deprive the posterity of the benefits inherent in them. The complacency of our people in regard to the forest wealth, however, leaves much to be desire. The most important role of the present day forester is to inspire and guide people, particularly the communities inhabiting forest areas, in the preservation of the human environment against deterioration. It hardly needs to be emphasised as to how much we depend on forests for our needs and well-being.

Forest lands are a perpetual source of supply of timber, fuel and other forest produce which support important industries. Rangelands, hitherto regarded as waste lands, are qually indispensable for livestock. Apart from these obvious benefits, forests impart beauty and grace to landscape, offer protection and nourishment to wildlife, and provide healthy recreation for human beings. The deterioration of the forest vegetation and its ruthless destruction over large areas has denuded the hill sides. Huge quantities of soil are washed down from the bare slopes with every rain, and are deposited in artificial reservoirs constructed at colossal cost at Mangla, Tarbela and other places. This gradual siltation process is posing a very grave threat to the functional life of these huge dams. Warsak is one of the examples where such damage has already set in. At the same time, water, which is the life blood of all human and cattle population as well as agricultural crops in the arid plains of West Pakistan is not only permanently lost but also becomes a menace causing devastating floods. The conservation of this vital resource for being utilized for useful purposes calls for proper control over its distribution. The only solution of this tremendous problem lies in speedy afforestation and scientific management of the catchment areas which regulate the flow of water in the rivers, so essential for the entire success of the vast irrigation system operating in the country. The conservation of existing forests and new afforestation measures call for the active participation of every citizen in these programmes. This will demand acceptance of responsibility by persons in all walks of life as well as of organizations concerned with related fields. Each one of us must appreciate his personal obligation to protect. forest land for the present generation and improve them for posterity. It is also imperative that our planners develop an integrated approach to for stry problems in the interest of national progress and economy. Whatever the dimensions of the undertaking, the task of forest conservation is by no means impossible. Nevertheless, it is a formidable challenge demanding mobilization of the maximum human efforts at both technical and socioeconomic levels.

Forestry is a long-term investment. A tree crop sometimes takes far longer to mature than a human generation. As a result of this peculiar feature of the forest crop, there is need to ensure continuity of forest management policies and practices. Mistakes in management by an individual could ruin the work of a centry. To precclude the possibility of such expensive errors and to ensure sound management over the year, it is imperative that forest planning is based on sound lines and the management of tree crops is ectrueted to persons who are specially qualified and trained for the job.

In the modern world every knowledgeable citizen is aware of the importance of research as the driving force behind all development and progress. Due to paucity of forest resources in the country, we cannot permit inefficient afforestation and management practices fostered by lack of scientific knowledge. Nation's present and future

requirements of wood can be met only if forestry projects are accelerated with the support of a comprehensive and well-conceived research programme. Research in the Pakistan Forest Institute on various aspects of tree growth, afforestation techniques, management practices and utilization of forest products are of practical use for drawing up management plans on scientific lines and to ensure the most intensive and economical use of the forest resources. Consciousness of the gap between the supply and demand of forest products is reflected in the research effort to raise fast-growing trees and increasing operational efficiency. With the limited availability of wood in the country, the need for reducing waste at every stage of its production and processing is more urgent today than it was ever before. Although importing new technology in these areas would be acceptable, but developing local techniques suited to our conditions and skills is equally important. It is heartening to learn that the Pakistan Forest Institute is providing significant leadership in this direction.

Government is fully aware of the pivotal role which forests and forestry science play in the overall economy of the country. However, the complex nature of producing, protecting and using the basic forest resource brings into sharp focus the need for a well thought out forestry development programme based on an efficient and workable forest policy. Realising this situation, the Central Government set up a Forestry Committee in January last to examine various deficiencies and inadequacies of the existing forestry programmes and procedures and to recommend ways and means to manage and utilize the renewable forest resource on a permanent and efficient basis. Most of the recommendations of this Committee like assessment of timber and fuelwood requirements, propagation of fast growing species, changes in the management species, changes in the management practices and growing of forests by proprietors of wood-based industries themselves have already been accepted in principle. The new pattern of rapidly expanding demand of wood and the need for greatly intensified management of forest lands have not escaped the notice of the Government, and are being dealt with on top priority level. It will be realised that whatever targets are set by the Government, these can be achieved only with the active co-operation of the people.

Since foresters are entrusted with the management of a very valuable and important natural resource, they need a very thorough training with a strong practical bias. I appreciate that this objective is being successfully achieved in this Institute. I am sure that the trainees who are passing out have been duly equipped to meet the technical requirements of their profession. I would like to felicitate the Officers of the Pakistan Forest Institute, especially those of the Division of Forest Education, for doing a good job. All the subject specialists of the Institute and other co-operating organizations also deserve commendation for their contribution to this training programme. I congratulate all the outgoing students on the successful completion of their course. I am sure that the rigorous course of training during your stay at the Insti-

tute has prepared you well for an active career in forestry. It is a red-letter day for the Forest Ranger trainees who are passing out with a Degree instead of a Diploma for the first time. I wish you a promising future and a successful life devoted to the conservation and improvement of national forests. My young friends, we all have faith in your zeal and dedication and are confident that you will rise to the expectations of your Alma Mater in making your country green, rich and strong.

Thank you.

B. Sc. IN FORESTRY 1970-72 COURSE MERIT LIST

				Maximu	ım Marks : 1900
Order o	of Name		Marks obtained	Division	Province/Region
1.	Mr. Zahoorul Haque		1310	I	Baluchistan
2.°	Mr. Muhammad Khan	rafi i	1218	п	Pakistan Forest Institute.
3.	Mr. Muhammad Akhtar Beg	٠	1098	Щ	Pakistan Forest Institute.
4.	Mr. Habibullah Mirza		1031	IV	Baluchistan

B. Sc. (HONOURS) IN FORESTRY 1970-72, COURSE MERIT LIST

Maximum Marks: 2100

Order of Merit	Name	Marks obtained	Division	Province/Region.
1.	Mr. Ali Akbar	 1481	I	N.W.F.P.
2.	Munshi Anwarul Islam	 1291	II	East Pakistan
3.	Mr. A. Z. M. Shamsul Huda	 1270	Ш	East Pakistan.
4.	Mr. Muhammad Nuruzzaman	1261	IV	East Pakistan.
5.	Mr. Muhammad Anwar Hussain	 1185	V	East Pakistan.

APPENDIX "A"

Academic Prizes (1972)

A. B	Sc. in Forestry 1970-72 course.	t did
1.	Mohammad Din Mohammad Aslam Medal for first in the class.	Zahoorul Haque.
2.	Institute Medal for Best Practical Forester .	. Muhammad Khan
3.	Indus Medal for first in Silviculture	. Akhtar Beg.
4.	Dr. G.M. Gorrie Medal for first in Watershed Manage- ment and Soil Conservation.	Zahoorul Haque.
5.	Inspector General of Forests Medal for first in forestry subjects.	Zahoorul Haque.
6.	Institute Medal for first in subsidiary subjects	Zahoorul Haque.
B. N	on-Academic Prizes	
1.	Begum Shahnaz Najmuddin Medal for best marksman	M. Shamsul Haq/ M. Ismail Memon
2.	Marathon Trophy.	Muhammad Nuruzzaman.
C. B	Sc. (Honours) in Forestry 1970-72 course.	
1.	University of Peshawar Gold Medal for standing first and winning first class in B.Sc., (Hons.) in Forestry.	Ali Akbar Khan.
2.	Dux Medal for first in the class	Ali Akbar Khan.
3.	Institute Medal for best practical Forester	M. Nuruzzaman.
4.	Schlich's Memorial Medal for first in Forestry subjects	Ali Akbar Khan.
5.	Bolan Medal for first in Working Plan	Ali Akbar Khan.
,	Dr. G. M. Gorrie Medal for first in Watershed Manage-	Ali Akbar Khan
. 6.	ment and Soil Conservation.	The second second

APPENDIX "B" LIST OF THE ANNUAL SPORTS PRIZE WINNERS, 1972

1.	100 meter	Nuruzzaman	Mohd. Yusuf
2.	Three lagged race	Mohammad Yusuf and Qazi Abdul Ali	M/S S.M. Huda and Zaman
3.	800 meter	Nuruzzaman	Qazi Abdul Ali
4.	400 meter	Nuruzzaman	Mohammad Yusuf
5.	Shot put	Habibullah	Nuruzzaman
6.	Long Jump	Habibullah	Nuruzzaman
7.	Obstacle race	Shamsul Huda	Akhtar Beg
8.	1 mile race	Nuruzzaman	Mohammad Yusuf
9.	High Jump	Habibullah	Nuruzzaman
10.	Officers handicap race	Ch. M. Ismail.	
11.	Staff 100 meters	Qaim Shah	Mohammad Nawaz
12.	Winners Badminton single	Nuruzzaman	Shamsul Huda
13.	Winners Basketball	Honours students	Degree students
14.	Winners Volleyball	Degree students	Honours students
15.	Winners lawn tannis single	Nuruzzaman	Shamsul Huda
16.	Students Tug of War Vrs. staff	Staff	Students
17.	Tug of War D. Gs' team Vrs. D. F. E.'s team	D. G's Team	Students.

counter and country that present the 1960-on Manufact a cruste plant are not to the option of the country of th