REPORT OF THE EXPERT COMMITTEE ON

THE MINIMUM QUALIFICATIONS AND WORKLOAD ETC.

FOR

LIBRARIANS AND DIRECTORS

OF PHYSICAL EDUCATION

IN UNIVERSITIES AND COLLEGES

UNIVERSITY GRANTS COMMISSION NEW DELHI

JULY 1987

REPORT OF THE EXPERT COMMITTEE ON

THE MINIMUM QUALIFICATIONS AND WORKLOAD ETC.

FOR

LIBRARIANS AND DIRECTORS
OF PHYSICAL EDUCATION
IN UNIVERSITIES AND COLLEGES

UNIVERSITY GRANTS COMMISSION
NEW DELHI

JULY 1987

© University Grants Commission
UGC (P) 55/1987
1000
ISBN 81 85025 16 9

Professor G. Padmanabhan, Department of Bio-Chemistry Indian Institute of Science, Bangalore-560 012, and Member, U.G.C.

Camp: New Delhi

July 9, 1987

The Secretary, University Grants Commission, Bahadur Shah Zafar Marg, New Delhi.

Sub: Recommendations of the Expert Committee on the minimum qualifications, workload etc. for Librarians and Directors of Physical Education.

Dear Sir,

With reference to your letter No. F. 1-2/86 (PS Cell) dated 9th December, 1986 on the above subject, I have great pleasure in submitting the final report of the Expert Committee constituted to make recommendations on the issues listed above.

I would like to thank the members of the Committee and the officers of the UGC, without whose, inputs this report would not have been possible.

Thanking you,

Yours faithfully, G. Padmanabhan

CONTENTS

		Page No.
CHAPTER I	Background	1
CHAPTER II	Recommendations regarding qualifications for Librarians and Directors of Physical Education	7
CHAPTER III	Recommendations regarding evaluation, work-load, code of conduct, professional training etc. for Librarians and Directors of Physical Education	15
Appendices		17

REPORT OF THE EXPERT COMMITTEE ON THE MINIMUM QUALIFICATIONS AND WORKLOAD ETC. FOR LIBRARIANS AND DIRECTORS OF PHYSICAL EDUCATION IN UNIVERSITIES AND COLLEGES

CHAPTER I

I. Background

- 1.1 The University Grants Commission appointed a Committee on December 24, 1983 under the chairmanship of Professor R.C. Mehrotra, Emeritus Professor, Rajasthan University, Jaipur to consider the revision of pay scales, career/professional development and service conditions of teachers in the universities and colleges.
- 1.2 In October, 1985 the Commission in consultation with the Government of India, requested the Committee to consider the revision of pay scales of Librarians and Directors of Physical Education, in addition to the pay scales of university and college teachers.
- 1.3 The report of the Committee on revision of pay scales of Librarians and Directors of Physical Education in universities and colleges has been submitted to the Commission on 3rd September, 1986.
- 1.4 The main recommendations/observations of the Committee are as follows:
- 1.4.1 "The Committee noted that the principle of parity has been established in the matter of scales of pay between university and college teachers and Librarians and Directors/Instructors of Physical Education in the universities and colleges. In the case of teachers, the Committee has recommended pay scales in the existing framework; the same may be applied to pay scales of these categories. These pay scales may, therefore, be treated as notional and would have to be converted in the light of the recommendations of the Fourth Pay Commission. The Committee recommends that while converting these scales, it should be ensured that the Librarians and Directors/Instructors of Physical Education in universities and colleges are not put to any financial disadvantage and envisaged parity is maintained."

1.4.2 Recommendations for Librarians Pay scales

The pay scales recommended for the various categories of Librarians in universities and colleges are as follows:

Universities	Pay scale in the existing framework Rs.
(i) Asstt. University Librarian/Documentation Officer	700-40-1100-50-1600
(ii) Asstt. University Librarian (Senior scale)/ Documentation Officer (Senior scale)	1200-50-1300-60-1900
(iii) Asstt. University Librarian (Selection grade)/ Documentation Officer (Selection grade)	2000-125/2-2250
(iv) Deputy University Librarian	1500-60-1800-100- 2000-125/2-2250
(v) University Librarian	1800-100-2000-125/2- 2750-125-3000
Colleges	
(i) College Librarian(ii) College Librarian (Senior scale)(iii) College Librarian (Selection grade)	700-40-1100-50-1600 1200-50-1300-60-1900 2000-125/2-2250

1.4.3 Recommendations for Directors of Physical Instructions and Sports

The categories of Directors of Physical Instructions and Sports in the universities and colleges and the pay scales recommended for them are as follows:

University/College		Pay scale in the existing framework	
1.	Director of Physical Instructions & Sports	700-40-1100-50-1600	
2.	D.P.I.S. (Senior scale)	1200-50-1300-60-1900	
3.	D.P.I.S. (Selection grade)	2000-125/2-2250.	

The Committee felt that in the new set up of Physical Instructions and Sports, it might be necessary to appoint Coordinator(s) of Physical Instructions and Sports in affiliating universities. Where there is a large network of colleges having substantial sports and physical fitness activities, the post of a Chief Coordinator of Physical Instructions may also be required in the university. Details regarding these may be worked out by an expert Committee.

1.4.4 Selection procedure

Selection for the post of University Librarian, Deputy University Librarian, Assistant University Librarian/College Librarian/Documentation Officer and Director of Physical Instructions and Sports should be made strictly on merit on an All India basis. The selection Committee should include atleast two experts not connected with the university. Promotion of candidates to the senior scale and selection grade should also be done on the recommendations of a Selection Committee having atleast one expert not connected with the university.

1.4.5 Probation

An Assistant University Librarian, Dy. University Librarian, University Librarian, College Librarian and Director of Physical Instructions and Sports may normally be put on probation for a period of two years.

1.4.6 The Librarians and the Directors of Physical Instructions should be treated as non-vacation staff and entitled to the leave admissible to other non-vacation staff in universities. The work-load of the Directors of Physical Instructions and Sports would be different from the class room teaching because of the nature of the job which they have to perform. Therefore, the norms of work in their case would be different. The hours of work would be staggered: early morning, late afternoon and during the working day, the total work load aggregating to 40 hours a week. The working hours of Librarians will similarly conform to the library timings. During the vacations, the Librarians and Directors of Physical Instructions and Sports should participate in programmes for their professional development. The Directors of Physical Instructions should also organise games and camps during the vacations.

1.4.7 Housing Facilities

The Committee would urge that keeping in view the special duties of the Directors of Instructions which are to be performed both in the mornings and in the evenings, they should receive priority in allotment of houses on the campus.

1.4.8 Age of superannuation

The Committee recommends that the age of superannuation of the Librarians and Directors of Instructions may continue to be 60 years. No extension or re-employment be given.

1.4.9 Code of Conduct

The Committee had recommended a Code of Ethics for the teachers in

Part 'A' of the report. The recommendations regarding this may be suitably modified in the case of Directors of Instructions and Librarians keeping in view the duties to be assigned to them.

- 1.5 The basic recommendations of the Committee relate to (a) scales of pay (b) avenues of promotion and (c) conditions of service. The Committee suggested the constitution of two Expert Committees. The Expert Committees may be requested to pay special attention to the following:
 - (i) Minimum qualifications:
 - (a) for open All India recruitment at different levels;
 - (b) for promotion to higher grades within the same cadre; and
 - (c) for completion of satisfactory period of probation.
 - (ii) Specific items to be included in the self-appraisal and evaluation forms;
 - (iii) Facilities for professional training and development, taking into account the expansion of activities and augmentation of refresher courses and tests.
 - (iv) Workload to be defined, specifically to meet the special nature of their duties and functions (i.e. staggering of hours etc.).
- 1.6 The Commission at its meeting held on 27th October, 1986 considered the report and generally agreed with the recommendations of the Committee relating to (a) scales of pay, (b) avenues of promotion, and (c) conditions of service. The Commission desired that an Expert Committee may be appointed to consider the minimum qualifications and workload etc., as envisaged in para 1.5.

1.7 Composition

In view of the above decision of the Commission, an Expert Committee was constituted with the following members:

 Professor G. Padmanabhan, Department of Bio-Chemistry, Indian Institute of Science, Bangalore. Convener

Professor N.M. Swani,
 Director,
 Indian Institute of Technology,
 New Delhi.

Member

3.	Professor (Miss) A.K. Anand, Librarian, Panjab University,	M ember	
	Chandigarh.		
4.	Dr. Ashin Das Gupta. Director, National Library, Calcutta.	32	
(*)5.	Professor N.N. Mall, Director, Laxmibai National College of Physical Education Shakti Nagar, Gwalior.	,, 1,	
	Professor M. Robson, Director, Department of Physical Education and Sports Sc Annamalai University, Annamalainagar 608 002 (TN).	iences,	*
7.	Dr. C.M. Muthiah, Director-General Netaji Subhash National Institute of Sports, Motibagh, Patiala.	,,	
	Shri S.K. Chaturvedi, Joint Secretary, Ministry of Human Resource Development, Department of Youth Affairs and Sports, New Delhi.	,	
9.	Shri C.R. Pillai, Deputy Secretary, Ministry of Human Resource Development, Department of Education, New Delhi.	. ,,	
10.	Shri R.P. Gangurde, Joint Secretary, University Grants Commission,	Member-Secretary	

^(*) Expressed his inability to attend the meeting. Professor Karan Singh of BHU was nominated for the meetings held on 11th March, 1987 and 30th March, 1987.

New Delhi.

1.8 Terms of Reference

The terms of reference of the Committee is to consider further the recommendations of the Committee on revision of pay scales of Librarians and Directors of Physical Education in universities and colleges (Mehrotra Committee report part 'B') on the following matters:

- (i) Minimum qualifications
 - (a) for open All India recruitment at different levels;
 - (b) for promotion to higher grades within the same cadre; and
 - (c) for completion of satisfactory period of probation.
- (ii) Specific items to be included in the self-appraisal and evaluation forms.
- (iii) Facilities for professional training and development, taking into account the expansion of activities and augmentation of refresher courses and tests.
- (iv) Workload to be defined, specifically to meet the special nature of their duties and functions (i.e. staggering of hours etc.).

1.9 Time schedule

The Committee had its meetings on 6th February, 1987, 11th March, 1987, 30th March, 1987, 30th April, 1987 and 9th July, 1987. The Committee had discussions with the representatives of All India Association of Librarians and Directors of Physical Education on 30th March, 1987.

1.10 The Committee appointed two sub-Committees to work out the details regarding the self appraisal and evaluation forms and various training programmes for career development of Librarians and Directors of Physical Education. The composition of the sub-Committees is given in Appendix I and II.

CHAPTER II

Recommendations regarding qualifications for Librarians and Directors of Physical Education

2.1 As mentioned in chapter I, the term of reference of the Committee is to prescribe minimum qualifications for the categories of posts suggested by Mehrotra Committee for Librarians and Directors of Physical Instruction and Sports. The Committee tried to suggest the qualifications within the framework of the recommendations of Mehrotra Committee but wherever it felt that it was necessary to go beyond the recommendations of the Mehrotra Committee, it has done so.

2.2 Librarians

The recommendations of the Committee regarding qualifications for Librarians are given as follows:

2.2.1 Assistant University Librarian/College Librarian/Documentation Officer

The minimum qualifications recommended for the post of Assistant University Librarian/College Librarian/Documentation Officer are as follows:

- (i) Qualifying at the national test conducted for the purpose by the UGC or any other agency approved the by the UGC.
- (ii) Master's degree in Library Science/Information Science/Documentation or an equivalent professional degree with atleast fiftyfive per cent marks or its equivalent grade plus a consistently good academic record.

OR

Master's degree in the Arts/Science/Commerce or equivalent degree with atleast fiftyfive per cent marks or its equivalent grade and a Bacherlor's degree in Library Science/Information Science/Documentation or an equivalent professional degree with atleast fiftyfive per cent marks or its equivalent grade plus a consistently good academic record.

2.2.2 Assistant University Librarian (senior scale)/College Librarian (senior scale)/Documentation Officer (senior scale)

An Assistant University Librarian/College Librarian/Documentation

Officer may be considered for promotion to Assistant University Librarian/College Librarian/Documentation Officer (senior scale) Rs. 1200-1900 after completing eight years of service as an Assistant University Librarian/College Librarian/Documentation Officer or on reaching a basic pay of Rs. 1020/- and having the following minimum qualifications:

- (i) Master's degree in Library Science/Information Science/Documentation or one year course of specialisation in an area of information technology/Archive and manuscript keeping or Master's degree in an area of thrust in the institution:
- (ii) Should have attended atleast two summer institutes or refresher courses or orientation course of about five weeks duration each with proper and well defined evaluation procedure; and
- (iii) Consistently good appraisal reports.
- 2.2.3 An Assistant University Librarian/College Librarian/Documentation Officer would cease to earn his annual increments beyond Rs. 1300 in case he does not acquire the following minimum qualifications:
 - (i) Master's degree in Library Science/Information Science/Documentation or One year course of specialisation in an area of information technology/Archive and manuscript keeping or Master's degree in an area of thrust in the institution.

2.2.4 Assistant University Librarian/College Librarian/Documentation Officer (Selection Grade)

An Assistant University Librarian/College Librarian/Documentation Officer (senior scale) could be promoted to Assistant University Librarian/College Librarian/Documentation Officer (selection grade) provided:

- (i) he has reached the basic pay of Rs. 1900 in the scale of Rs. 1200-1900;
- (ii) he has attended atleast two refresher courses or summer institutes of about five weeks duration with proper and well defined evaluation procedure after his placement in the scale of Rs. 1200-1900; and
- (iii) his performance appraisal reports are found satisfactory by the selection Committee including atleast one outside expert.

2.2.5 Deputy University Librarian

(i) Master's Degree in Library Science/Information Science/Documentation with atleast fiftyfive per cent marks or its equivalent grade and a consistently good academic record;

- (ii) One year specialisation in an area of information technology/ Archives and manuscript keeping or Master's degree in an area of thrust in the institution:
- (iii) Seven years experience as an Assistant University Librarian/College Librarian, and
- (iv) Evidence of innovative library services, published work and professional commitment.

Desirable:

M.Phil./Ph.D. degree in Library Science/Information Science/Documentation/Archives and manuscript keeping.

2.2.6 University Librarian

- (i) Master's Degree in Library Science/Information Science/Documentation with at least fiftyfive per cent marks or its equivalent grade and a consistently good academic record;
- (ii) One year specialisation in an area of information technology/ Archives and manuscript keeping Master's Degree in an area of thrust in the institution; and
- (iii) atleast eight years as a Deputy Librarian in a University Library or fifteen years experience as a College Librarian.
- (iv) Evidence of innovative library service and organisation of published work.

Desirable

M.Phil./Ph.D. degree in Library Science/Information Science/Documentation/Archives and manuscript keeping.

2.2.7 Selection

The Committee recommended that the selection of Assistant University Librarian/College Librarian/Documentation Officer, Deputy University Librarian and University Librarian must be made on All India basis with the help of Selection Committee. The Selection Committee should include atleast two outside experts not connected with the university and one of them should be practicing Librarian.

2.2.8 Career Development of existing Librarians

This Committee received many representations regarding pay revision given to Librarians with effect from 1st April, 1980. One of the qualifications proposed for the new scale of Rs. 700-1600 was first or second class B.A./

B.Sc./B.Com. degree plus a first or second class M.Lib.Sc. degree or first or second class M.A./M.Sc./M.Com. degree and a first or second class B. Lib. Science or a diploma in Library Science. Those who were appointed before 1.1.1973 were given exception in respect of acquiring the new qualifications.

In the 1st January, 1973 revision while the scales of Rs. 400-500 and Rs. 400-800 were upgraded to Rs. 700-1300 and Rs. 700-1100 respectively, the scale of Rs. 300-600 was upgraded to Rs. 550-900. It appears that there are a small number of incumbents who have not got the Rs. 700-1600 grade in 1980 (especially the ones in Rs. 550-900 grade), since they possess a Master's degree with a III class. These incumbents had no opportunity or facilities to improve their qualifications, it is claimed that they have large years of experience and some are on the verge of retirement. Therefore, it has been represented that relaxation in qualifications should also be given to those appointed before 1st April, 1980 since all the scales were merged into Rs. 700-1600 at this point of time.

The Committee recommends those who were appointed before 1st April, 1980 but having a qualification of Master's degree (III class) and Bachelor's degree/Diploma in Library Science, should also be given the grade of Rs. 700-1600, if they had put in atleast ten years of experience as Assistant Librarian/College Librarian/Documentation Officer by 1.4.80. However, these persons should obtain the prescribed additional professional qualifications in case they would like to be considered for higher posts.

2.2.9 The Committee felt that the posts of Deputy Librarian and Librarians may also be created in the selected colleges. The UGC evolve suitable criteria for selection of such colleges.

A provision should be made to award positions of Librarians of Eminence on the lines of Professors of Eminence for outstanding Librarians.

2.2.10 Probation

The Committee recommends that an Assistant University Librarian/College Librarian/Documentation Officer, Deputy University Librarian and University Librarian may normally be put on probation for a period of two years.

An Assistant University Librarian/College Librarian/Documentation Officer may be confirmed only when he has actually completed a short term course of three-four weeks duration in a relevant field and his performance appraisal reports are found satisfactory.

2,3 Qualifications for Directors of Physical Education and Sports

Inspite of the fact that the terms of reference of this Committee does not

include some of the issues, the Committee made recommendation in the spirit of the Mehrotra Committee report that "it should be the endeavour of the Expert Committee on Physical Instructions and Sports to recommend the re-structuring and broad-basing of the system in such a manner that physical fitness becomes a byeword in educational institutions, which should also make in full measure their overdue contribution to national prowess in games and sports", and emphasis of National Education Policy, 1986 for development of physical education and sports in universities and colleges.

2.3.1 The Mehrotra Committee has suggested a change in the designation of personnel working in various universities and colleges for the development and promotion of Physical Education to "Physical Instructors" or "Coordinators". This needs to be modified as the word instruction is a mis-fit in the present times. The word "Physical Education" is more appropriate term in modern concept. Whereas Physical Education includes sports, there seems to be a need to emphasise sports as specific part of physical education.

Hence, the designation of personnel working for development of Physical Education and Sports in the Universities and Colleges should be the Director of Physical Education and Sports.

In the Professional Institutions as well as Teaching Departments in the universities and colleges, the designation may however, be retained as in the case of other teachers.

2.3.2 The 'B' Part of the report presented by Professor Mehrotra does not mention any equivalent post of Physical Education and Sports personnel above the rank of Lecturer. Though three tier promotional avenue exists at the level of Lecturer grade, it is not so, for further promotion equivalent to Readers' and Professors' grade.

It may be noted that in universities like Panjab, there are people who are already serving as the Director of Physical Education in the Professors' scale, Dy. Director of Physical Education in the Readers' scale and Assistant Director of Physical Education in the Lecturers' scale. So also various university set ups have the Directors of Physical Education in the Professors' and Readers' scale, in the existing situation.

2.3.3 The report also does not differentiate much on the work of the College Director of Physical Education and the University Director of Physical Education. It may be noted that Director of Physical Education of a University has to be a man with high knowledge and learning and an aptitude for professional upliftment alongwith extra ability to carry the house together as compared to other departments. The University's Director of Physical Education is to be a very senior man, since his unit of correspondence itself is the Principal of a College or Professor/Head of Department. He is supposed

to maintain a balance of the whole University's academic life with extra thinking, labour, skill, dexterity, and methods of working in keeping a very well knit schedule of activities alongwith organisation, coordination and supvervision of various types of activities which are normally looked after by various other teachers of the rank of lecturer/Reader and even Professor. The University's Director of Physical Education however, has got to be a person with qualification and experience to be accepted by people with whom he has to work. Such mention does not exist in the report and hence, needs to be identified very specifically. There should however, be no compromise as far as experience and qualification in the selection of the Director is concerned, as per other academic disciplines or equivalent jobs.

2.3.4 There has been a renewed concept of education with Physical Education forming a very important role in the total educational stream and the concept of Physical Fitness has achieved great importance for preparedness in mental learning. The Prime Minister's New 20 Points Programme includes "Physical Fitness and Adventureous Sports" and the man to cater for all such activities of thrill, achievement, excitement and human satisfaction in the educational stream to consider "Human as a whole, needs to be identified with proper facilities and position in the society. The University Director has also got to coordinate sports activities with national and international sports bodies and requires a very large sphere of activities of continuous nature.

2.3.5 Minimum qualifications for Assistant University D.P.E.S./College D.P.E.S.

The following minimum qualifications are suggested for the Assistant University D.P.E.S./College D.P.E.S.

- (i) Qualifying at the National Test conducted for the purpose by the UGC or any other agency approved by the UGC.
- (ii) Master's degree in Physical Education with atleast fiftyfive per cent marks or its equivalent grade and good academic record.

2.3.6 Qualifications for Assistant University D.P.E.S./College D.P.E.S. (senior scale)

The Assistant University D.P.E.S./College D.P.E.S. may be considered for promotion to Assistant University D.P.E.S./College D.P.E.S. (senior scale) Rs. 1200-1900, after completing eight years of service as an Assistant University D.P.E.S./College D.P.E.S. or on reaching a basic pay of Rs. 1020 and having the following minimum qualifications:

- (i) Ph.D. degree.
- (ii) Should have attended atleast two summer institutes or workshops

or clinics or refresher or orientation courses of about three-four weeks duration each with proper and well-defined evaluation procedure: and

- (iii) Consistantly good appraisal reports.
- 2.3.7 An Assistant University D.P.E.S./College D.P.E.S. would cease to earn his annual increments beyond Rs. 1300 in case he does not acquire the following minimum qualifications even after reaching the basic pay of Rs. 1300:

Ph.D. degree

OR

M.Phil. degree, alongwith satisfactory completion of a course organised by any agency recognised by the UGC.

2.3.8 Qualifications for Assistant University D.P.E.S./College D.P.E.S. (selection grade)

An Assistant University D.P.E.S./College D.P.E.S. (senior scale) could be promoted to Assistant University D.P.E.S./College D.P.E.S. (selection grade) provided:

- (i) he has reached the basic pay of Rs. 1900 in the scale of Rs. 1200-1900.
- (ii) he has attended atleast two refresher courses, workshops, clinics or other such summer institutes of about three-four weeks duration with proper and well defined evaluation procedure after his placement in the scale of Rs. 1200-1900, and
- (iii) his performance appraisal reports are found satisfactory by the selection committee including atleast one outside expert.

2.3.9 Deputy University D.P.E.S.

Essential

- (a) Ph.D. degree in Physical Education
- (b) Seven years experience as an Assistant University D.P.E.S./College D.P.E.S./Lecturer in Physical Education.
- (c) Specialised training in refresher courses or officiating organisation and coaching/teaching technologies/specialised areas relevant to the profession;
- (d) He should have evidence of innovation and organisation or management of published work, preparation or coaching or management

of sports teams for higher level of performance like combined universities or state/national teams.

2.3.10 University D.P.E.S.

- (a) Ph.D. degree in Physical Education
- (b) He should have experience of atleast five years as Deputy University D.P.E.S./Reader in Physical Education.
- 2.3.11 A provision should be made to award UGC Directorship (Director General) on lines of the Professor of Eminence who have shown or performed outstandingly well in sports organisation at International level or other equal academic work. The selection for such posts should be done at National level and UGC may evolve a suitable mechanism for the same.

The posts of DPES in the grade of Reader and Professor may also be created in selected colleges. The UGC may evolve criteria for selection of such colleges.

2.3.12 Selection

"Selection of Dy. University D.P.E.S./University D.P.E.S. must be made on All India basis with the help of proper selection committee. The Selection Committee should include atleast two outside experts not connected with the University and one of them to practising Director of Physical Education and Sports.

2.3.13 Probation

An Assistant University D.P.E.S./College D.P.E.S. may normally be put on probation for a period of two years. He may be confirmed only when he has actually completed a short term course of three-four weeks duration in relevant fields and his performance appraisal reports are found satisfactory.

CHAPTER III

Recommendations regarding evaluation, workload, code of conduct, professional training etc. for Librarians and Directors of Physical Education

3.1 Evaluation of Librarians and D.P.E.S.

The importance of evaluation has been explained in the Mehrotra Committee report. The National Policy on Education and its Programme of Action has emphasised evaluation of teachers in the universities and colleges. The Committee is of the opinion that evaluation of Librarians and D.P.E.S. in the universities and colleges is equally important. The Committee had appointed the sub-Committees to suggest format for evaluation of Librarians and D.P.E.S. The format suggested are at Appendix III and IV respectively for Librarians and D.P.E.S.

3.2 Workload for Librarians and D.P.E.S.

The Committee endorsed the recommendations of Mehrotra Committee report, para 'B' regarding workload for Librarians and D.P.E.S. that:

"The Librarians and the DPIS should be treated as non-vacation staffand entitled to the leave admissible to other non-vacation staff in universities. The work-load of the Directors of Physical Instructions and Sports would be different from the class room teaching because of the nature of the job which they have to perform. Therefore, the norms of work in their case would be different. The hours of work would be staggered: early morning, late after-noon and during the working day, the total work load aggregating to 40 hours a week. The working hours of librarians will similarly conform to the library timings. During the vacations, the Librarians and Directors of Physical Instructions and Sports should participate in programmes for their professional development. The DPIS should also organise games and camps during the vacations."

The Committee recommends that since the promotion of the Librarians is linked to acquisition of additional qualifications, they should be given the necessary facilities and every kind of leave (such as duty/sabbatical/study) admissible to teachers for career development and improvement of qualifications. It will help them in giving better services.

3.3 Code of Ethics

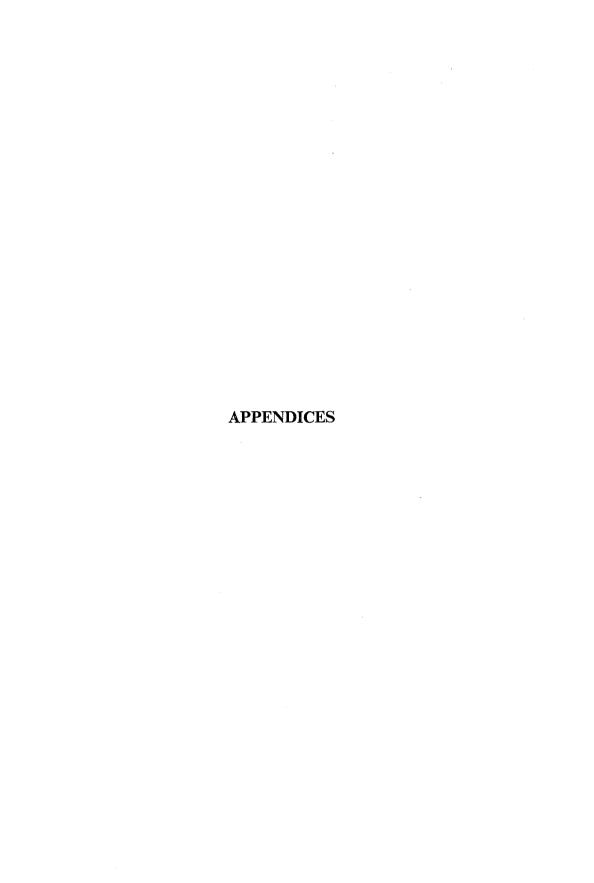
The Committee is of the view that code of ethics for Librarians and DPE.S. be formulated with the help of their National level organisation as suggested for teachers in Programme of Action of National Policy on Education-1986.

3.4 Professional training for Librarians

Considering the rapid expansion in the information system and development of modern management techniques for running libraries, continuous professional training of Librarians has become essential. The Committee had appointed a sub-Committee to identify the courses for continuous professional training of Librarians and the places where such courses could be conducted, as given in Appendix V.

3.5 Professional training for D.P.E.S.

Continuing professional training is as necessary to DPES as it is for teachers and Librarians. The field of physical education and sports is a competitive field and DPES have to be in touch with modern techniques and innovations in the area of physical education, sports and physical fitness activities. The Committee had appointed a sub-Committee to work out details of courses etc. which are given at Appendix VI.



LIST OF APPENDICES

Sl.1	Vo.	Page
Ι	List of sub Committee members to evolve format for Evaluation and Professional Training Programme for Librarians.	21
II	List of Sub-Committee members to evolve format for Evaluation and Professional Training Programme for Directors of Physical Education.	23
Ш	Format for Evaluation for Librarians.	24
IV	Format for Self Assessment for College/University Directors of Physical Education and Sports.	28
v	Courses of Study for Refresher Courses for Librarians.	33
VI	Courses of Study for Refresher Courses for Directors of Physical Education and Sports.	37

APPENDIX I

List of Sub Committee Members to evolve format for evaluation and Professional Training Programme for Librarians

 Professor (Miss) A.K. Anand Librarian,
 Panjab University Library, Chandigarh

Convener

- Smt. Kalpana Dasgupta Librarian, National Library, Belvedere, Calcutta
- Professor Probir Roy Chowdhury
 Department of Library and Information Science,
 Jadavpur University,
 Calcutta
- Shri Subhash Biswas
 Librarian,
 Central Secretariat Library,
 New Delhi
- Professor K.A. Issac
 Head of the Library Science Department,
 University of Kerala,
 Trivandrum-695 034
- 6. Shri T.V.R. Murthy
 University of Hyderabad Library,
 Central University,
 Hyderabad-500 134
- Shri T.S. Rajagopalan
 President,
 Indian Library Association,
 A/40-41, Flat No. 201,
 Ansal Building, Dr. Mukherjee Nagar,
 Delhi-110 009

8. The Director,
INSDOC/Scientist-in-charge Training Division,
Satsang Vihar Marg,
Special Institutional Area,
Delhi

APPENDIX II

List of Sub Committee Members to evolve format for evaluation and Professional Training Programme for Directors of Physical Education

1. Dr. N.N. Mall

Director,

Lakshmibai National College of Physical Education,

Shaktinagar,

Gwalior-474 002

Convener

2. Professor M. Robson

Director.

Department of Physical Education and Sports Sciences,

Annamalai University,

Annamalainagar-608 002

3. Dr. J.S. Naruka

Director.

Department of Physical Education,

Delhi University,

Delhi

4. Dr. T.S. Brar

Lakshmibai National College of Physical Education,

Shaktinagar,

Gwalior-474 002

5. Dr. A.K. Uppal

Lakshmibai National College of Physical Education,

Shaktinagar,

Gwalior-474 002

6. Shri K. Gunasekharan

Education Officer,

University Grants Commission,

New Delhi-110 002

APPENDIX III

Format for Evaluation by Self, Peer and Reviewing Officer

1.	•	Name (in full BLOCK LET		
		`	ſTERS)	
	(b)	Designation		
	(c)	Date of birth	• • • • • • • • • • • • • • • • • • • •	
	(d)	Department/Branch/Section		
	(e)	Date of joining this Instituti	on's service	
	(f)	Present post held since		
	(g)	Scale of pay & basic pay.		
	(h)	Whether permanent/tempo	rary/ad-hoc	
	(i)	Leave enjoyed during the ye	ear (total)	
2.	Qu	alifications		
	(a)	Academic (i)	Year	University/Institution
		(ii)		
		(iii) (iv)		
		•		
	Me	ention any special feature/a	ward/credit etc	:.
	(b)	Professional qualifications		
			Year	University/Instt.
		(i) Certificate		
		(ii) Diploma		
		(iii) B. Lib. Sc.		
		(iv) M. Lib. Sc./MLISC		
		(v) M. Phil/Ph.D.		
		(any special feature/award	/credit etc.)	

(c)	Improvement of qualification during the preceding one year (degree/diploma, short-term training/orientation course, etc.) academic/professional:
(d)	Research work: any kind of Library survey, evaluation, analysis that has been formally submitted/during the period
(e)	Research papers/monographs/books published during last year (title published/Journal)
(f)	Research in progress: (any research project undertaken/assigned connected with the library or otherwise. Please give the title of the project and time limit etc.)
(g)	Seminar, conference, symposium, etc. attended (including paper contributed, capacity in which participated, e.g. resource person, Rapporteurs, presented paper, etc.: with details)
	•••••••••••••••••••••••••••••••••••••••
(h)	Membership of professional bodies with details
	•••••••••••••••••••••••••••••••••••••••
	•••••
Dı	uties and job specifications
(a)	Total weekly working hours
(b)	Work in shifts/daily working schedule
	No. of staft members you supervise

3.

ď	Kinds of job you have performed during the last year indicating the rank order
	(a) Supervisory
	(b) Policy & Planning
	(c) administration
	(d) books, periodical section, etc.
	(e) documentation
	(f) cataloguing and classification filing of cards
	(g) acquisition
	(h) periodicals
	(i) reference & bibliographical activities
	(j) circulation
	(k) stock-maintenance (including funding)
	(l) display, promotional work
	(m) editing & publishing
	(n) computer section
	(o) reprographic work
	(p) staff training
	(q) attending the library users personally
	(r) meeting conference
	(s) social and extension activities
	(t) gift and exchange
	(u) inter-library loan
	(v) teaching/academic
Gi	ve some details, where possible
4. (a)	Languages known
(b)	Mention any significent contribution you have made to improve the (a) Library services of your Institution and (b) Development of Library profession
	Signature Librarian
Date:	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,

To be completed by peers

Indicate overal	l assessment of the work of the individual.
	Signature
Date:	Designation
	To be completed by Reviewing Officer
1. Do you agree	with the information given?
2. If not give jus	tification
3. Overall assessi	ment of work

APPENDIX IV

Self Assessment for College/University Directors of Physical Education & Sports

1.	• •		
	• • • • • • • • • • • • • • • • • • • •		• • • • • • • • • • • • • • • • • • • •
	(b) Age (Date of birth	1)	
	(c) Designation		
	(d) Department	• • • • • • • • • • • • • • • • • • • •	· · · · · · · · · · · · · · · · · · ·
	(e) Date of joining the	present post	
			one)
	(f) Present post held a	nd since when	
	(g) Scale of pay and ba	isic pay	
			•
	• • • • • • • • • • • • • • • • • • • •	- ·	of days)
2.	Qualifications	Year	University Institution
	(a) General	1eui	Oniversity/Institution
	(i)		
	(ii)		
	(iii)		
	(iv)		
	(b) Professional		
	(b) Floressional	Year	University/Institution
	(i)		
	(ii)		
	(iii)		
	(iv)		
	(v)		
	(vi)		

((c) Academic/Professional Achievements during the year. (Short-term/ Special Refresher/Orientation Course etc.)
(d) Research papers/articles, books published during the year (mention title, Journal/other publication details).
	••••••

•	(e) Research in progress: (any research project undertaken/assigned connected with sports or otherwise please give the title of the project and time limit etc.)
	•••••
	(f) Participation in Seminars, Conferences, Symposia, Clinics, Workshops etc & presented paper (including papers contributed, capacity in which participated e.g. resource person, rapporteour presented paper etc. with details
	(i) Participated as a resource person
	(ii) Presented a paper
	(iii) Attended
•	(g) Membership of professional organisations (e.g. AIPEATA, NAUTPE, IATHPER, AISSPE etc. with details)
3.	Work Load
	(i) On field (practical work)
	(ii) In office administrative work, planning and coordination
Supe	rvision
	(i) Supervision of personnel under charge:
	(a) Professional including coaches
	(b) Office Staff
	(c) Ground Staff
	(d) Any other
	Responsibilities undertaken during the year
	(i) Coaching in Sports/Games, specify

varsity or any other Athletic Meets/ as Managers, Coaches/Technical delegates/ Official etc.
5. Organisational experience (As Director, Chairman Org. Secretary, member of Org. committee/Sub-committee
(i) Motivation and Incentive to Sportsman
(ii) Rehabilitation activities of the handicapped
•••••
(iii) Recreational programmes for all
•••••
(iv) Stock-maintenance (including funding)
(v) Exhibition and displays, promotional work
(vi) Editing and publishing of Sports achievements
(vi) Eutong and paramager specie demovements
(vii) Mass participation & physical fitness programme
(vii) Mass parterpation & physical iteless programme
(viii) Week end programmes
(vin) week end programmes
(ix) Participation in adventurous sports (hiking, camping, trekking etc.)
(x) Social and Extension Community programme
•••••••••••••••••••••••••••••••••••••••
6. Mention any achievements/credit of yours that has been recognised/helped in improving the sports services enclose document, if any)
•••••••••••••••••••••••••••••••••••••••
Date: SIGNATURE Director Physical Edu. & Sports

EVALUATION BY SUPERIOR

(10	be completed by the reviewing Officer)
(a)	Observation about punctuality, conduct, integrity, sociability
(b)	Outstanding work/or warned reprimanded in writing (supporting documents)
	•••••••••••••••••••••••••••••••••••••••
(c)	Ability to work and deal directly with the sportsman
(d)	Has the officer shown himself able to do the work for which he has been appointed?
	(i) Lecture
	(ii) Teaching of Activities
	(iii) Tutorial & guidance work
	(iv) Supervision
	(v) Individual research of study undertaken:
	(vi) Participation in and assignments undertaken by the college
(e)	What is your opinion of the officer's capacity for getting work out of and his relation with his:
	(i) Colleagues
	(ii) Students
	(iii) Subordinates
(f)	What has been the officers Attitude towards his superiors?
(g)	What in your opinion has been the officer contribution to the life of the college in general (mention special contribution if any)
(h)	Has any incident occured during the period under report which reflects credit or discredit on the officer? (Mention)
(i)	Has the officer shown initiative and imagination in planning his work?

(j)	Has the officer, during the year, conducted any original work?	
(k)	Has the officer shown improvements on defects brought to his notice in the last report?	
(1)	General remarks as to loyalty, discipline, punctuality, conduct and competence.	
(m)	His contribution generally to the social life of the college.	
PEER EVALUATION		

- 1. Ability to communicate
- 2. Qualities of Human relationship
- 3. Organisational ability
- Leadership 4.
- Skill performance 5.
- Sociability 6.
- 7. Personal habits
- Public relations/publicity
- 9. Ability to identify problems
- 10. Personality
- Liaison with other departments 11.
- 12. Any other position contributed

APPENDIX V

Orientation Programmes that may be run for College Librarians/Assistant Librarians/Deputy Librarians/ Librarians in University Libraries

Level I Courses

Target Group: College Librarians/Assistant Librarians in universities—Duration 100 hours.

Course 1 (LI-1)

1. Library management;

Personnel, fiscal, library material, building, furniture equipment. Operational functions: (a) job analysis (b) work-flow (c) workload (d) Evaluation of work (e) Time scheme (f) Records and Statistics

Course 2 (LA-2)

Resource Development and management

- (a) Collection Development
- (b) Resource sharing
- (c) Net-working
- (d) Information processing and Organisation
- (e) Non-book materials

Course 3 (LA-3)

User studies

- (a) User survey
- (b) Information gathering habits
- (c) User Education and Training
- (d) Assessment of information needs of users
- (e) Information use promotion

Course 4 (LI-4)

Computer Application

- 1. System Analysis for computerization
- 2. Hardware selection
- 3. Library application Software
- 4. Automation for Library jobs
 - (a) Acquisition
 - (b) Serial Control
 - (c) Cataloguing
 - (d) Office Management
 - (e) Circulation
 - (f) Bibliographical Information handling
 - (g) Database creation

Course 5 (LI-5)

Information Services and Products

- 1. Reference Service
- 2. CAS
- 3. SDI
- 4. Information Systems
- 5. Reprographic Services

Level II (L II) Courses

Target Group: Deputy Librarians/Librarians-

Duration: 100 hours

Course 1 (L II-1) Information Technology (Advance Course)

- i) Computer applications—An introduction to computers. Computer organisation and architecture
 - (a) Application of computers to Library and Information work, Global and national scenes. Software and hardware concepts, Operating systems, Large, mini, micro and personal computers, word processors, Different types of computer equipment useful in implementing data information systems, input-output devices, storage devices, etc.

- (b) Bibliography and information handling
- (c) Office management
- (ii) Reprographic Services
- (iii) Elements of Telecommunication

Course 2 (L II-2)—Advance course in Library Management

- (a) Policy formulation
- (b) Planning—Physical and functional
- (c) Scheduling and monitoring
- (d) Control
- (e) Modelling
- (f) Project Proposal and implementation
- (g) Evaluation

Course 3 (L II-3) Communication

- I. Written communication
 - (a) Technical Report Writing
 - (b) Feasibility Studies
 - (c) Project Report
- II. Public Relations
 - (a) Rapport with the Academic Community
 - (b) Rapport with administration
 - (c) Rapport with professional, academic bodies, learned Societies and funding agencies
- III. Audio Visual communication—use of educational technology aids

Course 4 (L II-4) Conservation and Preservation

- (a) Library materials
- (b) Archival Cells

Institutions identified to run the Orientation Courses (Levels I & II)

University Librarians and/or Departments of Library and Information Sciences

- 1. Jadavpur University, Calcutta
- 2. Bhagalpur University, Bhagalpur
- 3. Banaras Hindu University, Varanasi

- 4. University of Delhi, Delhi
- 5. Aligarh Muslim University, Aligarh
- 6. Punjab University, Chandigarh
- 7. University of Nagpur, Nagpur
- 8. S.N.D.T., Bombay
- 9. University of Poona, Poona
- 10. University of Bombay, Bombay
- 11. University of Hyderabad, Hyderabad
- 12. Utkal University, Bhubaneswar
- 13. University of Sagar, Sagar
- 14. University of Kerala, Trivandrum
- 15. University of Mysore, Mysore
- 16. University of Rajasthan, Jaipur
- 17. Gauhati University, Gauhati

INSTITUTIONS

- 1. D.R.T.C. Bangalore
- 2. National Library, Calcutta
- 3. Central Secretariat, New Delhi
- 4. Physical Research Library, Ahmedabad
- 5. Indian Instt. of Science, Bangalore
- 6. N.A.S.S.D.O.C., New Delhi
- 7. I.I.T., Bombay
- 8. I.I.T., Baroda
- 9. BARC, Bombay
- 10. M.S. University of Baroda, Baroda
- 11. DESIDOC, New Delhi
- 12. Nehru Museum & Library, New Delhi
- 13. National Aeronautical Library, Bangalore
- 14. CFTRI, Mysore
- 15. NICDAD, Lucknow

APPENDIX VI

Courses of Study for Refresher Courses—Duration of "Five" Weeks

Course No. 1 (For Senior Scale)

Cluster of Subjects to be offered in First Course

I. COMPULSORY

- 1. Physical Fitness Area
- 2. Rules of Games and Sports.

II. OPTIONAL (Any TWO of the following)

- 3. Philosophical, Psychological, Social Concept of Physical Education (Principles)
- 4. Organisation and Administration of Intramurals and Mass Sports Programme
- 5. Recent Trends—National, International Policies in Education and Physical Education

PRACTICAL

- 1. Officiating and Coaching
- 2. Tests and Measurements

FIELD PROJECTS

The trainee should attend one National Tournament and one Athletic Meet of National Level and prepare a critical report any time before each assessment becomes due.

EVALUATION

Each Paper (including Practicals) will carry 50 mks. and the questions will be in the form of Objective or short answer types.

Course No. 2 (For Selection Scale)

I. COMPULSORY

- 1. Measurement and Evaluation and Statistics
- 2. Rules of Games and Sports

II. OPTIONAL (Any TWO of the following)

- 3. Scientific Methods of Training and Coaching
- 4. Curriculum Development related to College and University
- 5. Bio-mechanics of Sports Techniques

PRACTICAL

- 1. Officiating and Coaching
- 2. Tests and Measurements

FIELD PROJECTS

The trainee should attend one National Tournament and one Athletic Meet of National Level and prepare a critical report any time before each assessment becomes due.

EVALUATION

Each paper (including Practicals) will carry 50 marks and the questions will be in the form of Objective or Short answer types.

Course No. 3 (For Professor Scale)

I. COMPULSORY

- 1. Exercise Physiology and Sports Medicine
- 2. Rules of Games and Sports.

II. OPTIONAL (Any TWO of the following)

- 3. Design and Construction of Physical Education and Sports facilities
- 4. Psychology and Sociology of Sports
- 5. Introduction to Computer Science

PRACTICAL

- 1. Officiating and Coaching
- 2. Test and Measurement

FIELD PROJECTS

The trainee should attend one National Tournament and one Athletic Meet of National Level and prepare a critical report any time before each assessment becomes due.

EVALUATION

Each paper (including Practicals) will carry 50 mks. and the questions will be in the form of Objective or short answer types.

MEASUREMENT, EVALUATION AND STATISTICS

I. Introduction

Concept of Measurement and Evaluation, Need and Importance of Measurement and Evaluation.

II. Test Evaluation

Criteria of Test selection, steps in constructing skill test.

- III. Suggesssions for Administering Tests
- IV. Tests of Physical Fitness, Motor Fitness, Cardio-respiratory Endurance and Skill.

STATISTICS

- I. Need and Importance of Statistics.
- II. Measures of Central Tendancy

Calculation of Mean, Median and Mode.

III. Measures of variability

Computation of Standard Deviation.

IV. Correlation

Computation of product-moment, Correlation from grouped and ungrouped data.

REFERENCE

- 1. Application of Measurement in Health and Physical Education, By H. Clarke.
- 2. Measurement in Physical Education. By Donald K. Mathew.
- 3. Measurement and Evaluation in Physical Education By Philips and Hornak.
- 4. Research Processes in Physical Education, Recreation and Health By David Clarke and Herison Clarke
- 5. Fundamental Statistics in Psychology and Education By J.P. Guilford.

PSYCHOLOGY AND SOCIOLOGY OF SPORT

- 1. Concept and importance of Sport Psychology
- 2. Personality—Nature of personality, personality trails of Sportsman, Relationship of personality to sport performance
- 3. Motivation—Role of motivation in sport, Extrinsic and Intrinsic Motivation
- 4. Psychology of Competition—Psychological preparation for athletic excellence
- 5. Concept and importance of sport sociology
- 6. Sport a cultural product—Influence of social institutions on involvement and success in sport, sport involvement and self construction in a mass society.
- 7. Sport groups and organisations—Composition and structure of sport. Groups, Leadership in Sport Groups, Sport organisation, Processes and performance.
- 8. Important social issues and sport. Sport and collective violence, sport and social changes.

REFERENCES

- 1. Alderman R.B. *Psychological Behavior in Sport* Philadelphia London, Saunder Company, 1974.
- 2. Cratty B.J. *Psychology of Contemporay sports* Englewood Cliffs N.J. Prentice Hall, Inc. 1976.
- 3. Cratty B.J. *Psychological preparation and Athletic Excellence*. Movement Publication Inc., New York 1980.

- 4. Loy, McPherson, Kenyon; Sport and social system Addison—Wesky Publishing Company, California 1978.
- 5. Loy, Mcpherson, Kenyon; Sport, Culture and Society a reader on the Sociology of sport. Lea and Febiger, Philadelphia 1981.
- 6. Ball aud Loy, Sport and Social Order. Addison-Wesley Publishing Company Mento park, California, 1975.

RECENT TRENDS—NATIONAL AND INTERNATIONAL POLICY OF EDUCATION AND PHYSICAL EDUCATION

- 1. New National Education Policy and its impact on Physical Education.
- 2. National Sports Policy.
- 3. UNESCO Charter on Physical Education and Sport.
- 4. Changing concept in Physical Education.
- 5. Olympism.
- 6. Professionalism and Sport
- 7. Children and Competitive Sport
- 8. Women and Sport

REFERENCE

- 1. Government of India's National Policy on Education
- 2. Government of India's National Policy on Sport.
- 3. UNESCO Charter
- 4. News papers and Journals.

SCIENTIFIC METHODS OF TRAINING AND COACHING

- 1. Sports Training—Aim, Tasks, Characteristics and Principles of Sports Training.
- 2. Training Load—Inner and outer loads important features (Intensity, Density. Duration and Frequency). Relationship between load and adaptation, conditions of adaptation.
- 3. Training means for the development of strength, speed, endurance, flexibility and co-ordinative abilities.
- 4. Training Plans—Long term developmental plans, Olympic plan, Annual plan, Sectional plans and day plans, periodisation Cyclic process of training.
- 5. Diet for sportsmen, specific diet before competition.

PHYSICAL FITNESS

- 1. Definition, meaning importance and Components of physical fitness.
- 2. Physiological systems associated with physical fitness.
- 3. Methods of physical fitness development:
 - (i) Continuous running method
 - (ii) Interval running method
 - (iii) Circuit training method
 - (iv) Weight training
 - (v) Fortlek
 - (vi) Acceleration runs and pace races
 - (vii) Exercises for development of flexibility and co-ordinative abilities.
- 4. Tests and Measurements:
 - (i) General Physical fitness tests,
 - (ii) Specific fitness tests.

CONSTRUCTION AND MAINTENANCE OF PHYSICAL EDUCATION AND SPORTS FACILITIES

- 1. The significance of construction and maintenance of Physical Education and Sports facilities.
- 2. Principles of planning and construction of sports facilities.
- 3. Construction and maintenance of Indoor and outdoor facilities.
 - (a) Construction and maintenance of outdoor facilities.
 - (b) Construction of Physical Education and sports facilities in an open space (Multipurpose use of open space).
 - (c) Construction and maintenance of special sports grounds—Basket-ball, Hockey, Football, Volleyball, Badminton, Track and Cricket.
 - (d) Construction of multipurpose Indoor Halls.
 - (e) Construction and maintenance of Swimming Pools and Gymnasiums Indoor and Outdoor.

REFERENCES

- 1. Administrative management of Phy. Education and Athletic programmes. By Clayne R. Jensen
- 2. Administration of Physical Education and Athletic programmes By Charles A. Bucher,

- 3. Administration of Physical Education for schools and colleges By William L. Hughes, Esther French, Nelson G. Lahsten.
- 4. Sports Building and playing fields By Richerd Sudell and D. Tennyson Watens
- 5. Construction and maintenance of sports facilities. By Wilfried Ehrler.

EXERCISE PHYSIOLOGY AND SPORTS MEDICINE

Exercise Physiology

- -Meaning, Concept and importance in Physical Education
- -Skeletal Muscle, structure and function
- -Circulatory system, composition and function
- -Respiratory system, composition and function
- -Metabolism-Anaerobic and Aerobic changes
- -Exercise and training-effects on different systems
- -Nutrition and sports performance

SPORTS MEDICINE

- -Concept of sports medicine
- -Need and scope of sports medicine in Physical Education
- -Role of sports medicine
- -Prevention of injuries-Principles
- —Treatment of injuries — —"—
- -Rehabilitation of injuries - -"-

REFERENCES

- 1. Fon and Mathew, Physiological Basic of Physical Education and Athletic
- 2. More-house and Miller, Exercise Physiology
- 3. Karpovitch, Physiology of Muscular Activity
- 4. William J.G.F., Sports Medicine
- 5. Morehouse and Rash, Sports Medicine for Trainer

BIOMECHANICS OF SPORTS TECHNIQUES

Biomechanics: Meaning and scope in Physical Education Basic concepts:

- Forms of motion
- Linear Kinematics
- Angular Kinematics
- Linear Kinetic

- Angular Kinetics
- Fluid mechanics: Air Resistance and water Resistance

Techniques of Biomechanics:

- Photography-Still and Motion pictures
- Electromyography
- Dynamometery
- Computer simulation

Biomechanical Analysis of sports techniques

- Track and Field, Gymnastics
- Hockey, Football, Basketball, Volleyball
- Swimming

REFERENCES

- 1. James G. Hay, The Biomechanics of sports Techniques
- 2. Simonian, Fundamentals of sports Biomechanics
- 3. John Bunn, Scientific Principles of Coaching

CURRICULUM DEVELOPMENT AT COLLEGE AND UNIVERSITY LEVELS

- 1. Meaning and principles of Curriculum development.
- 2. Elements and steps in curriculum construction.
- 3. Organisation and Administration of Physical Education in Higher education—Department, School and College.
- 4. Faculty and staff.
- 5. Growth, development needs and interests of college and university students
- 6. Basic instruction programme.
- 7. Co-education curricula.
- 8. Administrative policies.

REFERENCES

- 1. Cowell and Hazelton-Curriculum designs in Physical Education
- 2. Daughtery and Woods—Physical Education and Intramural programme, organisation and Admn.
- 3. Bucher-Foundations of Physical Education.

ORGANISATION AND ADMINISTRATION OF INTRAMURALS AND MASS SPORTS PROGRAMMES

- 1. Meaning, objectives and purposes of intramurals.
- 2. General policies and guidelines for organisation and administration—Administration personnel.
- 3. Organisation—Activities scheduling, Awards and point systems.
- 4. Units and types of tournaments.
- 5. Co-education intramurals—Planning and selection organisation and Administration Guidelines.
- 6. Meaning and significance of mass-sports programmes.
- 7. Categories of mass-sports competitive, non-competitive and demonstrations.
- 8. Organisation and Administration of mass-sports programmes.

REFERENCES

- 1. Daughtery and Woods—Physical Education and intramural programmes.
- 2. Charles Bucher—Administration of Physical Education and Athletic Programmes.
- 3. Two experienced professors—Organisation, Administration and Recreation in Physical Education.
- 4. Clayne Jensen—Administrative Management of Physical Education and Athletic programmes.

LIST OF RECOGNISED CENTRES FOR CONDUCTING COURSES

- 1. Lakshmibai National College of Physical Education, Gwalior.
- 2. Lakshmibai National College of Physical Education, (South Centre), Trivandrum.
- 3. Punjab University, Chandigarh.
- 4. Guru Nanak Dev University, Amritsar.
- 5. Govt. College of Physical Education, Patiala.
- 6. Y.M.C.A. College of Physical Education, Madras.
- 7. H.V.P. Mandal College of Phy. Edu., Amaravati.
- 8. Kalyani University, Kalyani.

- 9. University College of Physical Education, Bangalore.
- 10. University College of Phy. Edu., Mysore.
- 11. Allagappa University College of Physical Education, Karaikudi.
- 12. Annamalai University, Annamalai Nagar.
- 13. Kurukshetra University, Kurukshetra.
- 14. Maruthi College of Physical Edu., Coimbatore.
- 15. Chandrashekhar Agashe College of Physical Education, Pune.
- 16. B.P.C.A. College of Phy. Edu., Wadala, Bombay.
- 17. Deptt. of Physical Education, BHU, Varanasi.
- 18. Deptt. of Phy. Edu. & Sports, University of Delhi, Delhi.
- 19. College of Sports, H.A.U., Hissar.
- 20. Deptt. of Physical Education & Sports, Gujarat University, Ahmedabad.

PHILOSOPHICAL, PSYCHOLOGICAL AND SOCIAL CONCEPT OF PHY. EDUCATION (PRINCIPLES)

Philosophical

- -Concepts of Philosophies
- -Major concerns of Philosophy
- -Implication of Philosophy in Physical Education
- —Development of Philosophical point of view
- —Principles derived from Philosophy

Psychological

- -Concept of Psychology
- -Sources of Psychology
- —Learning process
- —Types of Learning
- -Laws and Theories of Learning
- -Learning curve
- -Factors promoting Motor learning
- -Principles derived from Psychology

Sociological

- —Concept of Sociology
- -The Nature of Man

- -Social Institutions and their influence on human behaviour
- -Games and Sports as man's cultural heritage
- -Development of Social Unity
- --Principles derived from Sociology

REFERENCE

- Bucher, Charles A. Foundation of Physical Education, St. Louis: The D.V. Mosby Com. 1968 Dollar 9.50
- Nixon, Eugene E. and Cozens W. An Introduction to Physical Education. Philadelphia, London: W.B. Saunders Co. 1969 Dollar 7.00
- 3. Oberteuffer, Delbert: *Physical Education*, New York, Harper and Brothers Publishers, 1870, Dollar 5.95
- 4. Williams, Jesse Feiring: The Principles of Physical Education, Philadelphia. W.B. Saunders Co. 1964.

REPORT OF THE EXPERT COMMITTEE ON

THE MINIMUM QUALIFICATIONS AND WORKLOAD ETC.

FOR

LIBRARIANS AND DIRECTORS
OF PHYSICAL EDUCATION
IN UNIVERSITIES AND COLLEGES

UNIVERSITY GRANTS COMMISSION
NEW DELHI

JULY 1987

REPORT OF THE EXPERT COMMITTEE ON

THE MINIMUM QUALIFICATIONS AND WORKLOAD ETC.

FOR

LIBRARIANS AND DIRECTORS
OF PHYSICAL EDUCATION
IN UNIVERSITIES AND COLLEGES

UNIVERSITY GRANTS COMMISSION
NEW DELHI

JULY 1987

© University Grants Commission
UGC (P) 55/1987
1000

ISBN 81 85025 16 9

Professor G. Padmanabhan, Department of Bio-Chemistry Indian Institute of Science, Bangalore-560 012, and Member, U.G.C.

Camp: New Delhi

July 9, 1987

The Secretary, University Grants Commission, Bahadur Shah Zafar Marg, New Delhi.

Sub: Recommendations of the Expert Committee on the minimum qualifications, workload etc. for Librarians and Directors of Physical Education.

Dear Sir,

With reference to your letter No. F. 1-2/86 (PS Cell) dated 9th December, 1986 on the above subject, I have great pleasure in submitting the final report of the Expert Committee constituted to make recommendations on the issues listed above.

I would like to thank the members of the Committee and the officers of the UGC, without whose, inputs this report would not have been possible.

Thanking you,

Yours faithfully, G. Padmanabhan

CONTENTS

		Page No.
CHAPTER I	Background	1
CHAPTER II	Recommendations regarding qualifications for Librarians and Directors of Physical Education	7
CHAPTER III	Recommendations regarding evaluation, work-load, code of conduct, professional training etc. for Librarians and Directors of Physical Education	15
Appendices		17

REPORT OF THE EXPERT COMMITTEE ON THE MINIMUM QUALIFICATIONS AND WORKLOAD ETC. FOR LIBRARIANS AND DIRECTORS OF PHYSICAL EDUCATION IN UNIVERSITIES AND COLLEGES

CHAPTER I

I. Background

- 1.1 The University Grants Commission appointed a Committee on December 24, 1983 under the chairmanship of Professor R.C. Mehrotra, Emeritus Professor, Rajasthan University, Jaipur to consider the revision of pay scales, career/professional development and service conditions of teachers in the universities and colleges.
- 1.2 In October, 1985 the Commission in consultation with the Government of India, requested the Committee to consider the revision of pay scales of Librarians and Directors of Physical Education, in addition to the pay scales of university and college teachers.
- 1.3 The report of the Committee on revision of pay scales of Librarians and Directors of Physical Education in universities and colleges has been submitted to the Commission on 3rd September, 1986.
- 1.4 The main recommendations/observations of the Committee are as follows:
- in the matter of scales of pay between university and college teachers and Librarians and Directors/Instructors of Physical Education in the universities and colleges. In the case of teachers, the Committee has recommended pay scales in the existing framework; the same may be applied to pay scales of these categories. These pay scales may, therefore, be treated as notional and would have to be converted in the light of the recommendations of the Fourth Pay Commission. The Committee recommends that while converting these scales, it should be ensured that the Librarians and Directors/Instructors of Physical Education in universities and colleges are not put to any financial disadvantage and envisaged parity is maintained."

1.4.2 Recommendations for Librarians Pay scales

The pay scales recommended for the various categories of Librarians in universities and colleges are as follows:

***	Pay scale in the existing framework
Universities	Rs.
(i) Asstt. University Librarian/Documentation Officer	700-40-1100-50-1600
(ii) Asstt. University Librarian (Senior scale)/ Documentation Officer (Senior scale)	1200-50-1300-60-1900
(iii) Asstt. University Librarian (Selection grade)/ Documentation Officer (Selection grade)	2000-125/2-2250
(iv) Deputy University Librarian	1500-60-1800-100-
	2000-125/2-2250
(v) University Librarian	1800-100-2000-125/2-
	2750-125-3000
Colleges	
(i) College Librarian	700-40-1100-50-1600
(ii) College Librarian (Senior scale)	1200-50-1300-60-1900
(iii) College Librarian (Selection grade)	2000-125/2-2250

1.4.3 Recommendations for Directors of Physical Instructions and Sports

The categories of Directors of Physical Instructions and Sports in the universities and colleges and the pay scales recommended for them are as follows:

University/College		Pay scale in the existing framework
1.	Director of Physical Instructions & Sports	700-40-1100-50-1600
2.	D.P.I.S. (Senior scale)	1200-50-1300-60-1900
3.	D.P.I.S. (Selection grade)	2000-125/2-2250.

The Committee felt that in the new set up of Physical Instructions and Sports, it might be necessary to appoint Coordinator(s) of Physical Instructions and Sports in affiliating universities. Where there is a large network of colleges having substantial sports and physical fitness activities, the post of a Chief Coordinator of Physical Instructions may also be required in the university. Details regarding these may be worked out by an expert Committee.

1.4.4 Selection procedure

Selection for the post of University Librarian, Deputy University Librarian, Assistant University Librarian/College Librarian/Documentation Officer and Director of Physical Instructions and Sports should be made strictly on merit on an All India basis. The selection Committee should include atleast two experts not connected with the university. Promotion of candidates to the senior scale and selection grade should also be done on the recommendations of a Selection Committee having atleast one expert not connected with the university.

1.4.5 Probation

An Assistant University Librarian, Dy. University Librarian, University Librarian, College Librarian and Director of Physical Instructions and Sports may normally be put on probation for a period of two years.

1.4.6 The Librarians and the Directors of Physical Instructions should be treated as non-vacation staff and entitled to the leave admissible to other non-vacation staff in universities. The work-load of the Directors of Physical Instructions and Sports would be different from the class room teaching because of the nature of the job which they have to perform. Therefore, the norms of work in their case would be different. The hours of work would be staggered: early morning, late afternoon and during the working day, the total work load aggregating to 40 hours a week. The working hours of Librarians will similarly conform to the library timings. During the vacations, the Librarians and Directors of Physical Instructions and Sports should participate in programmes for their professional development. The Directors of Physical Instructions should also organise games and camps during the vacations.

1.4.7 Housing Facilities

The Committee would urge that keeping in view the special duties of the Directors of Instructions which are to be performed both in the mornings and in the evenings, they should receive priority in allotment of houses on the campus.

1.4.8 Age of superannuation

The Committee recommends that the age of superannuation of the Librarians and Directors of Instructions may continue to be 60 years. No extension or re-employment be given.

1.4.9 Code of Conduct

The Committee had recommended a Code of Ethics for the teachers in

Part 'A' of the report. The recommendations regarding this may be suitably modified in the case of Directors of Instructions and Librarians keeping in view the duties to be assigned to them.

- 1.5 The basic recommendations of the Committee relate to (a) scales of pay (b) avenues of promotion and (c) conditions of service. The Committee suggested the constitution of two Expert Committees. The Expert Committees may be requested to pay special attention to the following:
 - (i) Minimum qualifications:
 - (a) for open All India recruitment at different levels;
 - (b) for promotion to higher grades within the same cadre; and
 - (c) for completion of satisfactory period of probation.
 - (ii) Specific items to be included in the self-appraisal and evaluation forms;
 - (iii) Facilities for professional training and development, taking into account the expansion of activities and augmentation of refresher courses and tests.
 - (iv) Workload to be defined, specifically to meet the special nature of their duties and functions (i.e. staggering of hours etc.).
- 1.6 The Commission at its meeting held on 27th October, 1986 considered the report and generally agreed with the recommendations of the Committee relating to (a) scales of pay, (b) avenues of promotion, and (c) conditions of service. The Commission desired that an Expert Committee may be appointed to consider the minimum qualifications and workload etc., as envisaged in para 1.5.

1.7 Composition

In view of the above decision of the Commission, an Expert Committee was constituted with the following members:

 Professor G. Padmanabhan, Department of Bio-Chemistry, Indian Institute of Science, Bangalore. Convener

Professor N.M. Swani,
 Director,
 Indian Institute of Technology,
 New Delhi.

Member

3.	Professor (Miss) A.K. Anand, Librarian, Panjab University,	M ember	
	Chandigarh.		
4.	Dr. Ashin Das Gupta. Director, National Library, Calcutta.		
(*)5.	Professor N.N. Mall, Director, Laxmibai National College of Physical Education Shakti Nagar, Gwalior.	,, 1,	
6.	Professor M. Robson, Director, Department of Physical Education and Sports Sc. Annamalai University, Annamalainagar 608 002 (TN).	iences,	
7.	Dr. C.M. Muthiah, Director-General Netaji Subhash National Institute of Sports, Motibagh, Patiala.	,,	
** 8.	Shri S.K. Chaturvedi, Joint Secretary, Ministry of Human Resource Development, Department of Youth Affairs and Sports, New Delhi.	29	
9,	Shri C.R. Pillai, Deputy Secretary, Ministry of Human Resource Development, Department of Education, New Delhi.	. 59	
10.	Shri R.P. Gangurde,	Member-Secretary	40

Joint Secretary,

New Delhi.

University Grants Commission,

^(*) Expressed his inability to attend the meeting. Professor Karan Singh of BHU was nominated for the meetings held on 11th March, 1987 and 30th March, 1987.

1.8 Terms of Reference

The terms of reference of the Committee is to consider further the recommendations of the Committee on revision of pay scales of Librarians and Directors of Physical Education in universities and colleges (Mehrotra Committee report part 'B') on the following matters:

- (i) Minimum qualifications
 - (a) for open All India recruitment at different levels;
 - (b) for promotion to higher grades within the same cadre; and
 - (c) for completion of satisfactory period of probation.
- (ii) Specific items to be included in the self-appraisal and evaluation forms.
- (iii) Facilities for professional training and development, taking into account the expansion of activities and augmentation of refresher courses and tests.
- (iv) Workload to be defined, specifically to meet the special nature of their duties and functions (i.e. staggering of hours etc.).

1.9 Time schedule

The Committee had its meetings on 6th February, 1987, 11th March, 1987, 30th March, 1987, 30th April, 1987 and 9th July, 1987. The Committee had discussions with the representatives of All India Association of Librarians and Directors of Physical Education on 30th March, 1987.

1.10 The Committee appointed two sub-Committees to work out the details regarding the self appraisal and evaluation forms and various training programmes for career development of Librarians and Directors of Physical Education. The composition of the sub-Committees is given in Appendix I and II.

CHAPTER II

Recommendations regarding qualifications for Librarians and Directors of Physical Education

2.1 As mentioned in chapter I, the term of reference of the Committee is to prescribe minimum qualifications for the categories of posts suggested by Mehrotra Committee for Librarians and Directors of Physical Instruction and Sports. The Committee tried to suggest the qualifications within the framework of the recommendations of Mehrotra Committee but wherever it felt that it was necessary to go beyond the recommendations of the Mehrotra Committee, it has done so.

2.2 Librarians

The recommendations of the Committee regarding qualifications for Librarians are given as follows:

2.2.1 Assistant University Librarian/College Librarian/Documentation Officer

The minimum qualifications recommended for the post of Assistant University Librarian/College Librarian/Documentation Officer are as follows:

- (i) Qualifying at the national test conducted for the purpose by the UGC or any other agency approved the by the UGC.
- (ii) Master's degree in Library Science/Information Science/Documentation or an equivalent professional degree with atleast fiftyfive per cent marks or its equivalent grade plus a consistently good academic record.

OR

Master's degree in the Arts/Science/Commerce or equivalent degree with atleast fiftyfive per cent marks or its equivalent grade and a Bacherlor's degree in Library Science/Information Science/Documentation or an equivalent professional degree with atleast fiftyfive per cent marks or its equivalent grade plus a consistently good academic record.

2.2.2 Assistant University Librarian (senior scale)/College Librarian (senior scale)/Documentation Officer (senior scale)

An Assistant University Librarian/College Librarian/Documentation

Officer may be considered for promotion to Assistant University Librarian/College Librarian/Documentation Officer (senior scale) Rs. 1200-1900 after completing eight years of service as an Assistant University Librarian/College Librarian/Documentation Officer or on reaching a basic pay of Rs. 1020/- and having the following minimum qualifications:

- (i) Master's degree in Library Science/Information Science/Documentation or one year course of specialisation in an area of information technology/Archive and manuscript keeping or Master's degree in an area of thrust in the institution:
- (ii) Should have attended atleast two summer institutes or refresher courses or orientation course of about five weeks duration each with proper and well defined evaluation procedure; and
- (iii) Consistently good appraisal reports.
- 2.2.3 An Assistant University Librarian/College Librarian/Documentation Officer would cease to earn his annual increments beyond Rs. 1300 in case he does not acquire the following minimum qualifications:
 - (i) Master's degree in Library Science/Information Science/Documentation or One year course of specialisation in an area of information technology/Archive and manuscript keeping or Master's degree in an area of thrust in the institution.

2.2.4 Assistant University Librarian/College Librarian/Documentation Officer (Selection Grade)

An Assistant University Librarian/College Librarian/Documentation Officer (senior scale) could be promoted to Assistant University Librarian/College Librarian/Documentation Officer (selection grade) provided:

- (i) he has reached the basic pay of Rs. 1900 in the scale of Rs. 1200-1900;
- (ii) he has attended atleast two refresher courses or summer institutes of about five weeks duration with proper and well defined evaluation procedure after his placement in the scale of Rs. 1200-1900; and
- (iii) his performance appraisal reports are found satisfactory by the selection Committee including atleast one outside expert.

2.2.5 Deputy University Librarian

(i) Master's Degree in Library Science/Information Science/Documentation with atleast fiftyfive per cent marks or its equivalent grade and a consistently good academic record;

- (ii) One year specialisation in an area of information technology/ Archives and manuscript keeping or Master's degree in an area of thrust in the institution:
- (iii) Seven years experience as an Assistant University Librarian/College Librarian, and
- (iv) Evidence of innovative library services, published work and professional commitment.

Desirable:

M.Phil./Ph.D. degree in Library Science/Information Science/Documentation/Archives and manuscript keeping.

2.2.6 University Librarian

- (i) Master's Degree in Library Science/Information Science/Documentation with at least fiftyfive per cent marks or its equivalent grade and a consistently good academic record;
- (ii) One year specialisation in an area of information technology/ Archives and manuscript keeping Master's Degree in an area of thrust in the institution; and
- (iii) atleast eight years as a Deputy Librarian in a University Library or fifteen years experience as a College Librarian.
- (iv) Evidence of innovative library service and organisation of published work.

Desirable

M.Phil./Ph.D. degree in Library Science/Information Science/Documentation/Archives and manuscript keeping.

2.2.7 Selection

The Committee recommended that the selection of Assistant University Librarian/College Librarian/Documentation Officer, Deputy University Librarian and University Librarian must be made on All India basis with the help of Selection Committee. The Selection Committee should include atleast two outside experts not connected with the university and one of them should be practicing Librarian.

2.2.8 Career Development of existing Librarians

This Committee received many representations regarding pay revision given to Librarians with effect from 1st April, 1980. One of the qualifications proposed for the new scale of Rs. 700-1600 was first or second class B.A./

B.Sc./B.Com. degree plus a first or second class M.Lib.Sc. degree or first or second class M.A./M.Sc./M.Com. degree and a first or second class B. Lib. Science or a diploma in Library Science. Those who were appointed before 1.1.1973 were given exception in respect of acquiring the new qualifications.

In the 1st January, 1973 revision while the scales of Rs. 400-500 and Rs. 400-800 were upgraded to Rs. 700-1300 and Rs. 700-1100 respectively, the scale of Rs. 300-600 was upgraded to Rs. 550-900. It appears that there are a small number of incumbents who have not got the Rs. 700-1600 grade in 1980 (especially the ones in Rs. 550-900 grade), since they possess a Master's degree with a III class. These incumbents had no opportunity or facilities to improve their qualifications, it is claimed that they have large years of experience and some are on the verge of retirement. Therefore, it has been represented that relaxation in qualifications should also be given to those appointed before 1st April, 1980 since all the scales were merged into Rs. 700-1600 at this point of time.

The Committee recommends those who were appointed before 1st April, 1980 but having a qualification of Master's degree (III class) and Bachelor's degree/Diploma in Library Science, should also be given the grade of Rs. 700-1600, if they had put in atleast ten years of experience as Assistant Librarian/College Librarian/Documentation Officer by 1.4.80. However, these persons should obtain the prescribed additional professional qualifications in case they would like to be considered for higher posts.

2.2.9 The Committee felt that the posts of Deputy Librarian and Librarians may also be created in the selected colleges. The UGC evolve suitable criteria for selection of such colleges.

A provision should be made to award positions of Librarians of Eminence on the lines of Professors of Eminence for outstanding Librarians.

2.2.10 Probation

The Committee recommends that an Assistant University Librarian/College Librarian/Documentation Officer, Deputy University Librarian and University Librarian may normally be put on probation for a period of two years.

An Assistant University Librarian/College Librarian/Documentation Officer may be confirmed only when he has actually completed a short term course of three-four weeks duration in a relevant field and his performance appraisal reports are found satisfactory.

2,3 Qualifications for Directors of Physical Education and Sports

Inspite of the fact that the terms of reference of this Committee does not

include some of the issues, the Committee made recommendation in the spirit of the Mehrotra Committee report that "it should be the endeavour of the Expert Committee on Physical Instructions and Sports to recommend the re-structuring and broad-basing of the system in such a manner that physical fitness becomes a byeword in educational institutions, which should also make in full measure their overdue contribution to national prowess in games and sports", and emphasis of National Education Policy, 1986 for development of physical education and sports in universities and colleges.

2.3.1 The Mehrotra Committee has suggested a change in the designation of personnel working in various universities and colleges for the development and promotion of Physical Education to "Physical Instructors" or "Coordinators". This needs to be modified as the word instruction is a mis-fit in the present times. The word "Physical Education" is more appropriate term in modern concept. Whereas Physical Education includes sports, there seems to be a need to emphasise sports as specific part of physical education.

Hence, the designation of personnel working for development of Physical Education and Sports in the Universities and Colleges should be the Director of Physical Education and Sports.

In the Professional Institutions as well as Teaching Departments in the universities and colleges, the designation may however, be retained as in the case of other teachers.

2.3.2 The 'B' Part of the report presented by Professor Mehrotra does not mention any equivalent post of Physical Education and Sports personnel above the rank of Lecturer. Though three tier promotional avenue exists at the level of Lecturer grade, it is not so, for further promotion equivalent to Readers' and Professors' grade.

It may be noted that in universities like Panjab, there are people who are already serving as the Director of Physical Education in the Professors' scale, Dy. Director of Physical Education in the Readers' scale and Assistant Director of Physical Education in the Lecturers' scale. So also various university set ups have the Directors of Physical Education in the Professors' and Readers' scale, in the existing situation.

2.3.3 The report also does not differentiate much on the work of the College Director of Physical Education and the University Director of Physical Education. It may be noted that Director of Physical Education of a University has to be a man with high knowledge and learning and an aptitude for professional upliftment alongwith extra ability to carry the house together as compared to other departments. The University's Director of Physical Education is to be a very senior man, since his unit of correspondence itself is the Principal of a College or Professor/Head of Department. He is supposed

to maintain a balance of the whole University's academic life with extra thinking, labour, skill, dexterity, and methods of working in keeping a very well knit schedule of activities alongwith organisation, coordination and supvervision of various types of activities which are normally looked after by various other teachers of the rank of lecturer/Reader and even Professor. The University's Director of Physical Education however, has got to be a person with qualification and experience to be accepted by people with whom he has to work. Such mention does not exist in the report and hence, needs to be identified very specifically. There should however, be no compromise as far as experience and qualification in the selection of the Director is concerned, as per other academic disciplines or equivalent jobs.

2.3.4 There has been a renewed concept of education with Physical Education forming a very important role in the total educational stream and the concept of Physical Fitness has achieved great importance for preparedness in mental learning. The Prime Minister's New 20 Points Programme includes "Physical Fitness and Adventureous Sports" and the man to cater for all such activities of thrill, achievement, excitement and human satisfaction in the educational stream to consider "Human as a whole, needs to be identified with proper facilities and position in the society. The University Director has also got to coordinate sports activities with national and international sports bodies and requires a very large sphere of activities of continuous nature.

2.3.5 Minimum qualifications for Assistant University D.P.E.S./College D.P.E.S.

The following minimum qualifications are suggested for the Assistant University D.P.E.S./College D.P.E.S.

- (i) Qualifying at the National Test conducted for the purpose by the UGC or any other agency approved by the UGC.
- (ii) Master's degree in Physical Education with atleast fiftyfive per cent marks or its equivalent grade and good academic record.

2.3.6 Qualifications for Assistant University D.P.E.S./College D.P.E.S. (senior scale)

The Assistant University D.P.E.S./College D.P.E.S. may be considered for promotion to Assistant University D.P.E.S./College D.P.E.S. (senior scale) Rs. 1200-1900, after completing eight years of service as an Assistant University D.P.E.S./College D.P.E.S. or on reaching a basic pay of Rs. 1020 and having the following minimum qualifications:

- (i) Ph.D. degree.
- (ii) Should have attended atleast two summer institutes or workshops

or clinics or refresher or orientation courses of about three-four weeks duration each with proper and well-defined evaluation procedure; and

- (iii) Consistantly good appraisal reports.
- 2.3.7 An Assistant University D.P.E.S./College D.P.E.S. would cease to earn his annual increments beyond Rs. 1300 in case he does not acquire the following minimum qualifications even after reaching the basic pay of Rs. 1300:

Ph.D. degree

OR

M.Phil. degree, alongwith satisfactory completion of a course organised by any agency recognised by the UGC.

2.3.8 Qualifications for Assistant University D.P.E.S./College D.P.E.S. (selection grade)

An Assistant University D.P.E.S./College D.P.E.S. (senior scale) could be promoted to Assistant University D.P.E.S./College D.P.E.S. (selection grade) provided:

- (i) he has reached the basic pay of Rs. 1900 in the scale of Rs. 1200-1900.
- (ii) he has attended atleast two refresher courses, workshops, clinics or other such summer institutes of about three-four weeks duration with proper and well defined evaluation procedure after his placement in the scale of Rs. 1200-1900, and
- (iii) his performance appraisal reports are found satisfactory by the selection committee including atleast one outside expert.

2.3.9 Deputy University D.P.E.S.

Essential

- (a) Ph.D. degree in Physical Education
- (b) Seven years experience as an Assistant University D.P.E.S./College D.P.E.S./Lecturer in Physical Education.
- (c) Specialised training in refresher courses or officiating organisation and coaching/teaching technologies/specialised areas relevant to the profession;
- (d) He should have evidence of innovation and organisation or management of published work, preparation or coaching or management

of sports teams for higher level of performance like combined universities or state/national teams.

2.3.10 University D.P.E.S.

- (a) Ph.D. degree in Physical Education
- (b) He should have experience of atleast five years as Deputy University D.P.E.S./Reader in Physical Education.
- 2.3.11 A provision should be made to award UGC Directorship (Director General) on lines of the Professor of Eminence who have shown or performed outstandingly well in sports organisation at International level or other equal academic work. The selection for such posts should be done at National level and UGC may evolve a suitable mechanism for the same.

The posts of DPES in the grade of Reader and Professor may also be created in selected colleges. The UGC may evolve criteria for selection of such colleges.

2.3.12 Selection

"Selection of Dy. University D.P.E.S./University D.P.E.S. must be made on All India basis with the help of proper selection committee. The Selection Committee should include atleast two outside experts not connected with the University and one of them to practising Director of Physical Education and Sports.

2.3.13 Probation

An Assistant University D.P.E.S./College D.P.E.S. may normally be put on probation for a period of two years. He may be confirmed only when he has actually completed a short term course of three-four weeks duration in relevant fields and his performance appraisal reports are found satisfactory.

CHAPTER III

Recommendations regarding evaluation, workload, code of conduct, professional training etc. for Librarians and Directors of Physical Education

3.1 Evaluation of Librarians and D.P.E.S.

The importance of evaluation has been explained in the Mehrotra Committee report. The National Policy on Education and its Programme of Action has emphasised evaluation of teachers in the universities and colleges. The Committee is of the opinion that evaluation of Librarians and D.P.E.S. in the universities and colleges is equally important. The Committee had appointed the sub-Committees to suggest format for evaluation of Librarians and D.P.E.S. The format suggested are at Appendix III and IV respectively for Librarians and D.P.E.S.

3.2 Workload for Librarians and D.P.E.S.

The Committee endorsed the recommendations of Mehrotra Committee report, para 'B' regarding workload for Librarians and D.P.E.S. that:

"The Librarians and the DPIS should be treated as non-vacation staffand entitled to the leave admissible to other non-vacation staff in universities. The work-load of the Directors of Physical Instructions and Sports would be different from the class room teaching because of the nature of the job which they have to perform. Therefore, the norms of work in their case would be different. The hours of work would be staggered: early morning, late after-noon and during the working day, the total work load aggregating to 40 hours a week. The working hours of librarians will similarly conform to the library timings. During the vacations, the Librarians and Directors of Physical Instructions and Sports should participate in programmes for their professional development. The DPIS should also organise games and camps during the vacations."

The Committee recommends that since the promotion of the Librarians is linked to acquisition of additional qualifications, they should be given the necessary facilities and every kind of leave (such as duty/sabbatical/study) admissible to teachers for career development and improvement of qualifications. It will help them in giving better services.

3.3 Code of Ethics

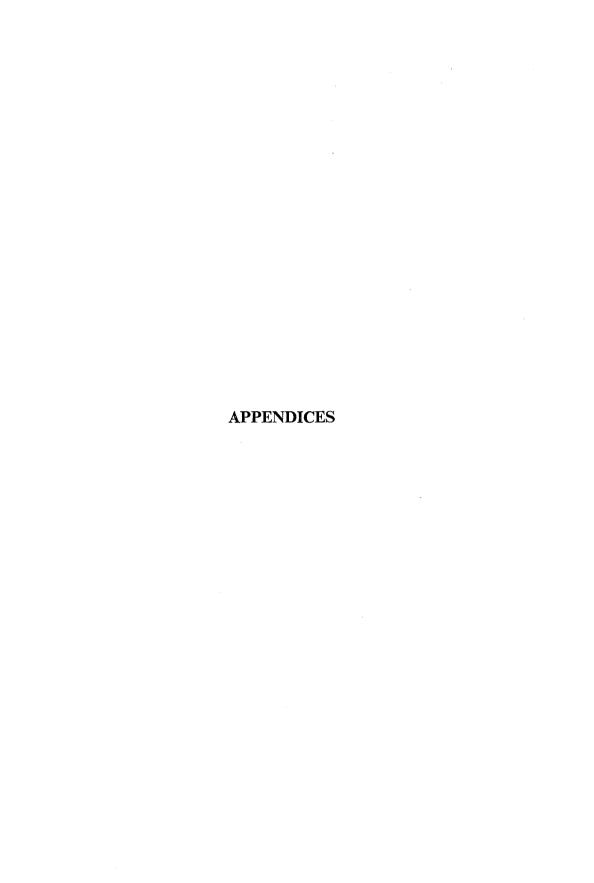
The Committee is of the view that code of ethics for Librarians and DPE.S. be formulated with the help of their National level organisation as suggested for teachers in Programme of Action of National Policy on Education-1986.

3.4 Professional training for Librarians

Considering the rapid expansion in the information system and development of modern management techniques for running libraries, continuous professional training of Librarians has become essential. The Committee had appointed a sub-Committee to identify the courses for continuous professional training of Librarians and the places where such courses could be conducted, as given in Appendix V.

3.5 Professional training for D.P.E.S.

Continuing professional training is as necessary to DPES as it is for teachers and Librarians. The field of physical education and sports is a competitive field and DPES have to be in touch with modern techniques and innovations in the area of physical education, sports and physical fitness activities. The Committee had appointed a sub-Committee to work out details of courses etc. which are given at Appendix VI.



LIST OF APPENDICES

Sl.I	No.	Page
Ι	List of sub Committee members to evolve format for Evaluation and Professional Training Programme for Librarians.	21
II	List of Sub-Committee members to evolve format for Evaluation and Professional Training Programme for Directors of Physical Education.	23
Ш	Format for Evaluation for Librarians.	24
IV	Format for Self Assessment for College/University Directors of Physical Education and Sports.	28
V	Courses of Study for Refresher Courses for Librarians.	33
VI	Courses of Study for Refresher Courses for Directors of Physical Education and Sports.	37

APPENDIX I

List of Sub Committee Members to evolve format for evaluation and Professional Training Programme for Librarians

 Professor (Miss) A.K. Anand Librarian,
 Panjab University Library, Chandigarh

Convener

- Smt. Kalpana Dasgupta Librarian, National Library, Belvedere, Calcutta
- Professor Probir Roy Chowdhury
 Department of Library and Information Science,
 Jadavpur University,
 Calcutta
- Shri Subhash Biswas
 Librarian,
 Central Secretariat Library,
 New Delhi
- Professor K.A. Issac
 Head of the Library Science Department,
 University of Kerala,
 Trivandrum-695 034
- Shri T.V.R. Murthy
 University of Hyderabad Library,
 Central University,
 Hyderabad-500 134
- Shri T.S. Rajagopalan
 President,
 Indian Library Association,
 A/40-41, Flat No. 201,
 Ansal Building, Dr. Mukherjee Nagar,
 Delhi-110 009

8. The Director,
INSDOC/Scientist-in-charge Training Division,
Satsang Vihar Marg,
Special Institutional Area,
Delhi

APPENDIX II

List of Sub Committee Members to evolve format for evaluation and Professional Training Programme for Directors of Physical Education

1. Dr. N.N. Mall

Director.

Lakshmibai National College of Physical Education,

Shaktinagar,

Gwalior-474 002

Convener

2. Professor M. Robson

Director,

Department of Physical Education and Sports Sciences,

Annamalai University,

Annamalainagar-608 002

3. Dr. J.S. Naruka

Director.

Department of Physical Education,

Delhi University,

Delhi

4. Dr. T.S. Brar

Lakshmibai National College of Physical Education,

Shaktinagar,

Gwalior-474 002

5. Dr. A.K. Uppal

Lakshmibai National College of Physical Education,

Shaktinagar,

Gwalior-474 002

6. Shri K. Gunasekharan

Education Officer,

University Grants Commission,

New Delhi-110 002

APPENDIX III

Format for Evaluation by Self, Peer and Reviewing Officer

1.	•	Name (in full BLOCK LET		
	(1)		ſTERS)	
	(b)	Designation		
	(c)	Date of birth	• • • • • • • • • • • • • • • • • • • •	
	(d)	Department/Branch/Section		
	(e)	Date of joining this Instituti	on's service	
	(f)	Present post held since		
	(g)	Scale of pay & basic pay.		
	(h)	Whether permanent/tempo	rary/ad-hoc	
	(i)	Leave enjoyed during the ye	ear (total)	
2.	Qu	alifications		
	(a)	Academic (i)	Year	University/Institution
		(ii)		
		(iii) (iv)		
		•		
	Me	ention any special feature/a	ward/credit etc	:.
	(b)	Professional qualifications		
			Year	University/Instt.
		(i) Certificate		
		(ii) Diploma		
		(iii) B. Lib. Sc.		
		(iv) M. Lib. Sc./MLISC		
		(v) M. Phil/Ph.D.		
		(any special feature/award	/credit etc.)	

(c)	Improvement of qualification during the preceding one year (degree/diploma, short-term training/orientation course, etc.) academic/professional:
(d)	Research work: any kind of Library survey, evaluation, analysis that has been formally submitted/during the period
	•••••••••••
	•••••••••••••••••••••••••••••••••••••••
(e)	Research papers/monographs/books published during last year (title published/Journal)
(f)	Research in progress: (any research project undertaken/assigned connected with the library or otherwise. Please give the title of the project and time limit etc.)
(g)	Seminar, conference, symposium, etc. attended (including paper contributed, capacity in which participated, e.g. resource person, Rapporteurs, presented paper, etc.: with details)
(h)	Membership of professional bodies with details
	•••••
Dı	aties and job specifications
(a)	Total weekly working hours
(b)	Work in shifts/daily working schedule
	No. of staff members you supervise

3.

ď	Kinds of job you have performed during the last year indicating the rank order
	(a) Supervisory
	(b) Policy & Planning
	(c) administration
	(d) books, periodical section, etc.
	(e) documentation
	(f) cataloguing and classification filing of cards
	(g) acquisition
	(h) periodicals
	(i) reference & bibliographical activities
	(j) circulation
	(k) stock-maintenance (including funding)
	(l) display, promotional work
	(m) editing & publishing
	(n) computer section
	(o) reprographic work
	(p) staff training
	(q) attending the library users personally
	(r) meeting conference
	(s) social and extension activities
	(t) gift and exchange
	(u) inter-library loan
	(v) teaching/academic
Gi	ve some details, where possible
4. (a)	Languages known
(b)	Mention any significent contribution you have made to improve the (a) Library services of your Institution and (b) Development of Library profession
	Signature Librarian
Date:	

To be completed by peers

]	Indicate overall assessment of the work of the individual.
	Signature
Dat	e: Designation
	To be completed by Reviewing Officer
1.	Do you agree with the information given?
2.	If not give justification
3.	Overall assessment of work

APPENDIX IV

Self Assessment for College/University Directors of Physical Education & Sports

Į.	(a)	Name (in full block lett	ters)	
	(b)	Age (Date of birth) .		
	(c)	Designation		
	(d)	Department		
	(e)	Date of joining the pro	esent post	
		(mention institution, if	more than one)	
	(f)	Present post held and s	ince when	
	(g)	Scale of pay and basic	pay	
	(h)	Whether permanent/or	n probation	
	(i)	Leave taken during the	e vear	
	• • • • • • • • • • • • • • • • • • • •	(mention type of leave a	•	
2.	Ou	alifications		
۷,	Qu	anneations	Year	University Institution
	(a)	General		
		(i)		
		(ii)		
		(iii)		
		(iv)		
	(b)	Professional		
	` ,		Year	University/Institution
		(i)		
		(ii)		
		(iii)		
		(iv)		
		(v)		
		(vi)		

	(c) Academic/Professional Achievements du Special Refresher/Orientation Course etc	
ı	(d) Research papers/articles, books publishe title, Journal/other publication details).	ed during the year (mention
	(e) Research in progress: (any research p connected with sports or otherwise pl project and time limit etc.)	- · · · · · · · · · · · · · · · · · · ·
	•••••	
	(f) Participation in Seminars, Conferences shops etc & presented paper (including p in which participated e.g. resource pers paper etc. with details	apers contributed, capacity
	(i) Participated as a resource person	
	(ii) Presented a paper	
	(iii) Attended	
	(g) Membership of professional organic NAUTPE, IATHPER, AISSPE etc. with	
3.	Work Load	
	(i) On field (practical work)	
	(ii) In office administrative work, plan	nning and coordination
Sup	ervision	
	(i) Supervision of personnel under ch	arge:
	(a) Professional including coaches	
	(b) Office Staff	
	(c) Ground Staff	
	(d) Any other	
	Responsibilities undertaken during the year	
	(i) Coaching in Sports/Games, specify	7
	, 5	

4. Experience of conducting & attending National International & intervarsity or any other Athletic Meets/ as Managers, Coaches/Technical delegates/ Official etc.
5. Organisational experience (As Director, Chairman Org. Secretary, member of Org. committee/Sub-committee
(i) Motivation and Incentive to Sportsman
(ii) Rehabilitation activities of the handicapped
•••••
(iii) Recreational programmes for all
(iv) Stock-maintenance (including funding)
(v) Exhibition and displays, promotional work
(vi) Editing and publishing of Sports achievements
(vii) Mass participation & physical fitness programme
(viii) Week end programmes
· · · · · · · · · · · · · · · · · · ·
(ix) Participation in adventurous sports (hiking, camping, trekking etc.)
(x) Social and Extension Community programme
6. Mention any achievements/credit of yours that has been recognised/helped in improving the sports services enclose document, if any)
•••••••••••••••••••••••••••••••••••••••
Date: SIGNATURE Director Physical Edu. & Sports

EVALUATION BY SUPERIOR

(10	be completed by the reviewing Officer)
(a)	Observation about punctuality, conduct, integrity, sociability
(b)	Outstanding work/or warned reprimanded in writing (supporting documents)
(c)	Ability to work and deal directly with the sportsman
(d)	Has the officer shown himself able to do the work for which he has been appointed?
	(i) Lecture
	(ii) Teaching of Activities
	(iii) Tutorial & guidance work
	(iv) Supervision
	(v) Individual research of study undertaken:
	(vi) Participation in and assignments undertaken by the college
(e)	What is your opinion of the officer's capacity for getting work out of and his relation with his:
	(i) Colleagues
	(ii) Students
	(iii) Subordinates
(f)	What has been the officers Attitude towards his superiors?
(g)	What in your opinion has been the officer contribution to the life of the college in general (mention special contribution if any)
(h)	Has any incident occured during the period under report which reflects credit or discredit on the officer? (Mention)
(i)	Has the officer shown initiative and imagination in planning his work?

(j)	Has the officer, during the year, conducted any original work?
(k)	Has the officer shown improvements on defects brought to his notice in the last report?
(1)	General remarks as to loyalty, discipline, punctuality, conduct and competence.
(m)	His contribution generally to the social life of the college.

PEER EVALUATION

- 1. Ability to communicate
- 2. Qualities of Human relationship
- 3. Organisational ability
- 4. Leadership
- 5. Skill performance
- 6. Sociability
- 7. Personal habits
- 8. Public relations/publicity
- 9. Ability to identify problems
- 10. Personality
- 11. Liaison with other departments
- 12. Any other position contributed

APPENDIX V

Orientation Programmes that may be run for College Librarians/Assistant Librarians/Deputy Librarians/ Librarians in University Libraries

Level I Courses

Target Group: College Librarians/Assistant Librarians in universities—Duration 100 hours.

Course 1 (LI-1)

1. Library management;

Personnel, fiscal, library material, building, furniture equipment. Operational functions: (a) job analysis (b) work-flow (c) workload (d) Evaluation of work (e) Time scheme (f) Records and Statistics

Course 2 (LA-2)

Resource Development and management

- (a) Collection Development
- (b) Resource sharing
- (c) Net-working
- (d) Information processing and Organisation
- (e) Non-book materials

Course 3 (LA-3)

User studies

- (a) User survey
- (b) Information gathering habits
- (c) User Education and Training
- (d) Assessment of information needs of users
- (e) Information use promotion

Course 4 (LI-4)

Computer Application

- 1. System Analysis for computerization
- 2. Hardware selection
- 3. Library application Software
- 4. Automation for Library jobs
 - (a) Acquisition
 - (b) Serial Control
 - (c) Cataloguing
 - (d) Office Management
 - (e) Circulation
 - (f) Bibliographical Information handling
 - (g) Database creation

Course 5 (LI-5)

Information Services and Products

- 1. Reference Service
- 2. CAS
- 3. SDI
- 4. Information Systems
- 5. Reprographic Services

Level II (L II) Courses

Target Group: Deputy Librarians/Librarians-

Duration: 100 hours

Course 1 (L II-1) Information Technology (Advance Course)

- i) Computer applications—An introduction to computers. Computer organisation and architecture
 - (a) Application of computers to Library and Information work, Global and national scenes. Software and hardware concepts, Operating systems, Large, mini, micro and personal computers, word processors, Different types of computer equipment useful in implementing data information systems, input-output devices, storage devices, etc.

- (b) Bibliography and information handling
- (c) Office management
- (ii) Reprographic Services
- (iii) Elements of Telecommunication

Course 2 (L II-2)—Advance course in Library Management

- (a) Policy formulation
- (b) Planning—Physical and functional
- (c) Scheduling and monitoring
- (d) Control
- (e) Modelling
- (f) Project Proposal and implementation
- (g) Evaluation

Course 3 (L II-3) Communication

- I. Written communication
 - (a) Technical Report Writing
 - (b) Feasibility Studies
 - (c) Project Report
- II. Public Relations
 - (a) Rapport with the Academic Community
 - (b) Rapport with administration
 - (c) Rapport with professional, academic bodies, learned Societies and funding agencies
- III. Audio Visual communication—use of educational technology aids

Course 4 (L II-4) Conservation and Preservation

- (a) Library materials
- (b) Archival Cells

Institutions identified to run the Orientation Courses (Levels I & II)

University Librarians and/or Departments of Library and Information Sciences

- 1. Jadavpur University, Calcutta
- 2. Bhagalpur University, Bhagalpur
- 3. Banaras Hindu University, Varanasi

- 4. University of Delhi, Delhi
- 5. Aligarh Muslim University, Aligarh
- 6. Punjab University, Chandigarh
- 7. University of Nagpur, Nagpur
- 8. S.N.D.T., Bombay
- 9. University of Poona, Poona
- 10. University of Bombay, Bombay
- 11. University of Hyderabad, Hyderabad
- 12. Utkal University, Bhubaneswar
- 13. University of Sagar, Sagar
- 14. University of Kerala, Trivandrum
- 15. University of Mysore, Mysore
- 16. University of Rajasthan, Jaipur
- 17. Gauhati University, Gauhati

INSTITUTIONS

- 1. D.R.T.C. Bangalore
- 2. National Library, Calcutta
- 3. Central Secretariat, New Delhi
- 4. Physical Research Library, Ahmedabad
- 5. Indian Instt. of Science, Bangalore
- 6. N.A.S.S.D.O.C., New Delhi
- 7. I.I.T., Bombay
- 8. I.I.T., Baroda
- 9. BARC, Bombay
- 10. M.S. University of Baroda, Baroda
- 11. DESIDOC, New Delhi
- 12. Nehru Museum & Library, New Delhi
- 13. National Aeronautical Library, Bangalore
- 14. CFTRI, Mysore
- 15. NICDAD, Lucknow

APPENDIX VI

Courses of Study for Refresher Courses—Duration of "Five" Weeks

Course No. 1 (For Senior Scale)

Cluster of Subjects to be offered in First Course

I. COMPULSORY

- 1. Physical Fitness Area
- 2. Rules of Games and Sports.

II. OPTIONAL (Any TWO of the following)

- 3. Philosophical, Psychological, Social Concept of Physical Education (Principles)
- 4. Organisation and Administration of Intramurals and Mass Sports Programme
- 5. Recent Trends—National, International Policies in Education and Physical Education

PRACTICAL

- 1. Officiating and Coaching
- 2. Tests and Measurements

FIELD PROJECTS

The trainee should attend one National Tournament and one Athletic Meet of National Level and prepare a critical report any time before each assessment becomes due.

EVALUATION

Each Paper (including Practicals) will carry 50 mks. and the questions will be in the form of Objective or short answer types.

Course No. 2 (For Selection Scale)

I. COMPULSORY

- 1. Measurement and Evaluation and Statistics
- 2. Rules of Games and Sports

II. OPTIONAL (Any TWO of the following)

- 3. Scientific Methods of Training and Coaching
- 4. Curriculum Development related to College and University
- 5. Bio-mechanics of Sports Techniques

PRACTICAL

- 1. Officiating and Coaching
- 2. Tests and Measurements

FIELD PROJECTS

The trainee should attend one National Tournament and one Athletic Meet of National Level and prepare a critical report any time before each assessment becomes due.

EVALUATION

Each paper (including Practicals) will carry 50 marks and the questions will be in the form of Objective or Short answer types.

Course No. 3 (For Professor Scale)

I. COMPULSORY

- 1. Exercise Physiology and Sports Medicine
- 2. Rules of Games and Sports.

II. OPTIONAL (Any TWO of the following)

- 3. Design and Construction of Physical Education and Sports facilities
- 4. Psychology and Sociology of Sports
- 5. Introduction to Computer Science

PRACTICAL

- 1. Officiating and Coaching
- 2. Test and Measurement

FIELD PROJECTS

The trainee should attend one National Tournament and one Athletic Meet of National Level and prepare a critical report any time before each assessment becomes due.

EVALUATION

Each paper (including Practicals) will carry 50 mks. and the questions will be in the form of Objective or short answer types.

MEASUREMENT, EVALUATION AND STATISTICS

I. Introduction

Concept of Measurement and Evaluation, Need and Importance of Measurement and Evaluation.

II. Test Evaluation

Criteria of Test selection, steps in constructing skill test.

- III. Suggesssions for Administering Tests
- IV. Tests of Physical Fitness, Motor Fitness, Cardio-respiratory Endurance and Skill.

STATISTICS

- I. Need and Importance of Statistics.
- II. Measures of Central Tendancy

Calculation of Mean, Median and Mode.

III. Measures of variability

Computation of Standard Deviation.

IV. Correlation

Computation of product-moment, Correlation from grouped and ungrouped data.

REFERENCE

- 1. Application of Measurement in Health and Physical Education, By H. Clarke.
- 2. Measurement in Physical Education. By Donald K. Mathew.
- 3. Measurement and Evaluation in Physical Education By Philips and Hornak.
- 4. Research Processes in Physical Education, Recreation and Health By David Clarke and Herison Clarke
- 5. Fundamental Statistics in Psychology and Education By J.P. Guilford.

PSYCHOLOGY AND SOCIOLOGY OF SPORT

- 1. Concept and importance of Sport Psychology
- 2. Personality—Nature of personality, personality trails of Sportsman, Relationship of personality to sport performance
- 3. Motivation—Role of motivation in sport, Extrinsic and Intrinsic Motivation
- 4. Psychology of Competition—Psychological preparation for athletic excellence
- 5. Concept and importance of sport sociology
- 6. Sport a cultural product—Influence of social institutions on involvement and success in sport, sport involvement and self construction in a mass society.
- 7. Sport groups and organisations—Composition and structure of sport. Groups, Leadership in Sport Groups, Sport organisation, Processes and performance.
- 8. Important social issues and sport. Sport and collective violence, sport and social changes.

REFERENCES

- 1. Alderman R.B. *Psychological Behavior in Sport* Philadelphia London, Saunder Company, 1974.
- 2. Cratty B.J. *Psychology of Contemporay sports* Englewood Cliffs N.J. Prentice Hall, Inc. 1976.
- 3. Cratty B.J. *Psychological preparation and Athletic Excellence*. Movement Publication Inc., New York 1980.

- 4. Loy, McPherson, Kenyon; Sport and social system Addison—Wesky Publishing Company, California 1978.
- 5. Loy, Mcpherson, Kenyon; Sport, Culture and Society a reader on the Sociology of sport. Lea and Febiger, Philadelphia 1981.
- 6. Ball aud Loy, Sport and Social Order. Addison-Wesley Publishing Company Mento park, California, 1975.

RECENT TRENDS—NATIONAL AND INTERNATIONAL POLICY OF EDUCATION AND PHYSICAL EDUCATION

- 1. New National Education Policy and its impact on Physical Education.
- 2. National Sports Policy.
- 3. UNESCO Charter on Physical Education and Sport.
- 4. Changing concept in Physical Education.
- 5. Olympism.
- 6. Professionalism and Sport
- 7. Children and Competitive Sport
- 8. Women and Sport

REFERENCE

- 1. Government of India's National Policy on Education
- 2. Government of India's National Policy on Sport.
- 3. UNESCO Charter
- 4. News papers and Journals.

SCIENTIFIC METHODS OF TRAINING AND COACHING

- 1. Sports Training—Aim, Tasks, Characteristics and Principles of Sports Training.
- 2. Training Load—Inner and outer loads important features (Intensity, Density. Duration and Frequency). Relationship between load and adaptation, conditions of adaptation.
- 3. Training means for the development of strength, speed, endurance, flexibility and co-ordinative abilities.
- 4. Training Plans—Long term developmental plans, Olympic plan, Annual plan, Sectional plans and day plans, periodisation Cyclic process of training.
- 5. Diet for sportsmen, specific diet before competition.

PHYSICAL FITNESS

- 1. Definition, meaning importance and Components of physical fitness.
- 2. Physiological systems associated with physical fitness.
- 3. Methods of physical fitness development:
 - (i) Continuous running method
 - (ii) Interval running method
 - (iii) Circuit training method
 - (iv) Weight training
 - (v) Fortlek
 - (vi) Acceleration runs and pace races
 - (vii) Exercises for development of flexibility and co-ordinative abilities.
- 4. Tests and Measurements:
 - (i) General Physical fitness tests,
 - (ii) Specific fitness tests.

CONSTRUCTION AND MAINTENANCE OF PHYSICAL EDUCATION AND SPORTS FACILITIES

- 1. The significance of construction and maintenance of Physical Education and Sports facilities.
- 2. Principles of planning and construction of sports facilities.
- 3. Construction and maintenance of Indoor and outdoor facilities.
 - (a) Construction and maintenance of outdoor facilities.
 - (b) Construction of Physical Education and sports facilities in an open space (Multipurpose use of open space).
 - (c) Construction and maintenance of special sports grounds—Basket-ball, Hockey, Football, Volleyball, Badminton, Track and Cricket.
 - (d) Construction of multipurpose Indoor Halls.
 - (e) Construction and maintenance of Swimming Pools and Gymnasiums Indoor and Outdoor.

REFERENCES

- 1. Administrative management of Phy. Education and Athletic programmes. By Clayne R. Jensen
- 2. Administration of Physical Education and Athletic programmes By Charles A. Bucher.

- 3. Administration of Physical Education for schools and colleges By William L. Hughes, Esther French, Nelson G. Lahsten.
- 4. Sports Building and playing fields By Richerd Sudell and D. Tennyson Watens
- 5. Construction and maintenance of sports facilities. By Wilfried Ehrler.

EXERCISE PHYSIOLOGY AND SPORTS MEDICINE

Exercise Physiology

- -Meaning, Concept and importance in Physical Education
- -Skeletal Muscle, structure and function
- -Circulatory system, composition and function
- -Respiratory system, composition and function
- -Metabolism-Anaerobic and Aerobic changes
- -Exercise and training-effects on different systems
- -Nutrition and sports performance

SPORTS MEDICINE

- -Concept of sports medicine
- -Need and scope of sports medicine in Physical Education
- -Role of sports medicine
- -Prevention of injuries-Principles
- —Treatment of injuries — —"—
- -Rehabilitation of injuries - -"-

REFERENCES

- 1. Fon and Mathew, Physiological Basic of Physical Education and Athletic
- 2. More-house and Miller, Exercise Physiology
- 3. Karpovitch, Physiology of Muscular Activity
- 4. William J.G.F., Sports Medicine
- 5. Morehouse and Rash, Sports Medicine for Trainer

BIOMECHANICS OF SPORTS TECHNIQUES

Biomechanics: Meaning and scope in Physical Education Basic concepts:

- Forms of motion
- Linear Kinematics
- Angular Kinematics
- Linear Kinetic

- Angular Kinetics
- Fluid mechanics: Air Resistance and water Resistance

Techniques of Biomechanics:

- Photography-Still and Motion pictures
- Electromyography
- Dynamometery
- Computer simulation

Biomechanical Analysis of sports techniques

- Track and Field, Gymnastics
- Hockey, Football, Basketball, Volleyball
- Swimming

REFERENCES

- 1. James G. Hay, The Biomechanics of sports Techniques
- 2. Simonian, Fundamentals of sports Biomechanics
- 3. John Bunn, Scientific Principles of Coaching

CURRICULUM DEVELOPMENT AT COLLEGE AND UNIVERSITY LEVELS

- 1. Meaning and principles of Curriculum development.
- 2. Elements and steps in curriculum construction.
- 3. Organisation and Administration of Physical Education in Higher education—Department, School and College.
- 4. Faculty and staff.
- 5. Growth, development needs and interests of college and university students
- 6. Basic instruction programme.
- 7. Co-education curricula.
- 8. Administrative policies.

REFERENCES

- 1. Cowell and Hazelton-Curriculum designs in Physical Education
- 2. Daughtery and Woods—Physical Education and Intramural programme, organisation and Admn.
- 3. Bucher-Foundations of Physical Education.

ORGANISATION AND ADMINISTRATION OF INTRAMURALS AND MASS SPORTS PROGRAMMES

- 1. Meaning, objectives and purposes of intramurals.
- 2. General policies and guidelines for organisation and administration—Administration personnel.
- 3. Organisation—Activities scheduling, Awards and point systems.
- 4. Units and types of tournaments.
- 5. Co-education intramurals—Planning and selection organisation and Administration Guidelines.
- 6. Meaning and significance of mass-sports programmes.
- 7. Categories of mass-sports competitive, non-competitive and demonstrations.
- 8. Organisation and Administration of mass-sports programmes.

REFERENCES

- 1. Daughtery and Woods—Physical Education and intramural programmes.
- 2. Charles Bucher—Administration of Physical Education and Athletic Programmes.
- 3. Two experienced professors—Organisation, Administration and Recreation in Physical Education.
- 4. Clayne Jensen—Administrative Management of Physical Education and Athletic programmes.

LIST OF RECOGNISED CENTRES FOR CONDUCTING COURSES

- 1. Lakshmibai National College of Physical Education, Gwalior.
- 2. Lakshmibai National College of Physical Education, (South Centre), Trivandrum.
- 3. Punjab University, Chandigarh.
- 4. Guru Nanak Dev University, Amritsar.
- 5. Govt. College of Physical Education, Patiala.
- 6. Y.M.C.A. College of Physical Education, Madras.
- 7. H.V.P. Mandal College of Phy. Edu., Amaravati.
- 8. Kalyani University, Kalyani.

- 9. University College of Physical Education, Bangalore.
- 10. University College of Phy. Edu., Mysore.
- 11. Allagappa University College of Physical Education, Karaikudi.
- 12. Annamalai University, Annamalai Nagar.
- 13. Kurukshetra University, Kurukshetra.
- 14. Maruthi College of Physical Edu., Coimbatore.
- 15. Chandrashekhar Agashe College of Physical Education, Pune.
- 16. B.P.C.A. College of Phy. Edu., Wadala, Bombay.
- 17. Deptt. of Physical Education, BHU, Varanasi.
- 18. Deptt. of Phy. Edu. & Sports, University of Delhi, Delhi.
- 19. College of Sports, H.A.U., Hissar.
- 20. Deptt. of Physical Education & Sports, Gujarat University, Ahmedabad.

PHILOSOPHICAL, PSYCHOLOGICAL AND SOCIAL CONCEPT OF PHY. EDUCATION (PRINCIPLES)

Philosophical

- -Concepts of Philosophies
- -Major concerns of Philosophy
- -Implication of Philosophy in Physical Education
- -Development of Philosophical point of view
- —Principles derived from Philosophy

Psychological

- -Concept of Psychology
- -Sources of Psychology
- —Learning process
- —Types of Learning
- -Laws and Theories of Learning
- -Learning curve
- -Factors promoting Motor learning
- -Principles derived from Psychology

Sociological

- —Concept of Sociology
- -The Nature of Man

- -Social Institutions and their influence on human behaviour
- -Games and Sports as man's cultural heritage
- -Development of Social Unity
- -Principles derived from Sociology

REFERENCE

- Bucher, Charles A. Foundation of Physical Education, St. Louis: The D.V. Mosby Com. 1968 Dollar 9.50
- Nixon, Eugene E. and Cozens W. An Introduction to Physical Education. Philadelphia, London: W.B. Saunders Co. 1969 Dollar 7.00
- Oberteuffer, Delbert: Physical Education, New York, Harper and Brothers Publishers, 1870, Dollar 5.95
- 4. Williams, Jesse Feiring: The Principles of Physical Education, Philadelphia. W.B. Saunders Co. 1964.