



OFFICE OF THE REGISTRAR :: DIBRUGARH UNIVERSITY :: DIBRUGARH

Ref. No. DU/DR-A/8-1/22/259

Date: 22.03.2022

NOTIFICATION

As recommended by the 124th Meeting of the Under Graduate Board, held on 10.02.2022, the 124th Meeting of the Academic Council held on 02.03.2022 vide Resolution No. 04 has approved the draft of the Revised Curriculum of the Two Year (4 Semester) Bachelor of Physical Education (B.P.Ed.) Programme w.e.f. the academic session 2022-2023.

Issued with due approval.

Curriculum (revised) of Two-Year B.P.Ed. Programme (Semester System) - 2022 is attached as **Annexure – I**.

(Dr. B.C. Borah)

Joint Registrar (Academic)
Dibrugarh University.

Copy to:

1. The Hon'ble Vice-Chancellor i/c, Dibrugarh University for favour of information.
2. The Deans, Dibrugarh University, for favour of information.
3. The Registrar, Dibrugarh University for favour of information.
4. The Director i/c, Centre for Studies in Physical Education and Sports, Dibrugarh University for favour of information.
5. The Controller of Examinations, Dibrugarh University for information and needful. A copy of the syllabus is enclosed herewith.
6. The Academic Officer, Dibrugarh University, for information.
7. The Programmer, Dibrugarh University for kind information and with a request to upload the Notification in the University website.
8. File.

(Dr. B.C. Borah)

Joint Registrar (Academic)
Dibrugarh University



**CURRICULUM
OF
TWO-YEAR B.P.ED PROGRAMME (SEMESTER SYSTEM) –2022
(REVISED)
DIBRUGARH UNIVERSITY**

RULES AND REGULATIONS

Preamble: Bachelor of Physical Education (B. P. Ed.) two years (**Four Semesters, Credit System**) programme is a professional programme meant for preparing teachers of physical education in classes VI to X and for conducting physical education and sports activities in classes XI and XII.

B. P. Ed. programme shall be designed to integrate the study of childhood, social context of Physical Education, subject knowledge, pedagogical knowledge, aim of Physical Education and communication skills. The programme comprises of compulsory theory as well as practical courses and compulsory school internship.

1. Introduction:

Short Title, Definition and Commencement:

- (a) These Regulations shall be called the Dibrugarh University Regulations for Bachelor of Physical Education (B.P.Ed) Programme, hereinafter referred to as the B.P.Ed. programme.
- (b) Department: The term 'Department' is used to mean a department of Dibrugarh University or a Centre established for the purpose or that of a College affiliated to the Dibrugarh University with reference to the subject approved by Dibrugarh University.
- (c) These Regulations shall be effective from the academic session 2015-2016.
- (d) Extent of Application: The Regulations shall be applicable to the students enrolled for the B.P.Ed Programme of Dibrugarh University.
- (e) The B.P.Ed programme shall be of duration of two academic years, that is, four semesters. However, the students shall be permitted to complete the programme requirements within a maximum of three years from the date of admission to the programme.

- (f) There shall be at least 200 working days in each academic year/one hundred working days in each semester exclusive of period of examination and admission etc.
- (g) There shall be minimum 36 (thirty six) working hours in a week (five or six days/week).
- (h) The programme will run as per the University Academic Calendar.
- (i) Any change in the Academic Calendar/Schedule may be made by the Academic Planning Committee whenever necessary.

2. Intake:

There shall be a basic unit of 100 (one hundred) students with two section of 50 (fifty) each.

3. Eligibility for admission: - (As per NCTE norms and standards)

- a) Bachelor's Degree in any discipline with 50 % marks and having at least participation in the Inter College/ Inter Zonal/ District/ School Competitions in Sports and Games as recognized by the AIU/IOA/SGFI/Govt. of India.

Or

- b) Bachelor's Degree with Physical Education with 45 % marks.

Or

- c) Bachelor's Degree in any discipline with 45% marks and studies physical education as compulsory/elective subject.

Or

- d) Bachelor's Degree with 45% marks and having at least participation in National/ Inter University/ State Competitions or secured 1st, 2nd and 3rd position in Inter College/Inter Zonal/ District/ School Competitions in Sports and Games as recognized by the AIU/IOA/SGFI/Govt. of India.

Or

- e) Bachelor's Degree and participation in International competitions or secured 1st, 2nd or 3rd position in national/ inter university competition in sports and games as respective federations/ AIU/IOA/SGFI/Govt. of India.

Or

- f) Graduation with 45 % marks and at least three years of teaching experience (deputed in-service candidates i.e. trained physical education teacher/coaches).

Relaxation in the percents of marks in the qualifying examination and in the reservation of the seats for SC/ST/OBC and other categories shall be as per the rules of the Central Govt. /State Govt. whichever is applicable.

4. Admission Procedure:

- a) Newspaper/Website notice inviting application for admission into the B.P.Ed. programme shall be issued by the Registrar or by any person authorized for the purpose at least one month in advance from the date of admission. Each applicant shall have to submit within the prescribed date his/her application with requisite documents as indicated.
- b) The admission shall be made on merit on the basis of marks in the Entrance Examination (written test, Sports proficiency test, Physical Fitness test and marks obtained in the qualifying examinations) or any other selection process as per the policy of the University/State Govt.
- c) The candidates seeking admission are expected to be free from any physical disability /defects, possess sound health and are medically fit. Qualified candidates will have to appear before the Medical Board and those who are pronounced medically fit by the Medical Board will be given admission.
- d) Maximum age for admission to the B.P.Ed. Programme shall not be more than 25 years on 1st July of the admission years. Relaxation of 3 years may be granted for outstanding sportsperson/Coaches and the applicants belonging to reserved categories as per govt. rules.
- e) Relaxation of age up to 40 years may also be granted for the applicants duly deputed by the institutions/ organizations recognized by the University.

5. Course of Programme:

- a. The medium of instruction and examination shall be English
- b. **The Credit System:** All programmes shall run on Credit System (CS). It is an instructional package developed to suit the needs of students, to keep pace with the developments in higher education and the quality assurance expected of it in the light of liberalization and globalization in higher education.
- c. **Course:** The term course usually referred to, as 'papers' is a component of a programme. All courses need not carry the same weight. The courses should define learning objectives and learning outcomes. A course may be designed to

comprise Lectures/ tutorials/laboratory work/ field work/ outreach activities/ project work/ vocational training/viva/ seminars/ term papers/assignments/ presentations/ self-study etc. or a combination of some of these.

- d. **Courses of Programme:** The B.P.Ed. Programme shall consist of a number of courses, the term 'Course' applied to indicate a logical part of subject matter of the programme and is invariably equivalent to the subject matter of a "paper" in the conventional sense. The following are the various categories of courses suggested for the B.P.Ed. Programme.

Theory Courses: Part A

Practicum: (Part B)

Teaching Practices: (Part C)

SCHOOL INTERNSHIP:

School Internship shall be designed to lead to the development of a broad repertoire of perspectives, professional capacities, teacher dispositions, sensibilities and skills. Student teachers shall be equipped to cater to diverse needs of learners in schools. Student-teachers are to be actively engaged in teaching at two levels, namely, upper primary and secondary. They should be provided opportunities to teach in government and private schools with systematic supervisory support and feedback from faculty. Internship in schools is to be done for a minimum duration of 15 weeks. This should include an initial phase of one week for observing a regular classroom with a regular teacher and would also include peer observations, teacher observations and observations of interns' lessons by faculty. It is important that the student-teachers consolidate and reflect on their teaching experience during and after the school internship. Therefore, along with writing reflective journals during the internship programme, there shall be space for extended discussions and presentations on different aspects of the teaching experience after the internship.

An internship is an opportunity offered by one institution to potential students or students of class undergoing a training / professional programme in the institution, either in any one or both of the semesters in the final year or after the end of the final semester of the programme usually. It provides students a period of practical experience in the industry relating to their field of study. The experience valuable to students as a means of allowing them to experience how their studies are applied in the "Real World" and as a work experience that can be highly attractive to employers on candidate's CV.

Particularly the programme of Bachelor of Physical Education, internship refers an exchange and extending of services for professional experience to be continued for 15 days in a school. Between the student and organization so that as experienced interns of few need little or no training when they begin regular employment, such work experiences internship, during this period, the intern is expected to use the things he /she has learned in the institution and put them in to practice thus the students gain with experience in this field of study. It would be a mandatory part of the completion of the said programme.

Duty Discharge Recording: Internal assessment shall be made on the basis of the following aspects and its record.

1. The intern shall conduct at least three assemblies for the students of whole school / organization.
2. The intern shall conduct classroom theory lessons on at least any three lessons pertaining to any topics learned in the course.
3. The intern shall conduct practical lessons on, at least any three lessons related to any learned physical activities from the course.
4. The intern further shall conduct sports coaching lesson practically, at least one lesson pertaining to his or her individual game specialization.
5. The interns shall show their sincerity and dedication, discipline, while carrying out the concerned work. The efficiency as a whole of the intern should be placed on record thoroughly.
6. Schools, organization like Sports schools, Ashramshala, Other recognized and registered local schools shall either be adopted or hour wise classes be conducted.
7. The duration of internship shall be of 15 days, one hour every day. A group of 5 student- teachers individually shall conduct teaching lessons one each from the theory course, physical activity practically and sports coaching for students of different classes in the school / organization every day.
8. A file has to be prepared and maintained with an index of all three lessons along with a brief note on three conduct of assembly of the whole school / organization. The sincerity, discipline and overall efficiency of student-teacher shall be mentioned in the note and be submitted to supervisor after duly signed by the school personnel / administrator of the school/ organization countersigned by the supervisor / house advisor / counselor.

Note: A compiled file with an index, having recorded the duty discharged by the intern be maintained accordingly which shall be signed by the physical education personal / administration of the school, followed by counter signed by the house advisor / counselor / of the programme. Ultimately it has to be endorse by head of the department of the programme.

- e. **Semesters:** An academic year is divided into two semesters. Each semester will consist of 17-20 weeks of academic work equivalent to 100 actual teaching days. The end semester examinations will be held as per the University Academic Calendar. The institution shall work for a minimum of 36 working hours in a week (five or six days a week).

Semester wise distribution of hours per week

Semester	Theory	Practicum	Teaching practice	Total
<i>I</i>	16	24	00	40
<i>II</i>	16	18	6	40
<i>III</i>	16	18	6	40
<i>IV</i>	16	12	12	40
Total	64	72	24	160
<i>Minimum of 36 teaching hours per week is required in five or six days in a week</i>				

- f. **Credits:** The term 'Credit' refers to a unit by which the programme is measured. It determines the number of hours of instructions required per week. One credit is equivalent to one hour of teaching (lecture or tutorial) or one and half / two hours of practical work/field work per week. The term 'Credit' refers to the weight given to a course, usually in relation to the instructional hours assigned to it.

Number of credits per semester

Semester	Theory	Practicum	Teaching practice	Total
<i>I</i>	16	16	00	32
<i>II</i>	16	12	04	32
<i>III</i>	16	12	04	32
<i>IV</i>	16	08	08	32
Total	64	48	16	128
<i>Minimum of 36 teaching hours per week is required in five or six days in a week</i>				

g. Provision of Bonus Credits Maximum 06 Credits in each Semester

Sr. No.	Special Credits for Extra Co-curricular Activities	Credit
1	Sports Achievement at State level Competition (Medal Winner)	1
	Sports Achievement National level Competition (Medal Winner)	2
	Sports Achievement National level Competition (Medal Winner)	4

	Sports participation International level Competition	
2	Inter Uni. Participation (Any one game)	2
3	Inter College Participation (min. Two games)	1
4	National Cadet Corps / National Service Scheme	2
5	Blood donation / Cleanliness drive / Community services /	2
6	Mountaineering – Basic Camp, Advance Camp / Adventure Activities	2
7	Organization / Officiating – State / National level in any two games	2
8	News Reposting / Article Writing / book writing / progress report writing	1
9	Research Project	4

Students can earn maximum 06 Bonus credits in each semester by his/her participation in the above mentioned activities duly certified by the Head of the institution / Department. This Bonus credit will be used only to compensate loss of credits in academic activities.

6. Attendance:

Student must have 85% of attendance in each course for appearing the examination.

7. Examinations:

- i. There shall be examinations at the end of each semester, for first semester in the month of December: for second semester in the month of June. A candidate who does not pass the examination in any course(s) shall be permitted to appear in such failed course(s) in the subsequent regular examinations.
- ii. A candidate should get enrolled /registered for the first semester examination. If enrollment/registration is not possible owing to shortage of attendance beyond condonation limit / rules prescribed OR belated joining OR on medical grounds, such candidates are not permitted to proceed to the next semester. Such candidates shall redo the semester in the subsequent term of that semester as a regular student; however, a student of first semester shall be admitted in the second semester, if he/she has successfully kept the term in first semester.

8. Pattern of Question Papers:

Question Papers shall have five questions (with option for each) corresponding to four units of each theory course.

B.P.Ed.: Format of Question Paper for 4 Units.

Each question paper shall have five questions. The pattern will be as follows:

Question No.	Description	Unit	Marks
1	Answer in detail (Long Question) Or Answer in detail (Long Question)	From Unit 1	15
2	Answer in detail (Long Question) Or Answer in detail (Long Question)	From Unit 2	15
3	Answer in detail (Long Question) Or Answer in detail (Long Question)	From Unit 3	15
4	Answer in detail (Long Question) Or Answer in detail (Long Question)	From Unit 4	15
5	M.C.Q. Type Questions (10 out of 10 Que.)	Not less than 2 questions from each unit	10
Total			70

9. Evaluation:

The performance of a student in each course is evaluated in terms of percentage of marks with a provision for conversion to grade point. Evaluation for each course shall be done by a continuous internal assessment (CIA) by the concerned course teacher as well as by end semester examination and will be consolidated at the end of course. The components for continuous internal assessment are;

One Test	15 Marks
Seminar / Quiz	5 Marks
Assignments	5 Marks
Attendance	5 Marks
Total	30 Marks

Attendance shall be taken as a component of continuous assessment, even though the students should have minimum 85% attendance in each course.

The fractions of the marks allotted for the attendance shall be:

% of attendance	Allotted marks
85	0 marks
86-88	1 marks
89-91	2 marks

92-94	3 marks
95-97	4 marks
98-100	5 marks

In addition to continuous evaluation component, the end semester examination, which will be written type examination of **at least 3 hours duration**, would also form an integral component of the evaluation. The ratio of marks to be allotted to continuous internal assessment and to end semester examination is 30:70. The evaluation of practical work, wherever applicable, will also be based on continuous internal assessment and on an end-semester practical examination.

10. Minimum Passing Standard:

The minimum passing standard for CIA (Continuous Internal Assessment) and External Examinations shall be 40%, i.e. 12 marks out of 30 marks and 28 marks out of 70 marks respectively for theory courses. The minimum passing for both CIA & external examination shall be 50%, i.e. 15 marks out of 30 and 35 marks out of 70 marks for the practical courses.

11. Grading:

Once the marks of the CIA (Continues Internal Assessment) and SEA (Semester End Assessment) for each of the courses are available, both (CIA and SEA) will be added. The marks, thus obtained for each of the courses will then be graded as per details provided in **SI. No. 14** from the first semester onwards the average performance within any semester from the first semester is indicated by Semester Grade Point Average (SGPA) while continuous performance (including the performance of the previous semesters also) starting from the first semester is indicated by Cumulative Grade Point Average (CGPA). These two are calculated by the following formula:

$$SGPA = \frac{\sum_{i=1}^n C_i G_i}{\sum_{i=1}^n C_i}$$

$$CGPA = \frac{\sum_{j=1}^N SGPA_j}{N}$$

Where C_i is the Credit earned for the course is in any semester; G_i is the Grade point obtained by the student for the course i and n number of courses

obtained in that semester; $SGPA_j$ is SGPA of semester j and N number of semester. Thus CGPA is average of SGPA of all the semesters starting from the first semester to the current semester.

12. Classification of Final Results:

For the purpose of declaring a candidate to have qualified for the Degree of Bachelor of Physical Education in the First class / Second class / Pass class or First class with Distinction, the marks and the corresponding CGPA earned by the candidate in Core Courses will be the criterion. It is further provided that the candidate should have scored the First / Second Class separately in both the grand total and end Semester (External) examinations.

13. Award of the B.P.Ed. Degree:

A candidate shall be eligible for the award of the degree of the B.P.Ed. only if he/she has earned the minimum required credit including Bonus Credits of the programme prescribed above.

14. Letter Grades and Grade Points:

- i. Two methods-relative grading or absolute grading– have been in vogue for awarding grades in a course. The relative grading is based on the distribution (usually normal distribution) of marks obtained by all the students in the course and the grades are awarded based on a cut-off mark or percentile. Under the absolute grading, the marks are converted to grades based on pre-determined class intervals. To implement the following grading system, the colleges and universities can use any one of the above methods.
- ii. The grades for each course would be decided on the basis of the percentage marks obtained at the end-semester external and internal examinations as per following table:

Percentage	Grade Point	Letter Grade	Description	Classification of final result
85 & above	8.5-10.0	O	Outstanding	First class with Distinction
70-84.99	7.0-8.49	A ⁺	Excellent	
60-69.99	6.0-6.99	A	Very Good	First Class
55-59.99	5.5-5.99	B+	Good	Higher Second Class
50-54.99	5.0-5.49	B	Above Average	Second Class
40-49.99	4.0-4.99	C	Average	Pass Class
Below 40	0.0	F	Fail/ Dropped	Dropped
	0	AB	Absent	

15. Grade Point Calculation

Calculation of **Semester Grade Point Average (SGPA)** and **Credit Grade Point (CGP)** and declaration of class for B. P. Ed. Programme.

The credit grade points are to be calculated on the following basis:

$$SGPA = \frac{\sum_{i=1}^n C_i G_i}{\sum_{i=1}^n C_i}$$

Example – I

Marks obtained by Student in course CC101 = 65/100

Percentage of marks = 65 %

Grade from the conversion table is = A

Grade Point = 6.0 + 5 (0.99/9.99)

= 6.0 + 5x0.1

= 6.0+ 0.5

=6.5

The Course Credits = 04

Credits Grade Point (CGP) = 6.5 × 04 = 26

The semester grade point average (SGPA) will be calculated as a weighted average of all the grade point of the semester courses. That is Semester grade point average (SGPA) = (sum of grade points of all eight courses of the semester) / total credit of the semester as per example given below:

SEMESTER-1

Courses No.	Credit	Marks out of 100 (%)	Grade	Grade Point	Credit Grade point
CC-101	4	65	A	6.5	26
CC-102	4	60	A	6	24
CC-103	4	62	A	6.2	24.8
EC-101/ EC-102	4	57	B+	5.7	22.8
PC-101	4	55	B+	5.5	22
PC-102	4	72	A+	7.2	28.8
PC-103	4	66	A	6.6	26.4
PC – 104	4	72	A+	7.2	28.8
	32				203.6

Examples: Conversion of marks into grade points

CC-101 65 = 60 + 5 = 6.0 + 5 x (0.99 / 9.99) = 6.0 + 5 x 0.1 = 6.0 + 0.5 = 6.5

CC-102 60 = 6.0

CC-103 62 = 60 + 2 = 6.0 + 2 x (0.99/9.99) = 6.0 + 2 x 0.1 = 6.0 + 0.2 = 6.2

$$\text{EC-104/EC-102 } 57 = 55 + 2 = 5.5 + 2 \times (0.49 / 4.99) = 5.5 + 2 \times 0.1 = 5.5 + 0.2 = 5.7$$

$$\text{PC-101 } 55 = 5.5$$

$$\text{PC-102 } 72 = 70 + 2 = 7.0 + 2 \times (1.49 / 14.99) = 7.0 + 2 \times 0.1 = 7.0 + 0.2 = 7.2$$

$$\text{PC-103 } 66 = 60 + 6 = 6.0 + 6 \times (0.99 / 9.99) = 6.0 + 6 \times 0.1 = 6.0 + 0.6 = 6.6$$

$$\text{PC - 104 } 72 = 70 + 2 = 7.0 + 2 \times (1.49 / 14.99) = 7.0 + 2 \times 0.1 = 7.0 + 0.2 = 7.2$$

$$\text{SEMESTER GRADE POINT AVERAGE (SGPA) = Total Credit Grade Points = 203.6} \\ /32 = 6.3625$$

$$\text{SGPA Sem. I} = 6.3625$$

At the end of Semester-1

$$\text{Total SGPA} = 6.3625$$

$$\text{Cumulative Grade Point Average (CGPA)} = 6.3625/1 = 6.3625$$

CGPA = 6.66875, Grade = A, Class = First Class

SEMESTER-2

Courses No.	Credit	Marks out of 100 (%)	Grade	Grade Point	Credit Grade point
CC-201	4	76	A+	7.6	30.4
CC-202	4	64	A	6.4	25.6
CC-203	4	59	B+	5.9	23.6
EC-201/ EC-202	4	80	A+	8	32
PC-201	4	49	C	4.9	19.6
PC-202	4	64	A	6.4	25.6
PC-203	4	55	B+	5.5	22
TP - 201	4	72	A+	7.2	28.8
	32				207.6

$$\text{SGPA Sem. II} = 6.4875$$

At the end of Semester-2

$$\text{Total SGPA for two Semesters} = 12.85$$

$$\text{Cumulative Grade Point Average (CGPA)} = 12.85/2 = 6.425$$

CGPA = 6.66875, Grade = A, Class = First Class

SEMESTER-3

Courses No.	Credit	Marks out of 100 (%)	Grade	Grade Point	Credit Grade point
CC-301	4	64	A	6.4	25.6
CC-302	4	64	A	6.4	25.6
CC-303	4	59	B+	5.9	23.6

EC-301/ EC-302	4	81	A+	8.1	32.4
PC-301	4	49	C	4.9	19.6
PC-302	4	64	A	6.4	25.6
PC-303	4	68	A	6.8	27.2
TP - 301	4	75	A+	7.5	30
	32				209.6

SGPA Sem. III = 6.55

At the end of Semester-3

Total SGPA for three Semesters = 19.4

Cumulative Grade Point Average (CGPA) = $19.4/3 = 6.466667$

CGPA = 6.66875, Grade = A, Class = First Class

SEMESTER-4

Courses No.	Credit	Marks out of 100 (%)	Grade	Grade Point	Credit Grade point
CC-401	4	83	A+	8.3	33.2
CC-402	4	76	A+	7.6	30.4
CC-403	4	59	B+	5.9	23.6
EC-401/ EC-402	4	81	A+	8.1	32.4
PC-401	4	49	C	4.9	19.6
PC-402	4	78	A+	7.8	31.2
TP-401	4	81	A+	8.1	32.4
TP-402	4	75	A+	7.5	30
	32				232.8

SGPA Sem. IV = 7.275

At the end of Semester-4

Total SGPA for all the four semesters = 26.675

Cumulative Grade Point Average (CGPA) = $26.675 / 4 = 6.66875$

CGPA = 6.66875, Grade = A, Class = First Class

Note:

(1) SGPA is calculated only if the candidate passes in all the courses, i.e. gets minimum C grade in all the courses.

(2) CGPA is calculated only when the candidate passes in all the courses of all the previous and current semesters.

(3) The cumulative grade point average will be calculated as the average of the SGPA of all the semesters continuously, as shown above.

(4) For the award of the class, CGPA shall be calculated on the basis of:

- (a) Marks of each Semester End Assessment And
- (b) Marks of each Semester Continuous Internal Assessment for each course.

The final class for B.P.Ed Degree shall be awarded on the basis of last CGPA (grade) from all the one to four semester examinations.

16. Grievance Redressal Committee:

The department/centre shall form a Grievance Redressal Committee for each course in each department/centre with the course teacher / Director/ HOD of the faculty and Dean of School as the members. This Committee shall solve all grievances of the students.

19. Revision of Syllabi:

- a. Syllabi of every course should be revised according to the NCTE.
- b. Revised Syllabi of each semester should be implemented in a sequential way.
- c. In courses, where units / topics related to governmental provisions, regulations or laws, that change to accommodate the latest developments, changes or corrections are to be made consequentially as recommended by the Academic Council.
- d. All formalities for revisions in the syllabi should be completed before the end of the semester for implementation of the revised syllabi in the next academic year.
- e. During every revision, up to twenty percent of the syllabi of each course should be changed so as to ensure the appearance of the students who have studied the old (unrevised) syllabi without any difficulties in the examinations of revised syllabi.
- f. In case, the syllabus of any course is carried forward without any revision, it shall also be counted as revised in the revised syllabi.

Semester – I

Part A: Theoretical Course						
Course Code	Title of the Papers	Total Hours	Credit	Internal Marks	External Marks	Total Marks
Core Course						
CC 101	History and foundation of Physical Education	4	4	30	70	100
CC 102	Anatomy and Physiology	4	4	30	70	100
CC 103	Health Education and Environmental Studies	4	4	30	70	100
Elective Course (Any One)						
EC101	Officiating and Coaching	4	4	30	70	100
EC102	Sports Sociology	4	4	30	70	100
Part-B Practical Course						
PC 101	Track and Field (Running, Walking and Hurdle Events)	6	4	30	70	100
PC 102	Swimming/Gymnastics/ Aerobics/ Mallakhamb	6	4	30	70	100
PC 103	Indigenous Sports: Kabaddi / Kho Kho/ Local traditional/ indigenous games and Sports	6	4	30	70	100
PC 104	Mass Demonstration Activities and Band: Dumbbells / Wands / Hoop /Mass P. T. / Lezium / Marching / Jodi / Umbrella / Tipri	6	4	30	70	100
Total		40	32	240	560	800

Note: Total Number of hours required to earn 4 credits for each Theory Course are 68-80 hours per semester whereas 102-120 hours for each Practicum Course.

Semester – II

Part-A: Theoretical Course						
Course Code	Title of the Papers	Total Hours	Credit	Internal Marks	External Marks	Total Marks
Core Course						
CC 201	Yoga Education	4	4	30	70	100
CC 202	Educational Technology and Methods of Teaching in Physical Education	4	4	30	70	100
CC 203	Management in Physical Education and Sports	4	4	30	70	100
Elective Course (Any One)						
EC 201	Computer Application in Physical Education and Sports	4	4	30	70	100
EC 202	Sports Nutrition	4	4	30	70	100
Part-B Practical						
PC 201	Track and Field (Throwing Events)	6	4	30	70	100
PC 202	Yoga/ Gymnastics (Apparatus) /	6	4	30	70	100
PC 203	Racket Sports: Badminton/ Table Tennis/ Tennis	6	4	30	70	100
Part – C Teaching Practices						
TP 201	Teaching Practices (05 lessons on class room teaching and 05 lessons on outdoor activities)	6	4	30	70	100
Total		40	32	240	560	800

Note: Total Number of hours required to earn 4 credits for each Theory Course are 68-80 hours per semester whereas 102-120 hours for each Practicum Course.

Semester – III

Part-A: Theoretical Course						
Course Code	Title of the Papers	Total Hours	Credit	Internal Marks	External Marks	Total Marks
Core Course						
CC 301	Sports Training	4	4	30	70	100
CC 302	Sports Medicine, Athletic Care and Rehabilitation	4	4	30	70	100
CC 303	Educational and Sports Psychology	4	4	30	70	100
Elective Course (Any One)						
EC 301	Fitness Management	4	4	30	70	100
EC 302	Professional Preparation and Curriculum Design	4	4	30	70	100
Part-B Practical Course						
PC 301	Track & Field (Jumping Events)	6	4	30	70	100
PC 302	Combative Sports: Martial Art/ Karate/ Judo/ Fencing/ Boxing/ Taekwondo/ Wrestling (Any two)	6	4	30	70	100
PC 303	Team Games: Baseball/ Cricket/ Football/ Hockey/ Softball/ Volleyball/ Handball/ Basketball/ (Any two)	6	4	30	70	100
Part – C Teaching Practices						
TP 301	Teaching Practice (Teaching Lesson Plan for Racket Sports/ Team Games/ Indigenous Sports	6	4	30	70	100
Total		40	32	240	560	800

Note: Total Number of hours required to earn 4 credits for each Theory Course are 68-80 hours per semester whereas 102-120 hours for each Practicum Course.

Semester – IV**Part A: Theoretical**

Course Code	Title of the Papers	Total Hours	Credit	Internal Marks	External Marks	Total Marks
Core Course						
CC 401	Measurement and Evaluation in Physical Education	4	4	30	70	100
CC 402	Kinesiology and Biomechanics	4	4	30	70	100
CC 403	Research and Statistics in Physical Education	4	4	30	70	100
Elective Course (Any One)						
EC 401	Theory of Games Specialization and Officiating & Coaching	4	4	30	70	100
EC 402	Adapted Physical Education	4	4	30	70	100
Part-B Practical Course						
PC 401	Track and Field / Swimming / Gymnastics (Any one)	6	4	30	70	100
PC 402	Kabaddi/ Kho-Kho/ Baseball/ Cricket/ Football/Hockey/Softball/ Volleyball/ Handball/ Basketball/ Netball/ Badminton/ Table Tennis/ Tennis /Yoga (Any one out of these)	6	4	30	70	100
Part – C Teaching Practices						
TP 401	Sports specialization: Coaching lessons (5 lessons on any one Sports)	6	4	30	70	100
TP 402	Games specialization: Coaching lessons (5 lessons on any one Game)	6	4	30	70	100
Total		4	32	240	560	800
		160	128	960	2240	3200

Note: Total Number of hours required to earn 4 credits for each Theory Course are 68-80 hours per semester whereas 102-120 hours for each Practicum Course.

SCHEME OF EXAMINATION**SEMESTER – I**

Paper	Subject	Internal	External	Total Marks
	THEORY (400)			
	Core Course			
CC 101	History and foundation of Physical Education	30	70	100
CC 102	Anatomy and Physiology	30	70	100
CC 103	Health Education and Environmental Studies	30	70	100
	Elective Course (Any one)			
EC 101	Officiating and Coaching	30	70	100
EC 102	Sports Sociology	30	70	100
	<u>PRACTICAL (400)</u>			
PC 101	Track and Field (Running, Walking and Hurdle Events)	30	70	100
PC 102	Aerobic /Swimming/Gymnastics/Mallakhamb (Any one out of these)	30	70	100
PC 103	Indigenous Sports: Kabaddi/ Kho Kho/ Local Traditional Games (Any one out of these)	30	70	100
PC 104	Mass Demonstration Activities: Lezium/ Marching/ dumbbells / tipri / wands / hoop /umbrella and Band (Any one out of these)	30	70	100
	Total	240	560	800

SEMESTER –II

Paper	Subject	Internal	External	Total Marks
	THEORY (400)			
	Core Course			
CC 201	Yoga Education	30	70	100
CC 202	Educational Technology and Methods of Teaching in Physical Education	30	70	100
CC 203	Management in Physical Education and sports	30	70	100
	Elective Course (Any One)			
EC 201	Computer Application in Physical Education and Sports	30	70	100
EC 202	Sports Nutrition	30	70	100
	<u>PRACTICAL (300)</u>			
PC 201	Track and Field (Throwing Events)	30	70	100
PC 202	Yoga/ Swimming / Gymnastics (Any two out of these)	30	70	100
PC 203	Racket Sports: Badminton/ Table Tennis/ Tennis (Any two out of these)	30	70	100
	TEACHING PRACTICE (100)			
TP 201	Teaching Practice (Classroom and outdoor)	30	70	100
	Total	240	560	800

SEMESTER –III

Paper	Subject	Internal	External	Total Marks
	THEORY (400)			
	Core Course			
CC 301	Sports Training	30	70	100
CC 302	Sports Medicine, Athletic Care and Rehabilitation	30	70	100
CC 303	Educational and Sports Psychology	30	70	100
	Elective Course (Any One)			
EC 301	Fitness Management	30	70	100
EC 302	Professional Preparation and Curriculum Design	30	70	100
	PRACTICAL (300)			
PC 301	Track and Field (Jumping Events)	30	70	100
PC 302	Combative Sports : Martial Art, Karate, Judo, Boxing, Taekwondo, Wrestling (Any two out of these)	30	70	100
PC 303	Team Games: Baseball, Cricket, Football, Hockey, Softball, Volleyball, Handball, Basketball and etc. (Any two out of these)	30	70	100
	TEACHING PRACTICE (100)			
TP 301	Teaching Practice (Teaching Lesson Plans for Racket Sport/ Team Games/Indigenous Sports)	30	70	100
	Total	240	560	800

SEMESTER –IV

Paper	Subject	Internal	External	Total Marks
	THEORY (400)			
	Core Course			
CC 401	Measurement and Evaluation in Physical Education	30	70	100
CC 402	Kinesiology and Biomechanics	30	70	100
CC 403	Research and Statistics in Physical Education	30	70	100
	Elective Course (Any One)			
EC 404	Theory of Specialized Games and Sports			
EC 404	Adapted Physical Education	30	70	100
	PRACTICAL (200)			
PC 401	Track and Field/Swimming /Gymnastics (Any one out of these)	30	70	100
PC 402	Kabaddi/ Kho-Kho/ Baseball/ Cricket/ Football/Hockey/Softball/ Volleyball/ Handball/ Basketball/ Badminton/ Table Tennis/ Tennis (Any one out of these)	30	70	100
	TEACHING PRACTICE (200)			

TP 401	Sports Specialization: Coaching lessons Plans Track and Field/Swimming /Gymnastics (Any one out of these)	30	70	100
TP 402	Game specialization Coaching lessons: Kabaddi/ Kho-Kho/ Baseball/ Cricket/Football/Hockey /Softball/ Volleyball/ Handball/ Basketball/ Badminton / Table Tennis/ Tennis/Yoga (Any one out of these)	30	70	100
	Total	240	560	800

APPENDIX-I
Athletic Performance Conversion Scoring Table (Men) Running Events

Marks	100 Mtrs. in Seconds	200 Mtrs. in Seconds	800 Mtrs. in Minutes & Seconds	1500 Mtrs. in Minutes & Seconds	110 Mtrs. & Hurdle in Seconds
10	12.5	26.5	2.40	4.50	17.5
9.5	12.7	26.7	2.42	4.53	17.6
9	12.9	26.9	2.44	4.56	17.7
8.5	13.1	27.1	2.46	4.59	17.8
8	13.3	27.3	2.48	5.02	17:9
7.5	13.5	27.5	2.50	5.03	18.0
7	13.7	27.7	2.52	5.08	18.2
6.5	13.9	27.9	2.54	5.11	18.4
6	14.1	28.1	2.56	5.14	18.6
5.5	14.3	28.3	2.58	5.17	18.8
5	14.5	28.5	3.00	5.20	19.0
4.5	14.6	28.7	3.02	5.23	19.1
4	14.7	28.9	3.04	5.26	19.2
3.5	14.8	29.1	3.06	5.29	19.3
3	14.9	29.3	3.08	5.32	19.4
2.5	15.0	29.5	3.10	5.35	19.5
2	15.1	29.7	3.12	5.38	19.6
1.5	15.2	29.8	3.14	5.41	19.7
1	15.3	29.9	3.16	5.42	19.8
0.5	15.4	30.0	3.18	5.47	19.9
0	15.5	30.1	3:20	5:50	20.0

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Athletic Performance Conversion Scoring Table (Women) Running Events

Marks	100 Mtrs. in Seconds	200 Mtrs. in Seconds	00 Mtrs.in Min.& seconds	100 Mtrs. Hurdle in Seconds
10	15.0	31.5	3.00	19.5
9.5	15.2	31.7	3.03	19.6
9	15.4	31.9	3.06	19.7
8.5	15.6	32.1	3.09	19.8
8	15.8	32.3	3.12	20.0
7.5	16.0	32.5	3.15	20.2
7	16.2	32.7	3.18	20.4
6.5	16.4	32.9	3.21	20.7
6	16.6	33.0	3.24	21.0
5.5	16.8	33.5	3.37	21.5
5	17.0	33.8	3.30	22.0
4.5	17.2	34.0	3.33	22.2
4	17.4	34.2	3.36	22.4
3.5	17.6	34.4	3.34	22.6
3	17.8	34.6	3.42	22.8
2.5	18.0	34.8	3.45	23.0
2	18.2	34.0	3.48	23.2
1.5	18.3	34.2	3.52	23.4
1	18.4	34.4	3.55	23.6
0.5	18.5	34.6	3.58	23.8
0	18.6	34.7	4:00	24.5

Athletic Performance Conversion Scoring Table (Men) Throwing Events

Marks	Shot Put (7Kg. 260 Gram) in Meters	Hammer Throw in Meters	Discus Throw in Meters	Javelin Throw Mtrs. in Meters
10	8.60	35.00	33.00	55.00
9.5	8.40	34.00	32.00	48.00
9	8.10	33.00	31.00	46.00
8.5	7.90	32.00	30.00	44.00
8	7.50	31.00	29.00	42.00
7.5	7.20	30.00	27.50	40.00
7	6.80	29.00	26.00	37.00
6.5	6.40	28.00	24.50	34.00
6	6.00	26.50	23.00	31.00
5.5	5.90	25.00	21.50	28.00
5	5.80	23.50	20.00	25.00
4.5	5.70	22.00	19.00	24.50
4	5.60	21.00	18.00	24.00
3.5	5.50	20.00	17.00	23.50
3	5.40	19.00	16.00	23.50
2.5	5.35	18.00	14.00	22.50
2	5.30	17.00	13.00	22.06
1.5	5.25	16.00	12.50	21.50
1	5.20	15.00	12.00	21.00
0.5	5.15	14.50	11.50	20.50
0	5.10	14.00	11.00	20.00

Athletic Performance Conversion Scoring Table (Women)
Throwing and Jumping Events

Marks	Shotput (4Kg) in Meters	Discus in Meters	Javelin in Mtrs.	Long Jump in meters	High jump in Meters
10	8.50	30.00	35.00	4.00	1.30
9.5	8.30	29.00	33.50	3.90	1.28
9	8.10	28.00	32.00	3.80	1.26
8.5	7.80	26.50	30.50	3.70	1.24
8	7.50	25.00	29.00	3.60	1.22
7.5	7.20	23.50	27.50	3.50	1.20
7	6.80	22.00	26.00	3.40	1.18
6.5	6.40	20.50	24.50	3.30	1.15
6	6.00	19.00	23.00	3.20	1.10
5.5	5.60	17.50	21.50	3.10	1.05
5	5.20	16.00	20.00	3.00	1.00
4.5	5.05	15.00	19.00	2.95	0.95
4	4.90	14.50	18.00	2.90	0.90
3.5	4.75	14.00	17.00	2.85	0.85
3	4.60	13.50	16.00	2.80	0.80
2.5	4.45	13.00	15.50	2.75	0.75
2	4.30	12.50	15.00	2.70	0.76
1.5	4.20	12.00	14.50	2.65	0.74
1	4.10	11.50	14.00	2.60	0.72
0.5	4.00	11.00	13.50	2.55	0.70
0	3.90	10.90	13.00	2.50	0.68

Athletic Performance Conversion Scoring Table (Men) Jumping Events

Marks	Long Jump in Meters	Hop Step Jump in Meters	High Jump in Meters	Pole Vault in Meters
10	6.00	13.60	1.50	3.40
9.5	5.90	13.40	1.48	3.37
9	5.80	13.20	1.46	3.34
8.5	5.70	13.00	1.44	3.30
8	5.60	12.80	1.42	3.25
7.5	5.50	12.60	1.40	3.20
7	5.40	12.40	1.38	3.15
6.5	5.30	12.20	1.36	3.10
6	5.20	12.00	1.34	3.05
5.5	5.10	11.80	1.32	3.00
5	5.00	11.60	1.30	2.90
4.5	4.95	11.50	1.28	2.85
4	4.90	11.40	1.26	2.80
3.5	4.85	11.30	1.24	2.75
3	4.80	11.20	1.22	2.70
2.5	4.75	11.10	1.20	2.65
2	4.70	11.00	1.18	2.60
1.5	4.65	10.90	1.16	2.55
1	4.60	10.80	1.15	2.50
0.5	4.55	10.70	1.14	2.45
0	4.50	10.60	1.13	2.40

APPENDIX-II
Swimming Performance Conversion Scoring Table (Men)

Marks	50 Mtrs free style in minutes & Seconds	50 Mtrs. Back Stroke In Minutes & Seconds	50 Mtrs. Breast Stroke In Minutes & Seconds	50 Mtrs. Butterfly Minutes &
10	0:35	0:40	0:50	0:45
9.5	0:36	0:41	0:51	0:46
9	0:37	0:42	0:52	0:47
8.5	0:38	0:43	0:53	0:48
8	0:39	0:44	0:54	0:49
7.5	0:40	0:45	0:55	0:50
7	0:41	0:46	0:56	0:51
6.5	0:42	0:47	0:57	0:52
6	0:43	0:48	0:58	0:53
5.5	0:44	0:49	0:59	0:54
5	0:45	0:50	1:00	0:55
4.5	0:47	0:52	1:02	0:57
4	0:49	0:54	1:04	0:59
3.5	0:51	0:56	1:06	1:01
3	0:53	0:58	1:08	1:03
2.5	0:55	1:00	1:10	1:05
2	0:57	1:02	1:12	1:07
1.5	0:59	1:04	1:14	1:09
1	0:01	1:06	1:16	1:11
0.5	0:03	1:08	1:18	1:13
0	0:05	1:10	1:20	1:15

Swimming Performance Conversion Scoring Table (Men)

Marks	100 Mtrs free style in minutes	100 Mtrs. Back Stroke In & Seconds	100 Mtrs. Breast Stroke In Minutes & Seconds	100 Mtrs.Butterfly Minutes & Seconds
10	1:10	1:20	1:30	1:15
9.5	1:11	1:21	1:31	1:16
9	1:12	1:22	1:32	1:17
8.5	1:13	1:23	1:33	1:18
8	1:14	1:24	1:34	1:19
7.5	1:15	1:25	1:35	1:20
7	1:16	1:26	1:36	1:21
6.5	1:17	1:27	1:37	1:22
6	1:18	1:28	1:38	1:23
5.5	1:19	1:29	1:39	1:24
5	1:20	1:30	1:40	1:25
4.5	1:22	1:32	1:42	1:27
4	1:24	1:34	1:44	1:29
3.5	1:26	1:36	1:46	1:31
3	1:28	1:38	1:48	1:33
2.5	1:30	1:40	1:50	1:35
2	1:32	1:42	1:52	1:37
1.5	1:34	1:44	1:54	1:3
1	1:36	1:46	1:56	1:41
0.5	1:38	1:48	1:58	1:43
0	1:40	1:50	2:00	1:45

APPENDIX-III
Weight lifting
Body Weight Category Table

Weight Group in Kilograms	Weight (in KILOGRAMS) & technique	
	Snatch	Clean & jerk
54	40	45
59	45	50
64	50	55
70	55	60
76	60	65
83	65	75
91	70	80
99	75	85
108	80	90
108 & above	90	95

Note :- Score sheets to be used for examination and their models are given below.

General:

- a) For any matter not covered under these Regulations for the B.P.Ed. Programme, the existing University Rules, Ordinance and the University Act, 1965 (as amended) shall be applicable.
- b) Any difficulty which may arise in the course of these operations relating to holding of the examinations shall be removed by the Examination Committee of the University.
- c) Provisions for the relevant existing Rules and Regulations of the University which are not in conformity with these Regulations shall stand repealed to the extent of their inconsistencies with these Regulations.

Syllabus of Two Year (Four Semesters) B. P. Ed. Programme
Semester – I
Part A (Theory)

CC-101 HISTORY AND FOUNDATION OF PHYSICAL EDUCATION			
Marks: Internal: 30 Marks; External Marks: 70 Marks; Total 100 Marks			
Learning objectives:			
<ul style="list-style-type: none"> • It will discuss the relationship of Physical Education and general education. • It helps to learn about the importance of Physical Education in present era and learn about aims and objectives of Physical Education. • It helps to learn acquire knowledge of Physical Education as an Art and Science. • It will discuss about historical development of Physical Education since Vedic period to after independence in India. • It helps to learn sports and social phenomena with various social cultural structure, pattern, and organization or group involved connection with society. • It will discuss about qualities of leadership and development of different components of personality. • It will learn about concept of Olympic Movement, origin and development of Olympic Game related to rules and regulations and understanding of Olympic participation. • To learn about introduction of different Olympic games 			
Learning outcome:			
<ul style="list-style-type: none"> • To understand the concept of Physical Education with knowledge of its importance, aims and objectives and recognize the value of Physical Education. • Develop basic knowledge about Physical Education as an Art and Science and able to compare the relationship between general education and Physical Education. • Students should be able to understand the various stages of historical development of Physical Education in India before and after Independence. • It should be able to comprehend the relationship between philosophy of education and Physical Education. • It develops and knows about leadership qualities such as cooperation, sympathy, team spirit, helpfulness, tolerance, patience and sportsmanship. • It understands various social cultural structure, pattern and organization related to variety of physical activities with reorganization. • To understand the concept of Olympic Movement and revival of Modern Olympic and know about rules and regulations. • Students will be able to identify terminology used in Olympic and various Olympic Games 			
Unit	Topic	Contact Hours	Marks
I	Introduction <ul style="list-style-type: none"> ○ Meaning, Definition and Scope of Physical Education ○ Aims and Objective of Physical Education ○ Importance of Physical Education in present era. ○ Misconceptions about Physical Education. 		

	<ul style="list-style-type: none"> ○ Relationship of Physical Education with General Education. ○ Physical Education as an Art and Science. 	12	17
II	<p>Historical Development of Physical Education in India</p> <ul style="list-style-type: none"> ○ Physical education during ancient and medieval India. ○ Physical education during British period (before 1947) ○ Physical education in India after Independence. ○ Kothari commission and its recommendation. ○ Role of organization in promoting physical education and Sports: - YMCA, SNIPES, NSNIS, LNIPE, SAI. 	14	18
III	<p>Foundation of Physical Education</p> <ul style="list-style-type: none"> ● Philosophical Foundation: Idealism, Pragmatism, Naturalism, Realism, Humanism, and Indian philosophy and culture. ● Biological Foundation: <ul style="list-style-type: none"> ○ Growth and development, ○ Age and gender characteristic, ○ Body types and its anthropometric difference. ● Psychological Foundation: <ul style="list-style-type: none"> ○ Meaning of Learning, types of learning. ○ Law of Learning ○ Principles of learning ○ Learning curve ● Sociological foundation: <ul style="list-style-type: none"> ○ Society and culture; social acceptance and recognition ○ Leadership, Types of leadership, qualities of leadership. 	24	17
IV	<p>Historical development of Olympic Movement</p> <ul style="list-style-type: none"> ● Origin and development of Olympic Games. ● Modern Olympic Games: Olympic Motto, Olympic Ring, Olympic torch, flag, oath, emblem, opening ceremony, Award, closing ceremony. ● International Olympic Committee: - Structure & Functions. ● National Olympic Committee and their role in Olympic movement. <p>Introduction of different Olympic Games</p> <ul style="list-style-type: none"> ○ Para Olympic Games ○ Summer Olympics ○ Winter Olympics ○ Youth Olympic Games 	18	18
<p>References:</p> <ul style="list-style-type: none"> ● Bucher, C. A. (n.d.) <i>Foundation of Physical Education</i>. St. Louis: The C.V. Mosby Co. 			

- Deshpande, S. H. (2014). *Physical Education in Ancient India*. Amravati: Degree college of Physical Education.(Maharashtra)
- Mohan, V. M. (1969). *Principles of Physical Education*. Delhi: Metropolitan Book Dep.
- Nixon, E. E. & Cozen, F.W. (1969). *An introduction to Physical Education*. Philadelphia: W.B. Saunders Co.
- Obertuffer, Delbert (1970) *Physical Education*. New York: Harper & Brothers Publisher.
- Sharman, J. R. (1964). *Introduction to Physical Education*. New York: A.S. Barnes & Co.
- William, J. F. (1964). *The Principles of Physical Education*. Philadelphia: W.B. Saunders Co.

CC-102 ANATOMY & PHYSIOLOGY

Marks: Internal: 30 Marks; External Marks: 70 Marks; Total 100 Marks

Learning Objectives:

- To provide the fundamentals knowledge of Anatomy and Physiology
- To provide the knowledge of different energy system of human body
- To provide different organ, tissue and cell structure
- To provide basic functions of physiology of muscles

Learning Outcomes:

- Understand the fundamentals of Anatomy and Physiology
- Classify different energy system of human body
- Chart various organ, tissue and cell
- Understand the physiology of muscles
- Understand the basic guidelines in sports medicine and physiotherapy and its management
- Understand the fundamental guidelines of rehabilitation in sports
- Understand various procedure of first-aid

Unit	Topic	Contact Hours	Marks
I	Introduction <ul style="list-style-type: none"> ○ Meaning and Concept of Anatomy ○ Need & Importance of the knowledge of Anatomy, in the field of Physical Education ○ Definition of Cell, Tissue, Organ and System ○ Microscopic Structure, Composition, and Function of Cell ○ Classification, structure and functions of Tissues <ul style="list-style-type: none"> • Epithelial Tissue • Connective Tissue • Muscular Tissue • Nervous Tissue ○ Essential Properties of Living Organism. 	17	17
	Structure and basic functions of various organic systems:		

II	<ul style="list-style-type: none"> ○ Musculo-Skeletal System ○ Different parts of Human Skeleton ○ Bones: Classification, Structure and function. ○ Joints: Classification and Basic movements at Joint Classification of muscle, structure and function of the Muscles. ○ The Circulatory System: Structure of Heart, Blood Circulation ○ The Respiratory System: Structure of Lung, Exchange of Gases in the lungs, Respiration Mechanism ○ The Nervous System: Structure and Functions of Automatic Nervous System ○ The Digestive System: Structure & Function Digestive Organs ○ Excretory System: Structure and Function of Kidney and Skin. 	19	18
III	<p>Physiology and Exercise Physiology</p> <ul style="list-style-type: none"> ○ Meaning and definition of Physiology and Exercise physiology. ○ Need and Importance of the knowledge of physiology and exercise physiology in the field of Physical Education. ○ Bio-energetic <ul style="list-style-type: none"> ● Energy-Meaning and definition of energy ● Biological Energy Cycle ● Fuel for muscular work (ATP CP) ● Sources of energy for muscular work ○ Microscopic structure of muscle fiber ○ Physiological mechanism of muscle contraction - Sliding Filament Theory 	16	18
IV	<p>Physiological changes due exercise and training in various system:</p> <ul style="list-style-type: none"> ○ Effect of exercise and training on muscular system. ○ Effect of exercise-and training on respiratory system. ○ Effect of exercise and training on cardiovascular system. ○ Muscle fatigue - Causes, symptoms and recovery ○ Oxygen debt, second wind 	15	17
<p>References:</p> <ul style="list-style-type: none"> ● D. (1979). A Christine, M. D., (1999). <i>Physiology of Sports and Exercise</i>.USA: Human Kinetics. ● Conley, M. (2000). <i>Bioenergetics of Exercise Training</i>. ● T.R. Baechle, & R.W. Earle, (Eds.), <i>Essentials of Strength Training and Conditioning</i> (pp. 73-90). Champaign, IL: Human Kinetics. ● David, R. M. (2005). <i>Drugs in Sports</i>, (4th Ed). Routledge Taylor and Francis Group. ● Gupta, A. P. (2010). <i>Anatomy and Physiology</i>. Agra: SumitPrakashan. 			

- Gupta, M. and Gupta, M. C. (1980). *Body and Anatomical Science*. Delhi: Swaran Printing Press.
- Guyton, A.C. (1996). *Textbook of Medical Physiology*, 9th edition. Philadelphia: W.B. Saunders.
- Hunter, M. *dictionary for physical educators*. In H. M. Borrow & R. McGee, (Eds.), *A Practical approach to measurement in Physical Education* (pp. 573-74). Philadelphia: Lea &Febiger.
- Karpovich, P. V. (n.d.). *Physiology of Muscular Activity*. London: W.B. Saunders Co.
- Lamb, G. S. (1982). *Essentials of Exercise Physiology*. Delhi: Surjeet Publication.
- Moorthy, A. M. (2014). *Anatomy, Physiology and Health Education*. Karaikudi: Madalayam Publications.
- Morehouse, L. E. & Miller, J. (1967). *Physiology of Exercise*. St. Louis: The C.V. Mosby Co.
- Pearce, E. C. (1962). *Anatomy and Physiology for Nurses*. London: Faber & Faber Ltd.
- Sharma, R. D. (1979). *Health and Physical Education*, Gupta Prakashan.
- Singh, S. (1979). *Anatomy and Physiology and Health Education*. Ropar: Jeet Publications.

CC-103 HEALTH EDUCATION AND ENVIRONMENTAL STUDIES
Marks: Internal: 30 Marks; External Marks: 70 Marks; Total 100 Marks

Learning Objectives

- To promote health and reduce the risk of developing by Global Health Issues.
- Encouraging consuming healthful diets.
- To achieve and maintain healthy body weights.
- To deal with the injuries and its prevention and its treatment.
- To provide proper knowledge of using natural resources.
- To deal with the Environmental issues and its remedies.
- Provide knowledge of recycling process.

Learning Outcome

- Able to analyze health related issues.
- Ability to Assess Individual & Community needs for health education especially in schools.
- Understand the roles of nutrients and other healthy food components.
- Improve knowledge to build a strong foundation for vital health and quality of life.
- Establish proper knowledge of recycling of plastic and other natural resources.
- Gain knowledge regarding first aid and its benefits.

Unit	Topic	Contact Hours	Marks
I	Health Education <ul style="list-style-type: none"> ○ Concept, Dimensions, Spectrum and Determinants of Health ○ Definition of Health, Health Education, Health Instruction, Health Supervision ○ Aim, objective and Principles of Health Education ○ Health Service and guidance instruction in personal hygiene 	17	18
	Health Problems in India <ul style="list-style-type: none"> ○ Communicable and Non Communicable Diseases ○ Obesity, Malnutrition, Adulteration in food, Environmental sanitation, Explosive Population, 		

II	<ul style="list-style-type: none"> ○ Personal and Environmental Hygiene for schools ○ Objective of school health service, Role of health education in schools ○ Health Services – Care of skin, Nails, Eye health service, Nutritional service, Health appraisal, Health record, Healthful school environment, first- aid and emergency care etc. 	17	18
III	<p>Environmental Science</p> <ul style="list-style-type: none"> ○ Definition, Scope, Need and Importance of environmental studies. ○ Concept of environmental education, Historical background of environmental education, ○ Celebration of various days in relation with environment. ○ Plastic recycling & probation of plastic bag / cover. ○ Role of school in environmental conservation and sustainable development. 	17	17
IV	<p>Natural Resources and related environmental issues:</p> <ul style="list-style-type: none"> ○ Water resources, food resources and Land resources ○ Definition, effects and control: measures of - Air Pollution, Water Pollution, Soil Pollution, Noise Pollution, Thermal Pollution ○ Management of environment and Govt. policies , Role of Pollution Control Board. 	17	17
<p>References:</p> <ul style="list-style-type: none"> • Agrawal, K.C. (2001). <i>Environmental Biology</i>. Bikaner: Nidhi publishers Ltd. • Frank, H. & Walter, H., (1976). <i>Turners school health education</i>. Saint Louis: The C.V. Mosby Company. • Nemir, A. (n.d.). <i>The school health education</i>. New York: Harber and Brothers. • Odum, E.P. (1971). <i>Fundamental of Ecology</i>. U.S.A.: W.B. Saunders Co. 			
<p>EC-101 OFFICIATING AND COACHING</p> <p>Marks: Internal: 30 Marks; External Marks: 70 Marks; Total 100 Marks</p>			
<p>Learning Objectives</p> <ul style="list-style-type: none"> • To understand the meaning of Officiating and Coaching. • To understand the prerequisites to be officials and coach • To understand the duties and responsibilities of officials and coach. <p>Learning Outcomes:</p> <ul style="list-style-type: none"> • Able to interpret the rules and regulation of games and sports while officiating. • Achieve the officiating skills. • Can be teach and coach games and sports • Able to lead the sports team 			
Unit	Topic	Contact Hours	Marks
I	<p>Introduction of Officiating</p> <ul style="list-style-type: none"> • Concept of officiating • Importance and principles of officiating • Philosophy of officiating • Qualities and Qualifications of officials 	17	18

	<ul style="list-style-type: none"> Measures of improving the standards of officiating and coaching 		
II	Duties and responsibilities of Official <ul style="list-style-type: none"> Duties of official in pre, during and post game. Rules of officiating of games and sports Mechanics of officiating – position, singles and movements of games and sports Eligibility rules of intercollegiate and inter-university tournaments, preparation of TA, DA bills 	16	17
III	Introduction to Coaching <ul style="list-style-type: none"> Meaning and concept of coaching. Philosophy of coaching Principles of Coaching Qualities and Qualifications of a coach Measures of improving the standard of coaching. 	16	17
IV	Duties and Qualities of Coach <ul style="list-style-type: none"> Pre, during and post game duties of coach Responsibilities of coach in on and off the field. System of coaching: Process of preparation of players and talent identification Means and methods of coaching Coaching as educational process 	19	18

Reference Books:

- Bunn, J. W. (1968). The art of officiating sports. Englewood cliffs N.J. Prentice Hall.
- Bunn, J. W. (1972). Scientific principles of coaching. Englewood cliffs N. J. Prentice Hall.
- Dyson, G. H. (1963). The mechanics of athletics. London: University of London Press Ltd. Dyson,
- G. H. (1963). The mechanics of Athletics. London: University of London Press Ltd.
- Lawther, J.D. (1965). Psychology of coaching. New York: Pre. Hall.
- Singer, R. N. (1972). Coaching, athletic & psychology. New York: M.C. Graw Hill. 2

EC102: SPORTS SOCIOLOGY**Marks: Internal: 30 Marks; External Marks: 70 Marks; Total 100 Marks****Learning Objectives**

- To understand the meaning of sports sociology and sports culture.
- To understand the social values of sports.
- To develop an understanding of the role of sociology in understanding physical education and sports from sociological point of view.
- To understand the religious implications on sports
- To understand and appreciate the status of women in sports and their participation.

Learning Outcomes:

- To make an understanding on the effect of social and cultural entities on the concept of individual difference and its importance in education, physical education and sports.
- To understand the basic concept of Sports Sociology by learners and it will the trainees to better understand of players at different levels and handle them

	<p>according to their need.</p> <ul style="list-style-type: none"> • Demonstrate the ability to discuss sociological theories, concepts, and ideas in large and small groups and to express empirically as well as theoretically-based opinions. • To apply core sociological theories to specific social problems in order to analyze social problems. 		
Unit	Topic	Contact Hours	Marks
I	<p>Concepts of Sociology and Sports Sociology</p> <ul style="list-style-type: none"> • Definition and meaning sociology and sports sociology • Nature and scope of sports sociology • Sports a social phenomenon • Need and importance for the study of Sports sociology • The role of sports in building values in society 	17	18
II	<p>Relation between Social Science and Physical Education</p> <ul style="list-style-type: none"> • Orthodoxy, customs, Tradition and Physical Education. • Festivals and Physical Education. • Socialization through Physical Education. • Social Group life, Social conglomeration and Social group, Primary group and Remote group. 	16	17
III	<p>Values, Social Institutions and Commercial Sports</p> <ul style="list-style-type: none"> • Physical activity and the social attitude of infants, children and adolescents. • Sports as a reflection and transmitter of values. • Cross culture differences, ethnic, political and democratic issues related to sports. • Sports as a social institution. • Relationship of sports with other social institutions. • Emergence and growth of commercialization of sports 	16	17
IV	<p>Sports culture, Sports for Women, Audience and Competition</p> <ul style="list-style-type: none"> • Meaning of culture and sports culture. • Women in sports – Female athlete and sports. • Gender issues, Gender Sensitization and future of women in sports. • The audience – Sports and aggression, violence in sports. • Consequences of competitions – Sports competition as preparation for life. 	19	18
<p>Reference Books:</p> <ul style="list-style-type: none"> • Approach. Dubque, Iowa: WMC Brown Publishers, 1986. • Ball and Ley. Sports and Social Order. Addison Wesley Pub.Co. • C.A. Bucher, Foundations of Physical Education and Sports • Cratty, B.J. Social Dimensions of Physical Activity. Englewood Cliffs, NJ: Prentice Hall. • Dharam, V.R. Sports and Society: Readings in the Sociology of Sports. New Delhi: • ED Sauners, G. White, Social Investigation in Physical Education and Sport, Falmer, 			

2001.

- Hylton, Kelvin, et.al. Sports Development: Policy, Process and Practice. London: Routledge, Inc., 1967.
- Iso-Ahola, Seppo E. and Brad Hatfield. Psychology of Sports: A Social Psychological
- Jay, J. Coakley, Sports in Society – Issue and Controversies
- Kuppuswamy, B. An Introduction to Social Psychology. Bombay: Media Promoters and
- Laker, Anthony (Ed.). The Sociology of Sport and Physical Education. London: Routledge
- Martin, Rainer. Social Psychology and Physical Achieving. New York: Harpen and Row
- Mohanty, Girish Bala. Social Psychology: New Delhi: Kalyani Publishers, 1977.
- Snyder, Eldon E. and Elonr Spreitzer. Social aspects of Sports. Englewood Cliffs, NJ:
- Wilbert Marcellus Leonard II, A Sociological Perspective of Sport

Practical Courses (Part – B) Semester – I

PC 101

Track Events

Running (Events-100M, 200M, 400M, 800M, 1500M, Hurdle)

- Starting techniques: Standing start, Crouch start and its variations, Proper use of blocks.
- Finishing Techniques: Run through, Forward lunging, Shoulder Shrug
- Track Marking, Rules and Officiating
- Hurdles: Fundamental Skills- Starting, Clearance and Landing Techniques.
- Types of Hurdles

Relays: (4 x 100 m and 4 x 400 m)

- Various patterns of Baton Exchange
- Understanding of Relay Zones- Stagger marking
- Interpretation of Rules and Officiating in Relay Races

Walking (5 Km for Women and 20 km for Men)

- Fundamental Skills- Mechanics of Walking & Common faults.
- Officiating

PC 102

A. Gymnastics: Floor Exercise

- Forward & Back Rolls in different positions
- Dive & Roll, Back Bend.
- Cartwheel.
- Balance:-V Balance, Frog balance, Aeroplane balance T balance

Vaulting Horse / Box

- Jump on Jump off
- Knees on Jump off
- Through vault
- Split vault
- Side vault
- Handspring

- Approach Run, Take off from the Spring Board, Flight & Support on Box, Body position and Landing.

B. Swimming: Fundamental Skills

- Entry into the pool.
- Developing water balance and confidence
- Water fear removing drills.
- Floating-Mushroom and Jelly fish etc.
- Gliding with and without kickboard.
- Introduction of various strokes
- Body Position, Leg, Kick, Arm pull, Breathing and Co ordination.
- Start and turns of the concerned strokes.
- Introduction of Various Strokes.
- Water Treading and Simple Jumping.
- Starts and turns of concerned strokes.
- Rules of Competitive swimming-officials and their duties, pool specifications, seeding heats and finals, Rules of the races.

C. Aerobics: Introduction of Aerobics

- Rhythmic Aerobics - dance
- Low impact aerobics
- High impact aerobics
- Aerobics kick boxing
- Postures – Warm up and cool down

D. Mallakhamb

- **Mallakhamb:** Salaami, Saadiudi, Kamaniudi, Bandarudi, AknaDhanurasana, Parvatasana, Straddle hold, Bajrang, Dashrangudi, Bagliudi, Suidora, Phirki, Padmasana, Landing, Nakikas
- Rope Mallakhamb- Climbing up and down, Straddle hold, Padmasana, Cross Y lever, Gourai, Bajrang, Gurupakad, Rikab, Paschimottanasana, Landing

PC 103

Indigenous Sports:

A. Kabaddi: Fundamental Skills

- Skills of Raider-Touching with hand, various kicks, crossing of baulk line, Crossing of Bonus line, luring the opponent to catch, Pursuing.
- Skills of Anti Raider-Variou formations, Catching from particular position, Different catches, Luring the raider to take particular position so as to facilitate catching, catching formations and techniques.
- Additional skills in raiding-Bringing the antis in to particular position, Escaping from various holds, Techniques of escaping from chain formation, Combined formations in offence and defense.
- Ground Marking, Rules and Officiating
- Rules of the Game and their interpretations, duties of officials

B. Kho Kho:

- General skills of the game-Running, chasing, Dodging, Faking etc.
- Skills in chasing-Correct Kho, Moving on the lanes, Pursuing the runner, Tapping the inactive runner, Tapping the runner on heels, Tapping on the pole, Diving, Judgement in giving Kho, Rectification of Foul.
- Skills in Running-Zig zag running, Single and double chain, Ring play, Rolling in the sides, Dodging while facing and on the back, fakes on the pole, fake legs, body arm etc, Combination of different skills.

- Ground Marking
- Rules of the Game and their interpretations, duties of officials.

C. Local Indigenous Games and Sports

PC 104

Mass Demonstration Activities and Band

Dumbbells/ Wands/ Hoop/ Umbrella/ Tipri / Lazium / Jodi / Lathi :
Fundamental skills

Lathi

- Lathi-Sidhi Bel, Ulti Bel, Do Rukh, Beliya, Beliya Choumukhi, Bagalwar, Jung war, Age Falang, Pichhe Falang

Lazium

- Ghati Lezuim-Char Awaz, Ath Awaz, Age Pav, Pav Chakkar, Adha Chakkar, Adhi Baithak, Puri Baithak, Corner
- Hindustani (Sadha) Lezuim-Char Awaaz, Ath Awaaz, Edi lagav, Pavitra, Age Phalang, Piche Phalang, Do Rukh

Mass P.T.

- Seating and standing tables' exercises.

Marching

- Marching – Savdhan, Vishram, Daine Mood, Baye Mood, Pichhe Mood, Kadam Tal, Tej Chal, Thumb, Dahine Salute, Samne Salute, Dahinedekh, Samnedekh, Khuli line chal, Nikat line chal, Kadambadal, Dhire Chal, Daudke Chal

Mass drills with apparatus (Dumbell / Wands / Jodi)

- Apparatus/ Light apparatus Grip
- Attention with apparatus/ Light apparatus
- Stand – at – ease with apparatus/ light apparatus
- Exercise with verbal command, drum, whistle and music – Two count, Four count, Eight count and Sixteen count.
- Standing Exercises
- Jumping Exercises
- Moving Exercises
- Combination of above all

Band:

- Drum, Side Drum, Flute playing with Valses, and Marches, National Anthem, General Salute.

Scheme of Examination
Semester – I Practical (Part B) (400)

PC 101 Track & Field (Running and Walking and hurdle events) Internal (30 Marks)
 External (70 Marks)

Internal - Physical Fitness – 20 (4 events X 5 Marks) + Demonstration of Skills & Techniques (10 Marks)

External - Record Book (10 Marks) Viva – Officiating, Rules and Marking (20 Marks)
 Performance – (20) 20-20 (200/200+800/1500)

PC 102 Gymnastics/ Swimming / Aerobics/ Malkhamb

Gymnastic

Internal – Skill Demonstration (any five) 5 x 6 = 30

External – Record Book (10) + Viva – Officiating, Rules (20) + Skill Demonstration (any

four) $4 \times 10 = 40$

Swimming

Internal – Start (10 Marks), Turn (10 Marks) & Technique of any stroke (10 Marks) = 30 Marks

External – Record Book (10 Marks) + Viva – Officiating, Rules (20 Marks) + Skill Demonstration any two (20 Marks) + Performance (50 Meter / 100 Meter Events) (200 Meter / 400 Meter Events) (20 Marks)

Aerobic

Internal – Demonstration of 1 Set of 12 Skills 30 Marks

External – Record Book (10 Marks) + Viva (20 Marks) + Demonstration of skill with & without Equipments

1 sets of 12 skill – 20 Marks

1 sets of 4 skill – 20 Marks

Malkhamb

Internal – Skill Demonstration (any five) $5 \times 6 = 30$

External – Record Book (10) + Viva – Officiating, Rules (20) + Skill Demonstration (any four) $4 \times 10 = 40$

PC 103 Kho-Kho / Kabaddi

Internal - Playing Ability (20 Marks) + Marking Practical (10 Marks)

External - Record Book (10 Marks) + Viva - Officiating, Rules (20 Marks) + Demonstration Of skills (Kabaddi) -

4 Raider Skills ($4 \times 5 = 20$ Marks) + 4 Anti Raider Skills ($4 \times 5 = 20$ Marks)

Kho-Kho -

Internal – Marking (10 Marks) + Playing Efficiency (20 Marks) (Demonstration of skills Kho-Kho) - 4 skills of chasing ($4 \times 5 = 20$ Marks) - 4 Skills of Runner ($4 \times 5 = 20$ Marks)

External – Record Book (10 Marks) + Viva – Officiating, Rules (20 Marks)

PC 104

Demonstration

Internal- Group Demonstration of 4 Activities $4 \times 5 = 20$ Marks

External - Demonstration of 5 items = $5 \times 10 = 50$ Marks

Band

Internal – All Rhythms of Drum & Side Drum ($5 + 5$) = 10 Marks

External - Flute (10 Marks) + Drum & Side Drum (10) = 20 Marks

Semester – II

Theory Courses (Part A) CC-201 YOGA EDUCATION

Marks: Internal: 30 Marks; External Marks: 70 Marks; Total 100 Marks

Learning Objectives:

- To increase the knowledge of the students about Yoga and holistic development.
- To provide a practical knowledge on different yogic practices.
- To give a glimpse of ancient Yoga Philosophy.
- To impart some knowledge about the healing power of Yoga.

Learning Outcomes:

- Students will have sound overall knowledge in the field of yoga.
- The students will have the knowledge of effect of yoga in different systems of human body.
- The student will have the knowledge of nature, characteristics and development of ancient Indian yoga philosophy.
- Students will know different yoga education institutions round the world and the benefits of yoga education courses.

Unit	Topic	Contact Hours	Marks
I	Introduction to Yoga <ul style="list-style-type: none"> ○ Meaning and Definition of Yoga ○ Aims and Objectives of Yoga ○ The Yoga Sutra in general ○ Need and Importance of Yoga in Physical Education and Sports 	14	18
II	Foundation of Yoga <ul style="list-style-type: none"> ○ Historical Perspective of Yoga ○ The Astanga Yoga: Yama, Niyama, Asana, Pranayama, Pratyahara, Dharana, Dhyana and Samadhi ○ Yoga in the Bhagavad Gita - Karma Yoga, Raj Yoga, Jnana Yoga and Bhakti Yoga 	18	17
III	Science of Asanas and Pranayamas <ul style="list-style-type: none"> ○ Principles of Asanas and Pranayamas ○ Classification of Asanas and Pranayamas ○ Effect of Asanas and Pranayama on various systems of the human body ○ Difference between yoga asanas and physical exercises. ○ Influences of relaxative, meditative postures on various systems of the human body 	21	18
IV	Yoga for Health and Wellbeing <ul style="list-style-type: none"> ○ Yogic Concept of Health ○ Yogic Diet ○ Yogic Principles of Healthy Living ○ Yoga in Stress Management. 	15	17

References:

- Brown, F. Y.(2000). *How to use yoga*. Delhi:Sports Publication.
- Gharote, M. L. & Ganguly, H. (1988). *Teaching methods for yogic practices*.Lonawala: Kaivalyadham.
- Shankar,G.(1998). *Holistic approach of yoga*. New Delhi: Aditya Publishers.
- Shekar,K. C. (2003). *Yoga for health*. Delhi: Khel Sahitya Kendra.

CC-202 EDUCATIONAL TECHNOLOGY AND METHODS OF TEACHING IN PHYSICAL EDUCATION

Marks: Internal: 30 Marks; External Marks: 70 Marks; Total 100 Marks

Learning Objectives:

- To provide education in the use of Information and Communication Technology or ICT.
- To encourage higher-level thinking and creativity through ICT.
- To deliver students with a learning experience in instructional technology.
- To promote computer-based educational resources.
- To make students aware of Information Technology.
- To determine the practical use of technology integration.

Learning Outcomes:

- To discover and analyse the characteristics and educational requirements of every student.
- To determine and state the specific behavioural classroom objectives.
- To understand and organise the contents of instruction in a proper sequence.
- To recognize the existing teaching-learning resources and materials.
- To identify the nature of the interaction of sub-systems like teachers, students, the content of instruction, teaching-learning material, and different methodologies.
- To plan teaching strategies and utilize human resources and material assets for accomplishing specific classroom objectives.

Unit	Topic	Contact Hours	Marks
I	Introduction <ul style="list-style-type: none"> ○ Education and Education Technology- Meaning and Definitions ○ Types of Education- Formal, Informal and Non- Formal Education. ○ Educative Process ○ Importance of Devices and Methods of Teaching. 	17	17
II	Teaching Techniques <ul style="list-style-type: none"> ○ Teaching Techniques – Lecture method, Command method, Demonstration method, Imitation method, project method etc. ○ Teaching Procedure – Whole method, whole – part – whole method, part – whole method. ○ Presentation Technique – Personal and technical preparation ○ Command- Meaning, Types and its uses in different situations. 	17	18
	Teaching Aids		

III	<ul style="list-style-type: none"> ○ Teaching Aids – Meaning, Importance and criteria for selecting teaching aids. ○ Teaching aids – Audio aids, Visual aids, Audio – visual aids, Verbal, Chalk board, Charts, Model, Slide & LCD projector, Motion pictures, computers, Laptops, etc ○ Difference between Teaching Methods and Teaching Aid. ○ Team Teaching – Meaning, Principles and advantage of team teaching. 	17	18
IV	<p>Lesson Planning and Teaching Innovations</p> <ul style="list-style-type: none"> ○ Lesson Planning – Meaning, Type and principles of lesson plan. ○ General and specific lesson plan. ○ Micro Teaching – Meaning, Types and steps of micro teaching. ○ Simulation Teaching - Meaning, Types and steps of simulation teaching. 	17	17

Reference:

- Bhardwaj, A. (2003). *New media of educational planning*. New Delhi: Sarup and Sons.
- Bhatia, & Bhatia, (1959). *The principles and methods of teaching*. New Delhi: Doaba House.
- Kochar, S.K. (1982). *Methods and techniques of teaching*. New Delhi: Sterling Publishers Pvt. Ltd.
- Sampath, K. Pannirselvam, A. & Santhanam, S. (1981). *Introduction to educational technology*. New Delhi: Sterling Publishers Pvt. Ltd.
- Walia, J.S. (1999). *Principles and methods of education*. Jullandhar: Paul Publishers.

CC-203 MANAGEMENT IN PHYSICAL EDUCATION AND SPORTS**Marks: Internal: 30 Marks; External Marks: 70 Marks; Total 100 Marks****Learning Objectives**

- To understand the importance of management and leadership in Physical Education at different level.
- To gain knowledge regarding the organization of various Physical Education programmes.
- To acquire knowledge on development of infrastructure and maintenance of facilities needed for Physical Education and Sports
- To deal with sports marketing and all other business related to sports.

Learning Outcomes

- Learners will become familiar with the Finance, Accounting and Economic growth of sports industry.
- Learners will be able to handle and maintain different types of sports infrastructure and facilities.
- Learners will improve the leadership quality and skill & competencies required for sports leader.
- Learners will be able to deal with marketing in sports and sports industry.

Unit	Topic	Contact Hours	Marks
	<p>Introduction</p> <ul style="list-style-type: none"> ○ Sports Management: Concept, Purpose and Scope. 		

I	<ul style="list-style-type: none"> ○ Meaning and importance of Organization and Administration in Physical Education ○ Qualification and Responsibilities of Physical Education Teacher ○ Program Planning: Meaning, Importance, Principles of Program Planning in Physical Education. ○ Type of Leadership and Leadership Qualities 	17	17
II	<p>Office Management, Record, Register & Budget</p> <ul style="list-style-type: none"> ○ Office Management: Meaning, functions and kinds of office management ○ Records and Registers: Maintenance of Attendance Register, Stock Register, Cash Register, Physical Efficiency Record. ○ Budget- Meaning and Importance ○ Criteria of a good Budget, Sources of Income, Expenditure, Preparation of Budget. 	15	17
III	<p>Facilities, & Time-Table Management</p> <ul style="list-style-type: none"> ○ Facilities and equipment management: Types of facilities: Infrastructure-indoor, outdoor, ○ Care of school building, Gymnasium, swimming pool, Play fields. ○ Equipment: Need, importance, purchase, care and maintenance. ○ Sports Management System in Schools, Colleges and Universities ○ Time Table Management: Meaning, Need, Importance and Factors affecting time table. 	18	18
IV	<p>Competition Organization</p> <ul style="list-style-type: none"> ○ Importance of Tournament ○ Types of Tournament ○ Preparation of fixture for tournaments ○ Layout of Track and Field and Organization structure of Athletic Meet ○ Intramurals & Extramural Tournament. ○ Common Problems in Institutional Sports and their remedies 	18	18

References:

- Broyles, F. J. & Rober, H. D. (1979). *Administration of sports, Athletic programme: A Managerial Approach*. New York: Prentice hall Inc.
- Bucher, C. A. (1983). *Administration of Physical Education and Athletic programme*. St. Louis: The C.V. Mosby Co.
- Earl, F. Z., & Gary, W. B. (1963). *Management competency development in sports and physical education*. Philadelphia: W. Lea and Febiger.
- Kozman, H.C. Cassidy, R. & Jackson, C. (1960). *Methods in Physical Education*. London: W.B. Saunders Co.
- Pandey, L.K. (1977). *Methods in Physical Education*. Delhi: Metropolitan Book Depo.

- Voltmer, E. F. & Esslinger, A. A. (1979). *The organization and administration of Physical Education*. New York: Prentice Hall Inc.

Elective Course (Any One)

EC-201: COMPUTER APPLICATIONS IN PHYSICAL EDUCATION
Marks: Internal: 30 Marks; External Marks: 70 Marks; Total 100 Marks

Learning Objectives:

- To equip the students with skills required for designing, developing applications in Information Technology.
- To enlighten the students about the latest trends in various subjects of computers in Physical Education.
- To provide hands-on use of Microsoft Office this will result in MS Office applications, knowledge and skills.
- To make the students efficient in using computers in different activities of Physical Education and Sports.

Learning Outcomes:

- Students can type; draw in different works of computer-related activities.
- Students can analyze and calculate by using computer.
- Students can make slides for presenting different topics in events.
- Students can use computers in officiating of sports events.

Unit	Topic	Contact Hours	Marks
I	Introduction to Computer <ul style="list-style-type: none"> ○ Meaning, need and importance of information and communication technology (ICT). Application of Computers in Physical Education ○ Components of computer, input and output device ○ Application software used in Physical Education and Sports 	15	17
II	MS Word <ul style="list-style-type: none"> ○ Introduction to MS Word ○ Creating, saving and opening a document ○ Formatting, Editing features Drawing table , ○ page setup, paragraph alignment, spelling and grammar check printing option, inserting page number, graph, footnote and notes 	17	18
III	MS Excel <ul style="list-style-type: none"> ○ Introduction to MS Excel: Creating, saving and opening the spreadsheet ○ Creating formulas ○ Format and editing features adjusting columns width and row height understanding charts. 	18	18
IV	MS Power Point <ul style="list-style-type: none"> ○ Introduction to MS Power Point ○ Creating, saving and opening a ppt. file ○ format and editing features slide show, design, 	18	17

	inserting slide number <ul style="list-style-type: none"> ○ picture, graph, table ○ Preparation of Power point presentations 		
References: <ul style="list-style-type: none"> • Irtegov, D. (2004). <i>Operating system fundamentals</i>. Firewall Media. • Marilyn, M.& Roberta, B. <i>Computers in your future</i>. 2nd edition, India: Prentice Hall. • Milke, M.(2007). <i>Absolute beginner's guide to computer basics</i>. Pearson Education Asia. • Sinha, P. K. & Sinha, P. (n.d.). <i>Computer fundamentals</i>. 4th edition, BPB Publication. 			
EC-202: Sports Nutrition Marks: Internal: 30 Marks; External Marks: 70 Marks; Total 100 Marks			
Learning Objectives <ul style="list-style-type: none"> • Gain knowledge in general metabolic principles, primarily fuel sources for the working muscle during exercise • Develop knowledge of the macronutrient principles of sports nutrition for different types of athletes based on their goals, specifically related to energy and recovery • Be knowledgeable of hydration guidelines for safety and performance and know how to evaluate and monitor hydration status 			
Learning Outcomes <ul style="list-style-type: none"> • Be able to evaluate dietary supplements for effectiveness and safety • Understand the role of nutrition in recovery from injury • Be knowledgeable of the techniques to safely and effectively monitor and alter weight and body composition • Be able to assess an athlete's current intake and develop a sport nutrition plan based on type of sport and goals 			
I	Introduction to Sports Nutrition <ul style="list-style-type: none"> • Meaning and definition of Nutrition and Sports Nutrition • Basic nutrition guidelines • Role of nutrition in sports • Factor to consider for developing nutrition plan. 	17	17
II	Nutrients: Ingestion to energy metabolism <ul style="list-style-type: none"> • Classifications of nutrients • Functions of nutrients • Role of carbohydrate, fat and protein during exercise and sports, • Role of Vitamins, Minerals and Water during exercise and sports • Role of hydration during exercise 		
III	Nutrition and Balance Diet <ul style="list-style-type: none"> • Concept of balanced diet • Concept of Supplementation. • Pre, during and post training nutrition, • Calculation of daily calorie intake and expenditure, • Preparation of diet plan. 		
IV	Weight Management <ul style="list-style-type: none"> • Meaning of weight management. • Factors affecting weight management 		

- Concept of BMI (Body Mass Index),
- Obesity: meaning and causes of obesity; health risk associated to obesity.
- Dieting vs exercises for weight management and obesity management.

References:

- Bessesen, D. H. (2008). Update on obesity. *J Clin Endocrinol Metab.*93(6), 2027-2034
- Butryn, M.L., Phelan, S., & Hill, J. O.(2007). Consistent self-monitoring of weight: a key component of successful weight loss maintenance. *Obesity(Silver Spring)*. 15(12), 3091-3096.
- Giam, C.K & The, K.C. (1994). ***Sport medicine exercise and fitness***. Singapore: P.G. Medical Book.
- Mcglynn, G., (1993). ***Dynamics of fitness***. Madison: W.C.B Brown.
- Sharkey, B. J.(1990). *Physiology of fitness*, Human Kinetics Book.
- Nutritive value of Indian food:- National Institute of Nutrition (NIN)
- Nutrition and dietetics with Indian case studies : Shubhangini A. Joshi, Mc-Grow Hill Publication

Semester – II
PRACTICAL COURSE (Part B)

PC 201**Track and Field****Athletics: Throwing Events****Throws****Shot Put (Perry – O Brien, Discoput)****Gliding Technique and Rotation Technique**

- The Grip
- The Stance
- The Leg-Swing
- The Shift
- The Delivery
- The Release
- The Recovery
- Rules, Marking and officiating

Discuss Throw (Quartile Technique); Rotation Technique

- The Grip
- The Initial Stance
- The Preliminary Swing
- The Pivot on the Foot
- The Pivot
- The Delivery
- The Release
- The Recovery
- Rules, Marking and officiating

Javelin Throw

- The Grip

- Finish Hold
- American Grip
- Hungarian Form
- Clearing the Javelin
- Carrying the Javelin
- The Approach
- The Delivery- Release
- Rules, Marking and officiating

Combined Events-

Decathlon / Heptathlon Events, Rules & Officiating

PC 202

A. Gymnastics:

Parallel Bar

- Mounting on the Bars & its types.(Any 3)
- Marching on the Bars & its types
- Swinging – Straight arm, Bent arm, Under arm swing
- Simple dips, Swinging dips.
- Balancing poses _ 'L' balance, Shoulder balance, Bent arm Hand stand, Full-arm Hand-stand
- Forward and Backward Roll in Straddle Position
- Up start with swing to 'L' balance.
- Dismounts (Any 3)
- Simple combination of skills.

Horizontal Bar

- Simple Swing & dismount landing.
- Belley Roll to Support position
- Short Circle
- One Leg circle
- Up start to support Position
- Up start to Down Swing
- Dismount

Uneven Bar (For Women / Men)

- Swing
- Mounts
- Short Circle
- One Leg Circle
- Balancing poses

- Simple Dismount (Any two types)

Balance Beam (Women / Men)

- Walk on Toe, Novelty walk
- V Balance and other balancing poses
- Split Jump
- 180° Turn
- Simple Dismounts
- Simple Jump
- Knee Balance, Aeroplane Balance

B. Yoga:

Suryanamskara – (12 counts)

Shatkarma

- Neti – Jala and Sutra
- Douti – Vamana, Danda / Vastra
- Nouli – Vama, Dakshina and Madhya (Nouli Chalana)
- Kapalbhata – Jala and Vata
- Trataka – Samipa and Sudure (Indoor and Outdoor)

Asana

Standing: - Tadasana, Ardhakatichakrasana, Ardhashakrasana, Trikonasana, Gurudasana, Utkatasana, Padahasthasana, Vrikshasana, Vatayanasana

Sitting: - Vajrasana, Padmasana, Bhadrasana, Swastikasana, Siddhasana, Goumukhasana, Paschimottanasana, Shashankasana, Ardhamatsyendrasana, Simhasana, Akarnadhanurasana, Ustrasana

Lying Spine Position: - Shavasana, Setubandhasana, Chakrasana, Sarvangasana, Halasana, Karnapidasana, Naukasana, Matsyasana

Lying Prone Position - Makarasana, Bhujangasana, Ardhashalabhasana, Dhanurasana, Shalabhasana, Naukasana

Pranayama

Nadishodhana, Suryabhedana, Ujjai, Shitali, Sitkari, Bhastrika, Bhramari

Bandh & Mudra

Jalndharabandha, Uddiyanbandha, Moolabandha, Yogamudra, Viparitkarnimudra, Shambhvimudra, Yonimudra, Mahavedhamudra

C. Swimming:

Introduction of Water Polo Game

- Fundamental skills
- Swimming with the ball
- Passing
- Catching
- Shooting
- Goal keeping
- Rules of the games and responsibilities of officials

PC 203

Racket Sports

A. Badminton

Fundamental Skills

- **Grip** – Forehand and Backhand
- **Service** – Forehand and Backhand
- **Stroke** – Forehand and Backhand Toss, Forehand and Backhand Drop, Forehand and Backhand Smash, Forehand and Backhand Dribble
- **Types of Game**- Single, Double and Mixed Double
- Rules and their interpretations and Duties of Officials

B. Table Tennis

Fundamental Skills

- The Grip-The Tennis Grip, Pen Holder Grip.
- Service-Forehand, Backhand, Side Spin, High Toss.
- Strokes-Push, Chop, Drive, Half Volley, Smash, Drop-shot, Balloon, Flick Shot, Loop Drive.
- Stance and Body position and Foot Work.
- Rules and their interpretations and Duties of Officials.

C. Tennis

Fundamental Skills -

- Grips- Eastern Forehand grip and Backhand grip, Western grip, Continental grip, Chopper grip.
- Stance and Footwork.
- Basic Ground strokes- Forehand drive, Backhand drive.
- Basic Service.
- Basic Volley.
- Over-head Volley.
- Chop
- Tactics – Defensive, Attacking
- Rules and their interpretations and Duties of Officials.

Scheme of Examination

PRACTICAL (Part B)

PC 201

– Track & Fields – (Throwing and Combined Events)

Internal Marks - 30 + External Marks - 70

Internal – Demonstration of Throws (20 Marks) + Performance of throws (10 Marks) = Total marks 30

External – Record Book (10 Marks) + Viva on Rules and regulation (20 Marks) + Demonstration of throw (10 + 10 = 20 Marks) + Performance of Throws (10 + 10 Marks) = marks 70

PC 202

- (Any Two) Yoga Compulsory

Internal – Demonstration of Surya Namaskar (5 Marks) + Demonstration of 5 Asanas (5 X 1 = 5 Marks) + Kriya (5 Marks)

External – Record Book (10 Marks) + Viva (10 Marks) + Demonstration of Two Asanas (5 Marks), Kriyas 2 With equipment, without equipment (3 + 2 = 5 Marks), Bandh / Mudra (2 Marks) + Pranayamas (3 Marks) = Total 35 Marks

Swimming

Internal – Demonstration of any one stroke (10 Marks) + Performance of any one stroke (5 Marks) = Total 15 Marks

External - Record Book (5 Marks) + Viva on Officiating and Rules (10 Marks) + Demonstration of skill any two - Stroke One (5 Marks) + Stroke two (5 Marks) + Performance on any one (10 Marks) = Total 35 Marks

PC 203

- Racket Sports: Badminton / Table Tennis / Tennis / Squash (Any Two Game)

Internal - Playing Efficiency (10 Marks) + Officiating (5 Marks) = Total 15 Marks

External - Record Book (10 Marks) + Viva on Rules and regulation (10 Marks) + Skills Demonstration (10 Marks) + Playing Efficiency (5 Marks) = Total 35 Marks

TEACHING PRACTICE (Part C)

TP 201 Teaching Practice- (5 Class Room Teaching on Theory subject of Physical Education + 5 Outdoor Teaching on Practical Activities)

Internal – 5 Class Room Teaching (5 x 3) + 5 Outdoor Teaching on Practical Activities
- (5 x 3) = Total 30 Marks

External - One Lesson on Classroom Teaching (35 Marks) + One Lesson on Outdoor Teaching (35Marks) = 70 Marks

Personal Preparation (15 Marks) + Technical Preparation (15 Marks) + Total Effect (5 Marks) = Total 35 Marks

**Semester – III
Theory Courses (Part A)**

CC-301 SPORTS TRAINING

Marks: Internal: 30 Marks; External Marks: 70 Marks; Total 100 Marks

Learning Objectives:

- This course will provide profound and science based knowledge and competences in the methodology of Sports Training.
- To bring understanding the concept, principles and different forms of sports training.
- It will enable them to prepare customized training programme according to need of players.

Learning Outcomes:

- To identify factors Influencing Training Programme
- To develop and understand various methods of training.
- To know technical and Tactical methods to develop training process.
- To be able to chalk out a training session for all levels of fitness and tournaments.

Unit	Topic	Contact Hours	Marks
I	Introduction to Sports Training <ul style="list-style-type: none"> ○ Meaning and Definition of Sports Training ○ Aim and Objective of Sports Training ○ Principles of Sports Training ○ System of Sports Training/ Training process– Basic Performance, Advance Performance and High Performance Training 	17	18
II	Training Components: Biomotor abilities <ul style="list-style-type: none"> ○ Strength – Means and Methods of Strength Development ○ Speed – Means and Methods of Speed Development ○ Endurance - Means and Methods of Endurance Development ○ Coordination – Means and Methods of coordination Development ○ Flexibility – Means and Methods of Flexibility Development 	20	18
III	Training Process <ul style="list-style-type: none"> ○ Training Load- Definition and Types of Training Load; over load, adaptation, recovery ○ Training means and methods ○ Principles of Intensity and Volume of stimulus ○ Process of Technical Training – Meaning and Methods 	15	17

	<ul style="list-style-type: none"> of Technique Training ○ Tactical Training – Meaning and Methods of Tactical Training 		
IV	<p>Training programming and planning</p> <ul style="list-style-type: none"> ○ Periodization – Meaning and types of Periodization ○ Aim and Content of Preparatory, Competition, Transitional Periods ○ Planning: Types of training plan and Training Cycles ○ Preparation of Training plan and schedule ○ Process of Talent Identification 	16	17
<p>Reference:</p> <ul style="list-style-type: none"> • Dick, W. F. (1980). <i>Sports training principles</i>. London: Lepus Books. • Jensen, R. C. & Fisher, A.G. (1979). <i>Scientific basis of athletic conditioning</i>. Philadelphia: Lea and Fibiger, 2nd Edn. • Matvyew, L.P. (1981). <i>Fundamental of sports training</i>. Moscow: Progress Publishers. • Singh, H. (1984). <i>Sports training, general theory and methods</i>. Patiala: NSNIS. • Uppal, A.K., (1999). <i>Sports Training</i>. New Delhi: Friends Publication. • Vladimir Issurin. (2008). <i>Block Periodization Breakthrough in Sports Training</i>. Ultimate Athlete Concepts, Michigan, USA • 			
<p>CC-302 SPORTS MEDICINE, ATHLETIC CARE AND REHABILITATION Marks: Internal: 30 Marks; External Marks: 70 Marks; Total 100 Marks</p>			
<p>Learning Objectives:</p> <ul style="list-style-type: none"> • To provide the concept of Sports Medicine • To provide the fundamentals and its principles of physiotherapy • To provide the knowledge of sports related injuries and its management • Understand the fundamental guidelines of rehabilitation in sports • Understand various procedure of first-aid and massage <p>Learning Outcomes:</p> <ul style="list-style-type: none"> • Student can be able to understand the importance and objectives of Sports Medicine, Physiotherapy and rehabilitation programme in the field of Sports and Fitness. 			
Unit	Topic	Contact Hours	Marks
I	<p>Sports Medicine and Physiotherapy</p> <ul style="list-style-type: none"> • Meaning and Definition of Sports Medicine • Aims and objectives of Sports Medicine • Need and importance of Sports Medicine. • Meaning and concept of Physiotherapy • Need and importance of physiotherapy • Guiding principle of physiotherapy 	17	17
II	<p>Management of Injury</p> <ul style="list-style-type: none"> • Sports Injury: Meaning and Classification of Sports Injury • Common Sports Injuries • Diagnosis of Sports Injuries: Causes, Sign and 	16	18

	<p>Symptoms</p> <ul style="list-style-type: none"> Principles of safety in sports; RICE, PRICE 		
III	<p>First Aid & Doping</p> <ul style="list-style-type: none"> Meaning and principles of first aid Qualities of first aider First Aid kit Types of Bandaging Doping: Meaning and Classification of doping, effects of doping. Dope test: NADA and WADA 	15	17
IV	<p>Athletic Care and Rehabilitation</p> <ul style="list-style-type: none"> Meaning of Athletic Care and Rehabilitation Meaning and classification of Therapeutic Exercises: Active and Passive Exercise Therapeutic modalities: Exercise therapy, Electro Therapy, Thermo Therapy, Hydro-Therapy Massage: Meaning and Classification of massage; Effect of Massage, Principles of Massage 	20	18
<p>References:</p> <p>Christine. M. D.. (1999). Physiology of sports and exercise. USA: Human Kinetics.</p> <p>Conley, M. (2000). Bioenergetics of exercise training. .</p> <p>David, R. M. (2005). Drugs in sports, (4th Ed). Routledge Taylor and Francis Group.</p> <p>Jeyaprakash, C. S. , Sports Medicine, J.P. Brothers Pub., New Delhi, 2003.</p> <p>Khanna- G.L., (1990). Exercise physiology and sports medicine. Delhi, Lucky Enterprises.</p> <p>Methew, D.K. & Fox. E.I.. (1971). Physiological basis of physical education athletics. Philadelphia: W Saunders Co.</p> <p>Pandey, P.K., (1987). Outline of sports medicine, New Delhi: J.P. Brothers Pub.</p> <p>Williams, J. G. P. (1962), Sports medicine. London: Edward Arnold Ltd.</p>			
<p>CC-303 EDUCATIONAL AND SPORTS PSYCHOLOGY</p> <p>Marks: Internal: 30 Marks; External Marks: 70 Marks; Total 100 Marks</p>			
<p>Learning Objectives:</p> <ul style="list-style-type: none"> To give good knowledge on psychology and its different scopes. To teach the students about different psychological concepts and theories. To teach about the influence of psychological factors on involvement and performance in sport, exercise and physical education settings. To give the knowledge on application of sports psychology skills and knowledge to coaching, teaching, physical therapy/athletic training. To make the students understand why psychology is important in all sport and exercise settings <p>Learning Outcomes:</p> <ul style="list-style-type: none"> Students will have sound knowledge about many psychological terms related to physical education and sports. Students will acquire skills and knowledge about sport psychology theory that can be applied as a participant, coach, teacher, athletic trainer, sport administrator. Students will obtain an understanding of the psychological techniques used to improve performance in individuals at the standard, professional, and elite level. Students will develop skills in counseling individuals to overcome personal barriers and push past previous limits to increase performance in sports. 			
Unit	Topic	Contact	Marks

		Hours	
I	Introduction <ul style="list-style-type: none"> ○ Meaning, Importance and Scope of Educational and Sports Psychology ○ General characteristics of Various Stages of Growth and Development ○ Types and nature of Individual Differences; Factors responsible -Heredity and Environment 	17	18
II	Learning and Personality <ul style="list-style-type: none"> ○ Nature of Learning, Theories of Learning, Laws of Learning, motor skill learning process ○ Learning Curve, Plateau in Learning; & Transfer of Training ○ Meaning and Definition of Personality, Characteristics of Personality ○ Dimension of Personality, Factors of affecting Personality, Personality and Sports Performance ○ Importance of Ideals & Role Models 	17	17
III	Motivation, Aggression, Anxiety and Stress <ul style="list-style-type: none"> ○ Meaning, Nature, Importance of Motivation in Learning. ○ Types of Motivation, Factors influencing Motivation. ○ Motivational Techniques and its impact on Sports Performance. ○ Aggression and its impact on Sports Performance. ○ Meaning and nature of anxiety, Kinds of anxiety. ○ Meaning and Nature of Stress; Types of Stress, Stress, Arousal and their effects on Sports Performance 	17	18
IV	Group Psychology <ul style="list-style-type: none"> ● Meaning, Importance and Nature of Group and Group Psychology. ● Types of Group and their Characteristics, Group Leader. ● Group Dynamics ● School, Class room and Team as a Group and Their Importance. ● Group Cohesion- Meaning and Importance in Sports and Sports Performance 	17	17
References: <ul style="list-style-type: none"> ● Ball, D. W. & Loy, J. W. (1975). <i>Sport and social order; Contribution to the sociology of sport.</i> London: Addison Wesley Publishing Co., Inc. ● Blair, J.& Simpson, R.(1962). <i>Educational psychology</i>, New York:McMillan Co. ● Cratty, B. J.(1968). <i>Psychology and physical activity</i>. Eaglewood Cliffs. Prentice Hall. 			

- Kamlesh, M.L. (1998). *Psychology in physical education and sport*. New Delhi:Metropolitan Book Co.
- Loy, J. W., Kenyon, G. S. & McPherson, B. D. (1978). *Sport and social system*. London: Addison Wesley Publishing Company Inc.
- Mathur, S.S., (1962). *Educational psychology*. Agra.VinodPustakMandir.
- Skinnner, C. E., (1984.). *Education psychology*. New Delhi: Prentice Hall of India.
- William, F. O.&Meyer, F. N. (1979). *A handbook of sociology*. New Delhi: Eurasia Publishing House Pvt Ltd.
- P.D. Pathak, 2000 *Shiksha Manovidnyan*, Agra, Vinod Pustak Mandir
- S. K. Mangal (2005) *Shiksha Manovidnyan*, Ludhiana, Tandan Publication books markets.

EC-301 Fitness Management

Marks: Internal: 30 Marks; External Marks: 70 Marks; Total 100 Marks

Learning Objectives:

- Students will understand the basic concept of fitness and its components and different principles of exercise programme to maintain Physical Fitness.
- Students will understand different concept of Fitness programme.
- Students will understand the basic concept of Nutrition and Nutritional requirement.
- Students became able to determine ideal body weight of an individual according to their health status and professional requirement.
- Students will understand various health risk factors related to obesity and hypokinetic disease.

Learning Outcomes:

- Understand the modern concept of Fitness and Wellness.
- Employ the knowledge about concept of holistic health through fitness and wellness
- Orient students toward the approach of positive life style.
- Develop competencies for profile development, exercise guidelines adherence.
- Apply the holistic concept of health and wellness.
- Realize and apply the fitness and wellness management techniques.
- Design different fitness training program for different age group.
- Explain common injuries and their management.

Unit	Topic	Contact Hours	Marks
I	Fitness and wellness <ul style="list-style-type: none"> • Meaning fitness and wellness • Importance of fitness and wellness • Types and components of fitness and wellness • Factors affecting fitness • Concept of warm up and cool down 	17	17
II	Principles of Exercise Program <ul style="list-style-type: none"> • Types of exercise: aerobic and anaerobic, isotonic, isometric and iso-kinetic exercises • Principles of conditioning • Calculation of heart rate zone, Repetition maximum and Resistance training intensities. • Concept of designing different fitness training program for different age groups 	17	18

III	Nutrition and fitness <ul style="list-style-type: none"> • Meaning and concept of nutrition, balanced Diet and Supplementation. • Classification and functions of nutrients. • Calculation of daily calorie intake and expenditure • Preparation of diet plan. • Dieting and exercises for weight management and obesity management. 	17	17
IV	Fitness Trainer and fitness centre <ul style="list-style-type: none"> • Qualification and qualities of fitness trainer • Legal formalities prior to conducting fitness programme. • Code of Ethics of fitness training • Principles of developing fitness centre. • Fitness center management. 	17	18

References :

EC-302 PROFESSIONAL PREPARATION AND CURRICULUM DESIGN
Marks: Internal: 30 Marks; External Marks: 70 Marks; Total 100 Marks

Learning Objectives

- To understand the concept of curriculum and its development and physical education.
- Understand the utility of curriculum.
- To understand the place of Physical Education in school curriculum.
- To acquaint the learner with planning, presentation technique and class management of teaching various activities in Physical Education.
- To acquaint the learner with different methods of teaching physical activities.
- To acquaint the learner with the principles of teaching physical activity.
- To acquaint the students with planning, objectives of different types of lessons.
- To acquaint the learner with organizing and conducting various types of tournaments and athletic meet.

Learning Outcomes:

- To understand the basic concept of Curriculum and framework of the course.
- It will enable them to develop course according to need of society.
- It will help them to develop infrastructure according to need of curriculum.
- To understand Under Graduate Level of Professional preparation in Physical Education and Sports.
- To develop an understanding of the Profession and Curriculum Design of physical education.
- To understand the role of teachers in curriculum development.
- To develop an understanding of the intelligence, creativity and the role of the teacher in fostering curriculum in physical education and sports.

Unit	Topic	Contact Hours	Marks
	Modern Concept of the Curriculum <ul style="list-style-type: none"> ○ Need and importance of curriculum and curriculum 		

I	<p>development</p> <ul style="list-style-type: none"> ○ Types of curriculum design: Traditional, Subject centric, Learner centric, Problem centric and Social centric ○ Factors affecting Curriculum – Social, Political, economical, Technological, Environmental and Child Psychology. <p>Personnel Qualifications – Under Graduate training in education, Teacher Certification, Teaching Experience, Advanced or Graduate Training. Instructional Facilities and Equipment.</p>	19	18
II	<p>Basic Guidelines For Curriculum Construction</p> <ul style="list-style-type: none"> ○ National and Professional Policies, research Finding. ○ Professional Competence to be develops- Facilities and Special Resources for Library, Laboratory and Other Facilities. ○ Focalization, Socialization, Individualization, Sequence and Operation, Steps in Curriculum Construction. 	15	17
III	<p>Curriculum-Old and New Concepts, Mechanics of Curriculum Planning.</p> <ul style="list-style-type: none"> ○ Basic Principles of Curriculum Construction and Curriculum Development ○ Meaning, Importance and Factors affecting Curriculum Design. ○ Principles of Curriculum Design according to the needs of the Students, State and National level Policies. ○ Role of Teachers, Method of Teaching, Instruction and Assessment. 	17	18
IV	<p>Under-Graduate Level of Professional Preparation.</p> <ul style="list-style-type: none"> ○ Kindergarden to second Standard (Pre- Primary). ○ 3rd to 5th Standard (Primary) ○ 6th to 8th Standard (Upper- Primary) ○ 9th to 10th Standard (High School) ○ 11th to 12th Standard (Higher Secondary) ○ Graduate Level and Teaching Practice 	17	17

Reference:

- Barrow, H. M. (1983). *Man and movement: principles of physical education*. Philadelphia: Lea and Febiger.
- Bucher, C. A. (1986). *Foundation of physical education*: St. Louis: The C. V. Mosby & Company.
- Cassidy, R. (1986). *Curriculum development in physical education*. New York: Harper & Company.
- Cowell, C.C. & Hazelton, H.W. (1965). *Curriculum designs in physical education*. Englewood Cliffs: N.J. prentice Hall Inc.
- Larson, L.A. (n.d.). *Curriculum foundation in physical education*. Englewood Cliffs: N.J. Prentice Hall Inc.
- Underwood, G. L. (1983). *The physical education curriculum in secondary school: planning and implementation*. England: Taylor and Francis Ltd.
- Willgoose, C.E. (1979). *Curriculum in physical education*. 3rd Ed. Englewood Cliffs.: N.J. Prentice Hall, Inc.
- Wakharkar, D. G., *Physical Education and Sports in India*

- Harrisons, Joyce., M & Blackmore, Conic L. (1989) Instructional Strategies for Secondary School Physical Education. Second Edition Dubugue. , Win. C. Brown Public

Semester – III
PRACTICAL COURSE (Part B)

PC 301: Track and Field: Jumping Events

**Athletics: Jumping Events,
Long Jump (Hang Style / Hitch- Kick Style)**

Basic Techniques -

- The Start
- Sprint-run
- Overall Approach
- Drive Phase
- Transition Phase
- Attack Phase
- Take- off
- Flight
- Landing
- Rules, Marking and officiating

High Jump (Scissor style, Straddle Role, Fosbury Flop Style)

Basic Techniques -

- Determining the take off test
- Approach, its importance and problems, eyeline during the approach
- The Plant
- Arm Action
- Take-off
- The Flight
- The Landing
- Rules, Marking and officiating

Triple Jump

Basic Techniques -

- The Approach
- Take-off (Hop 1st Jump)
- Step (2nd Jump)
- Jump (3rd Jump)
- The Landing
- Rules, Marking and officiating

PC 302 Combative Events

A. Boxing: Fundamental Skills

- Stance - Right hand stance, left hand stance.
- Footwork – Attack
- Punches – Jab, Cross, Hook, Upper cut, Combinations.
- Defense slip – bob and weave, parry/block, cover up, clinch, counter attack
- Tactics – Toe to toe, Counter Attack, Fighting in Close, Feinting
- Rules and their interpretations and duties of officials.

B. Martial Arts/Karate: Fundamental Skills

- Player Stances – walking, hand positions, front-leaning, side-fighting.
- Hand Techniques - Punches (form of a punch, straight punch, and reverse punch), Blocks (eight basic).
- Leg Techniques - Snap kicks, stretching straight leg, thrust kicks, sidekicks, round house.
- Forms - The first cause Katas.
- Self Defense - against punches, grabs and strikes, against basic weapons (knife, club sticks).
- Sparring - One step for middle punch, high punch and groin punch. (Defended by appropriate block from eight basic blocks).
- Rules and their interpretations and duties of officials.

C. Taekwondo Fundamental Skills

- Player Stances – Walking, Extending Walking, L Stance, Cat Stance.
- Fundamental Skills – Sitting Stance Punch, Single Punch, Double Punch, Triple Punch.
- Punching Skill from Sparring Position – Front-fist Punch, Rear Fist Punch, Double Punch, and four Combination Punch.
- Foot Techniques (Balgisul) – Standing Kick (soseochagi), Front kick (AP chagi), Arc kick (BandalChagi), Side kick, (YeopChagi), Turning kick (DollyoChagi), Back kick (Twit Chagi), Reverse Turning Kick (BandaedollyoChagi), Jump kick (TwimyoChagi),
- Poomsae (Forms) – Jang, Yi Jang, Sam Jang, Sa Jang, O Jang, Yook Jang, Chil Jang, Pal Jang (Fundamental Movement – eye control, concentration of spirit, speed control, strength control, flexibility, balance, variety in techniques)
- Sparring (Kyorugi) – One Step Sparring (hand techniques, foot techniques, self defense techniques, combination kicks), Free Sparring.
- Board Breaking (Kyokpa) – Eye control, Balance, Power control, Speed, Point of Attack.
- Rules and their interpretations and duties of officials

D. Judo: Fundamental skills

- Rei (Salutation)-Ritsurei(Salutation in standing position), Zarai (Salutation in the sitting position)
- Shisei (Posture in Judo)
- Kumi kata (Methods of holding judo costume)
- Ukemi (Break Fall)-UrhiroUkemi (Rear break Fall), Yoko Ukemi (Side Break Fall), Mae Ukemi (Front Break Fall), Mae mawariUkemi (Front Rolling break fall)
- Shin Tai (Advance or retreat foot movement)-Suri-ashi (Gliding foot), Twugi-ashi (Following footsteps), Ayumi-ashi (Waling steps).
- Kuzushi (Act of disturbing the opponent posture)
- Tai Sabaki (Management of the body)
- Tsukuri and kake (Preparatory action for attack)
- NageWaze (Throwing techniques)-HizaGuruma (Knee wheel), SesaeTwurikomi-ashi (Drawing ankle throw), De ashihari (Advance foot sweep), O Goshi (Major loinm), SeoiNage (Shoulder throw).
- Katamawaze(Grappling techniques)-Kesagatame (Scaff hold), Kata gatame (Shoulder hold), Kami shihogatama (Locking of upper four quarters), Method of escaping from each hold.
- ShimeWaza(Choking Tech.) Hadaka Gimie (Neck Choak) o Kuriarigimie (sliding

LapeChoak)

- KansetsuWaza(Locking Tech.) UdeGaramie. (Bent Arm Lock)

E. Wrestling: History of Wrestling

- Ancient Wrestling
- Indian Style Wrestling
- Modern Wrestling
 - Free Style Wrestling
 - Greco Roman style wrestling
 - Sumo Style Wrestling
 - Women Wrestling
- Rule and regulation of Modern Wrestling

Fundamental Skills

Stance

- Cross Stance
 - Right Cross Stance
 - Left Cross Stance
- Square Stance
- Wrestling Grip
- Technique
 - Standing technique
 - Dasti
 - Sar-Zir a bagal dub
 - Arm Bar
 - Fane Kamar
 - One arm throw
 - Khur Zin takan
 - Sitting technique
 - Nelson
 - Bangdi
 - Fitile
 - KastanaLatna
 - Bharandaj
 - Kunde

F. Fencing: Fundamental Skill

- Basic Stance - on-guard position (feet and legs)
- Footwork – advance, retire, lunge, Step-lunge
- Grip – hold a foil correctly, Etiquette – salute and handshake to coaches and partners
- Hit a target (glove, mask, person) at riposte distance
- Lunge from an on-guard position.
- Attack - simple attacks from sixte – direct, disengage, doublé attack, compound attacks high line – one-two and cut-over disengage, Cut-over attack, Low line attacks
- Semi circular parries – octave and septime
- Understand the layout of a piste.
- Compound or successive parries.
- Lateral parry and direct riposte
- Fence a bout – judges etc. salutes and handshakes

- Rules and their interpretations and duties of officials.

PC 303 Team Games

Base Ball Fundamental Skills

- Player Stances – walking, extending walking, L stance, cat stance.
- Grip – standard grip, choke grip,
- Batting – swing and bunt.
- Pitching –
- Baseball : slider, fast pitch, curve ball, drop ball, rise ball, change up, knuckle ball, screw ball,
- Softball: windmill, sling shot,
- Starting position: wind up, set.
- Fielding –
- Catching: basics to catch fly hits, rolling hits,
- Throwing: over arm, side arm.
- Base running –
- Base running: single, double, triple, home run,
- Sliding: bent leg slide, hook slide, head first slide.
- Rules and their interpretations and duties of officials.

Netball: Fundamental Skills

- Catching: one handed, two handed, with feet grounded, in flight.
- Throwing (different passes and their uses): one handed passes (shoulder, high shoulder, underarm, bounce, lob); two handed passes (push, overhead, bounce).
- Footwork: landing on one foot; landing on two feet; pivot; running pass.
- Shooting: one hand; two hands; forward step shot; backward step shot.
- Techniques of getting free: dodge and sprint; sudden sprint; sprint and stop; sprinting with change of speed.
- Defending: marking the player; marking the ball; blocking; inside the circle; outside the circle (that is, defending the circle edge against the pass in).
- Intercepting: pass; shot.
- The toss-up.
- Role of individual players
- Rules and their interpretations and duties of officials.

Cricket: Fundamental Skills

- Batting-Forward and backward defensive stroke
- Bowling-Simple bowling techniques
- Fielding-Defensive and offensive fielding
- Catching-High catching and Slip catching
- Stopping and throwing techniques
- Wicket keeping techniques

Football: Fundamental Skills

- Kicks-Inside kick, Instep kick, Outer instep kick, lofted kick
- Trapping-trapping rolling the ball, trapping bouncing ball with sole
- Dribbling-With instep, inside and outer instep of the foot.
- Heading-From standing, running and jumping.
- Throw in
- Feinting-With the lower limb and upper part of the body.
- Tackling-Simple tackling, Slide tackling.

- Goal Keeping-Collection of balls, Ball clearance-kicking, throwing and deflecting.

Hockey: Fundamental Skills

- Hitting: Straight hit, Hit on wrong foot, Reverse hit, Turn around and hit.
- Stopping : Straight stop, Stop on right side, Stop on left side, Reverse stopping, Stopping in air,
- Push: Straight push, Reverse push, Push on wrong foot.
- Flick: Straight flick, Reverse flick, Flick on wrong foot.
- Scoop : Straight scoop, push scoop
- Dribbling :
- Passing : Parallel pass, Through pass, Return pass, Over head pass
- Tackling : Shadow Tackling, Lunge & tackle, Tackling from reverse side
- Goal keeping :
- Rules and their interpretations
- Umpiring skills

Softball Fundamental Skills

- Catching: one handed, two handed, with feet grounded, in flight.
- Throwing (different passes and their uses): one handed passes (shoulder, high shoulder, underarm, bounce, and lob); two handed passes (push, overhead, bounce).
- Footwork: landing on one foot; landing on two feet; pivot; running pass.
- Shooting: one hand; two hands; forward step shot; backward step shot.
- Techniques of getting free: dodge and sprint; sudden sprint; sprint and stop; sprinting with change of speed.
- Defending: marking the player; marking the ball; blocking; inside the circle; outside the circle (that is, defending the circle edge against the pass in).
- Intercepting: pass; shot.
- The toss-up.
- Role of individual players
- Rules and their interpretations and duties of officials.

Volleyball: Fundamental Skills

- Basic Stance
 1. The Volley (Over head pass),
 2. The Dig (Under hand pass).
- Service
 - Under Arm Service, Side Arm Service, Tennis Service, Round Arm Service.
- Spiking
 1. Approach run
 2. Take off
 3. Body in the air
 4. Contact with the ball
 5. Landing
- Types of spiking
 1. Straight arm spike
 2. Body turn spike
 3. Wrist turn spike
- Construction and layout of the Volley ball court
- Marking of Volleyball court
- System of play

- Officiating – 1. Hand signal 2. Whistling
- Rules and regulation of the game
- Duties of officials – before, during and after the game

Hand Ball: Fundamental Skills-

Catching, Throwing, Ball Control, Goal Throws-Jump Shot, Centre Shot, Dive Shot, Reverse Shot, Dribbling-High and Low, Attack and Counter Attack, Simple Counter Attack, Counter Attack from two wings and centre, Blocking, Goal keeping, Defense. Rules and their interpretations and duties of officials.

Basket ball: Fundamental Skills

1. Player stance and ball handling
2. Passing-Two Hand chest pass, two hands Bounce Pass, One Hand Base ball pass, Side Arm Pass, Over Head pass, Hook Pass.
3. Receiving-Two Hand receiving, one hand receiving, receiving in stationary position, receiving while jumping, receiving while running.
4. Dribbling-How to start dribble, how to drop dribble, High dribble, Low dribble, Reverse dribble, rolling dribble.
5. Shooting-Layup shot and its variations, one hand set shot, One hand jump shot, Hook shot, Free throw.
6. Rebounding-Defensive rebound, Offensive rebound, Knock out, Rebound Organization.
7. Individual Defensive-Guarding the man with the ball and without the ball.
8. Pivoting.
9. Rules and their interpretations and duties of the officials.

PRACTICE TEACHING (Part C)

TPC 301 Teaching practices:

10 teaching lesson plans for Racket Sport/ Team Games/ Indigenous Sports out of which 5 lessons internal and 1 lessons external at school.

Scheme of Examination Semester – III

PRACTICAL (PART B)

PC 301 Track and Field (Jumping Events)

Internal –30 Marks

Internal – Demonstration of Jumps (20 Marks) + Performance of Jumps (10 Marks) = Total marks 30

External – Record Book (10 Marks) + Viva on Rules and regulation (20 Marks) + Demonstration of Jumps (10 + 10 = 20 Marks) + Performance of Jumps (10 + 10 Marks) = marks 70

PC 302 Combative Sports (Any Two)

Martial Arts / Karate / Judo / Fencing / Boxing / Tae-kwon-Do / Wrestling

Internal – (15 + 15 = 30 Marks)

Demonstration of any three skills / Techniques x 5 M of each game = 15 Marks in each Sport.

External – (35 + 35 = 70 Marks) Viva on Rules and Regulation (10 Marks) + Demonstration of 3 skills (3 x 5 = 15 Marks) + Performance (10 Marks) = 35 Marks for each sport

PC 303– Team Games (Any two)

Baseball / Cricket / Football / Hockey / Softball / Volleyball / Handball / Basketball / Netball

Internal – (15 + 15 = 30 Marks)

Playing Efficiency (10Marks) + Marking (5Marks) =15 Marks for each game

External – (35 + 35 = 70 Marks) Record Book (10 Marks) + Viva on Officiating, Rules & regulations and Marking (10 Marks) + Demonstration of Skills (10 Marks) + Playing Efficiency (5Marks) = 35 Marks for each game

TEACHING PRACTICE (Part C)

TP 301 - Teaching Practice

5 Internal Teaching Practice within Institution +5 External Teaching Practice on Sport Coaching / Special Subject at School

Internal – 10 Lesson x 3 = 30 Marks

External – 1 Lesson x 70 = 70 Marks

Semester – IV

Theory Courses (Part A)

CC-401 MEASUREMENT AND EVALUATION IN PHYSICAL EDUCATION

Marks: Internal: 30 Marks; External Marks: 70 Marks; Total 100 Marks

Learning Objectives:

- It teaches about basic of test, measurement and Evaluation.
- Students will identify the knowledge in Test administration.
- It teaches and identifies the purpose of test, measurement and evaluation.
- It learns and know to evaluate process in which various tools, techniques and norms are used and in conducting the sports skills test and collection of data
- It is learn in evaluating physical fitness skill and performance of the players
- Students knows about classification and administration of the test
- Students understand and explained different physical fitness and skill test.

Learning Outcomes:

- Students understand the concept of test, measurement and evaluation in physical education and sports.
- Students understand importance of test, measurement and evaluation in advance preparation during the test and after the test.
- Students know about classification and administration of the test.
- Students know the construction of a strong evaluation technique through the various test and measurement method used in physical education and sports.
- Students understand and explained different physical fitness and skill test.

Unit	Topic	Contact Hours	Marks
I	Introduction to Test & Measurement & Evaluation <ul style="list-style-type: none"> ○ Meaning of Test & Measurement & Evaluation in Physical Education ○ Need & Importance of Test & Measurement & 	17	17

	<p>Evaluation in Physical Education</p> <ul style="list-style-type: none"> ○ Criteria of good test ○ Criteria of tests: Reliability, Validity, Norms 		
II	<p>Criteria; Classification and Administration of test</p> <ul style="list-style-type: none"> ○ Classification of test. ○ Construction of sports knowledge test. ○ Construction of sports skill test. ○ Administration of test, advance preparation – Duties during testing – Duties after testing. 	17	18
III	<p>Physical Fitness Tests</p> <ul style="list-style-type: none"> ○ AAHPER youth fitness test ○ Harvard Fitness Test ○ Roger physical fitness test ○ Indiana Motor Fitness Test ○ JCR test ○ Kraus Weber Muscular strength test. ○ Barrow Motor ability test. 	17	18
IV	<p>Sports Skill Tests</p> <ul style="list-style-type: none"> ○ Lockhart and McPerson badminton test ○ Johnson basketball test ○ McDonald soccer test ○ S.A.I Soccer Skill test ○ SAI Hockey Test ○ SAI Volleybal Test ○ Friedal Hockey test. ○ Dyer tennis test ○ Brady Volleyball Test. 	17	17

References:

- Bangsbo, J. (1994). *Fitness training in football: A scientific approach*. Bagsvaerd, Denmark: Ho+Storm.
- Barron, H. M., & Mcghee, R. (1997). *A practical approach to measurement in physical education*. Philadelphia: Lea and Febiger.
- Barron, H.M. & Mcchee, R. (1997). *A Practical approach to measurement in physical education*. Philadelphia: Lea and Febiger.
- Kansal, D.K. (1996). *Test and measurement in sports and physical education*. New Delhi: D.V.S. Publications
- Mathews, D.K., (1973). *Measurement in physical education*, Philadelphia: W.B. Saunders Company.
- Pheasant, S. (1996). *Body space: anthropometry, ergonomics and design of work*. Taylor & Francis, New York.
- Phillips, D. A., & Hornak, J. E. (1979). *Measurement and evaluation in physical education*. New York: John Willey and Sons.
- Sodhi, H.S., & Sidhu, L.S. (1984). *Physique and selection of sports- a kinanthropometric study*. Patiala: Punjab Publishing House.

CC-402 KINESIOLOGY AND SPORTS BIOMECHANICS

Marks: Internal: 30 Marks; External Marks: 70 Marks; Total 100 Marks

Learning Objectives:

- To enable the learner to understand the basic structure and function of human body.
- To acquire the knowledge regarding effect of exercise on the body as a whole.
- To understand the importance of normal movements of the human body and

kinesiological analysis.

- To understand the knowledge regarding antagonistic and agonistic muscles involve in the movements.
- To understand the importance and techniques of movement analysis.
- To acquire the knowledge regarding the basic Physiological and Mechanical principles involved in the efficient body movements.
- To gain knowledge of the application of mechanical principles to fundamental skills and sports techniques.
- To understand basic mathematical problems related to motion, force and levers.

Learning Outcomes:

- Students will understand the concept of Kinesiology and Biomechanics. They will understand about fundamental movements and how laws of mechanics can help to enhance sports performance.
- Students develop understanding of skeletal muscle and their role in movement and posture maintenance. They learn about nature of muscular contraction and movements around various joints.
- Students develop the in-depth concept of mechanical laws in respect to exercise and sports. Became able to use appropriate mechanical laws to enhance sports performance and modification of training according to technical pit fault of player.

Unit	Topic	Contact Hours	Marks
I	Introduction to Kinesiology and Sports Biomechanics <ul style="list-style-type: none"> ○ Meaning and Definition of Kinesiology and Sports Biomechanics ○ Importance of Kinesiology and Sports Biomechanics to Physical Education Teacher, Athletes and Sports Coaches. ○ Terminology of Fundamental Movements ○ Fundamental concepts of following terms – Axes and Planes, Centre of Gravity, Equilibrium, Line of Gravity 	18	18
II	Fundamental Concept of Anatomy and Physiology <ul style="list-style-type: none"> ○ Classification of Joints and Muscles ○ Types of Muscle Contractions ○ Posture – Meaning, Types and Importance of good posture. ○ Fundamental concepts of following terms- Angle of Pull, All or None Law, Reciprocal Innovation 	15	17
III	Mechanical Concepts <ul style="list-style-type: none"> ○ Force - Meaning, definition, types and its application to sports activities ○ Lever - Meaning, definition, types and its application to human body. ○ Newton's Laws of Motion – Meaning, definition and its application to sports activities. ○ Projectile – Factors influencing projectile trajectory. 	18	18
IV	Kinematics and Kinetics of Human Movement <ul style="list-style-type: none"> ○ Linear Kinematics – Distance and Displacement, speed and velocity, Acceleration 		

	<ul style="list-style-type: none"> ○ Angular kinematics – Angular Distance and Displacement, Angular Speed and velocity, Angular Acceleration. ○ Linear Kinetics – Inertia, Mass, Momentum, Friction. ○ Angular Kinetics – Moment of inertia, Couple, Stability. 	17	17
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Reference:

- Bunn, J. W. (1972). *Scientific principles of coaching*. Englewood Cliffs, N.J.: Prentice Hall Inc.
- Hay, J. G. & Reid, J. G. (1982). *The anatomical and mechanical basis of human motion*. Englewood Cliffs, N.J.: prentice Hall Inc.
- Hay, J. G. & Reid, J. G. (1988). *Anatomy, mechanics and human motion*. Englewood Cliffs, N.J.: prentice Hall Inc.
- Hay, J. G. (1970). *The biomechanics of sports techniques*. Englewood Cliffs, N.J.: Prentice Hall, Inc.
- Simonian, C. (1911). *Fundamentals of sport biomechanics*. Englewood Cliffs, N.J.: Prentice Hall Inc.
- Deshpande, S.H. ((1995) *Manav Kriya Vigyan (Hindi)*, H.V.P. Mandal, Amravati

CC-403 RESEARCH AND STATISTICS IN PHYSICAL EDUCATION**Marks: Internal: 30 Marks; External Marks: 70 Marks; Total 100 Marks****Course Objectives:**

- Provide the fundamental knowledge of statistics
- To provide the concept of research proposal based on their activities
- To provide the criteria to construct research problem
- To provide the interpretation of various graphical presentation
- To Prepare statistical foundation of learner for pursuing research activities

Learning Outcomes:

- Understand the fundamental of statistics
- Prepare research proposal based on their activities
- Basics of statistics in physical education and sports
- Understand and interpret various graphical presentation
- Prepare statistical foundation of learner for pursuing research activities

Unit	Topic	Contact Hours	Marks
I	Introduction to Research <ul style="list-style-type: none"> ○ Definition of Research ○ Need and importance of Research in Physical Education and Sports. ○ Nature and characteristics of Research in Physical Education & Sports. ○ Classification of Research ○ Research Problem, Meaning and locating Research Problem ○ Criteria of Selection of Problem, Formulation of a Research Problem, Limitations and Delimitations. 	17	17
II	Survey of Related Literature <ul style="list-style-type: none"> ○ Need for surveying related literature. ○ Literature Sources, Library Reading ○ Research Proposal, Meaning and Significance of 		

	<p>Research Proposal.</p> <ul style="list-style-type: none"> ○ Preparation of Research proposal / project. ○ Research Report: A group project is to be undertaken by a small batch of students under the supervision of a teacher, wherein it is expected to survey school facilities of physical education, health assessment programme evaluation, fitness status of the students, staff and other stakeholders etc. and submit the report to the institution. 	17	18
III	<p>Basics of Statistical Analysis</p> <ul style="list-style-type: none"> ○ Statistics: Meaning, Definition, Nature and Importance ○ Class Intervals: Raw Score, Continuous and Discrete Series, Class Distribution, Construction of Tables ○ Graphical Presentation of Class Distribution: Histogram, Frequency Polygon, Frequency Curve, Cumulative Frequency Polygon, Ogive, Pie Diagram 	17	17
IV	<p>Statistical Models in Physical Education and Sports</p> <ul style="list-style-type: none"> ○ Measures of Central Tendency: Mean, Median and Mode-Meaning, Definition, Importance, Advantages, Disadvantages and Calculation from Group and Ungrouped data ○ Measures of Variability: Meaning, importance, computing from group and ungroup data ○ Percentiles and Quartiles: Meaning, importance, computing from group and ungroup data 	17	18

References:

- Best, J.W. (1963). *Research in education*. U.S.A.: Prentice Hall.
- Bompa, T. O. & Haff, G. G. (2009). *Periodization: theory and methodology of training, 5th ed.* Champaign, IL: Human Kinetics.
- Brown, L. E., & Ferrigno, V. A. (2005). *Training for speed, agility and quickness, 2nd ed.* Champaign, IL: Human Kinetics.
- Brown, L.E. & Miller, J., (2005). *How the training work*. In: *Training Speed, Agility, and Quickness*. Brown, L.E. & Ferrigno, V.A & Ferrigno, V.A., eds. Champaign, IL: Human Kinetics.
- Carl, E. K., & Daniel, D. A. (1969). *Modern principles of athletes training*. St. Louis: St. Louis's Mosby Company.
- Clark, H. H., & Clark, D. H. (1975). *Research process in physical education*. Englewood cliffs, New Jersey: Prentice Hall, Inc.
- Garrett, H.E. (1981). *Statistics in psychology and education*. New York: VakilsFeffer and Simon Ltd.
- Oyster, C. K., Hanten, W. P., & Llorens, L. A. (1987). *Introduction to research: A guide for the health science professional*. Landon: J.B. Lippincott Company.
- Thomas, J.R., & Nelson J.K. (2005). *Research method in physical activity*. U.S.A: Champaign, IL: Human Kinetics Books.
- Thomas, J.R., Nelson, J.K. & Silverman, S.J. (2011). *Research method in physical activity*. U.S.A: Champaign, IL: Human Kinetics Books.
- Uppal, A. K. (1990). *Physical fitness: how to develop*. New Delhi: Friends Publication.
- Verma, J. P. (2000). *A text book on sports statistics*. Gwalior: Venus Publications.

EC-401 THEORY OF SPECIALIZED GAMES & SPORTS			
Marks: Internal: 30 Marks; External Marks: 70 Marks; Total 100 Marks			
Learning Objectives			
<ul style="list-style-type: none"> • To understand the Games and Sports. • To understand the prerequisites to be Players and coach • To understand the teaching and coaching methodology. • Can understand the preparation and dimensions of sports playfield • To understand the scientific principles of coaching 			
Learning Outcomes:			
<ul style="list-style-type: none"> • Able to interpret the rules and regulation of games and sports while Coaching. • Achieve the Coaching ability. • Can be teach and coach games and sports • Able to lead the sports team • Can apply scientific principles while coaching. 			
Unit	Topic	Contact Hours	Marks
I	Theory of Sports and Games <ul style="list-style-type: none"> ○ General Introduction of specialized games and sports– (Athletics, Badminton, Basketball, Cricket, Football, Gymnastic, Hockey, Handball, Kabaddi, Kho-Kho, Table Tennis, Tennis, Volleyball and Yoga) Each game or sports to be dealt under the following heads <ul style="list-style-type: none"> ○ History and development of the Game and Sports ○ Ground preparation, dimensions and marking ○ Standard equipment and their specifications ○ Ethics of sports and sportsmanship 	17	17
II	Technique, Tactics and Strategy of Specialized Games and Sports <ul style="list-style-type: none"> ○ Fundamental Techniques and Advance Techniques ○ Phases of skill learning ○ Tactics and Strategy: Offence and defense, Principles of offence and defense. ○ Recreational and Lead up games 	17	17
III	<ul style="list-style-type: none"> ○ Concept of Conditioning and warming up. ○ Principles training and coaching ○ Different training and coaching methods ○ Game Specific fitness components and their improvement. 	17	18
IV	Scientific Principles of Coaching <ul style="list-style-type: none"> ○ Biomechanical Aspects of Coaching: Law of motion, Force, Equilibrium and Lever. ○ Psychological preparation of player ○ Safety in sports ○ Preparation of coaching plan and coaching log book 	17	18
References:			
<ul style="list-style-type: none"> • Bunn, J. W. (1968). <i>The art of officiating sports</i>. Englewood cliffs N.J. Prentice Hall. • Bunn, J. W. (1972). <i>Scientific principles of coaching</i>. Englewood cliffs N. J. Prentice Hall. 			

- Dyson, G. H. (1963). *The mechanics of athletics*. London: University of London Press Ltd.
- Lawther, J.D. (1965). *Psychology of coaching*. New York: Pre. Hall.
- Singer, R. N. (1972). *Coaching, athletic & psychology*. New York: M.C. Graw Hill.

EC-402 ADAPTED PHYSICAL EDUCATION

Marks: Internal: 30 Marks; External Marks: 70 Marks; Total 100 Marks

Learning Objectives

- Students will learn the concept of adapted physical education and their need and importance.
- Students will learn to develop the knowledge of quality and qualification of teacher of adapted physical education.
- Students learn to engage in various teaching opportunities.
- It will learn to teach different sports activities with physical disabilities, mental retardation, visual impairment, hearing impairment and behaviour disorder.

Learning Outcomes:

- To make understand the basic skills and movement pattern of selected sports.
- To enable them to understand the link between motor skills ability, learning and performance.
- It helps instructional method to support disabilities children in classroom.
- It helps well preparation adapted sporting teams/ athletes and contribute to school age children.
- It will understand how to plan, programmes, modifying activities and provide appropriate Physical education and activity instruction to individual with disabilities
- Student engage in various teaching opportunities with disabilities.

Unit	Topic	Contact Hours	Marks
I	Introduction to Adapted physical Education <ul style="list-style-type: none"> • Meaning and Definitions of Adapted Physical Education • Brief historical review of Adapted physical education. • Aims and objectives Adapted Physical Education • Need and importance Adapted Physical Education, • Quality and Qualification of teachers of adapted physical education. 		
II	Classification of Disability <ul style="list-style-type: none"> • Physical disabilities, Mental retardation, visual impairment, Hearing impairment, Behaviour disorder, • Characteristics and functional limitation of disabilities, • Aids for the disabled and its evaluation. • Facilities and equipment for recreation • Unified sports: Equipment of sports activities. 		
III	Activities for disabled <ul style="list-style-type: none"> • Importance of activity for disabled. • Co- curricular activity for disabled • Outdoor programme for disabled • Adventure based outdoor programme for disabled 		

	<ul style="list-style-type: none"> • Creative development, hobby and culture development programme. • Aquatic activity program for disabled 		
IV	<p>Adapted physical education program:</p> <ul style="list-style-type: none"> • Guiding principles of adapted physical education programme, • Interaction with trained physical educationist and communication with parents, • Nature of Home program: Parents as teachers, parent involvement, parent- teacher Association, • Parent Advisory committee for Unified Sports. 		

Reference

- Michael – Handbook of Adopted physical Education, Equipment and its use.
- Meller David (2006) Arthur G Meller & James. Teaching physical Activities to impaired youth.
- David Auxter et al. Principles and Methods of adopted physical education & Recreation.
- Gupta Rakesh (2013) Aroop Jain. Adopted physical education. Sports publication. Ashok Vihar Delhi.
- Luke E. Kelly. Adopted physical education National Standards.

Scheme of Examination

Semester – IV

Practical Courses (PART B)

PC 401 (Sports Specialization) Track & Field / Swimming / Gymnastics (Any One)

Internal – Demonstration of Any Two (2 x 10 = 20 Marks) + 2 Performance (5+ 5 = 10Marks)

External – Record Book (10 Marks) + Viva – Officiating, Rules & Marking (20 Marks) + Demo (2 x 10 = 20 Marks + Performance 2 (Rules, Regulation, Marking) (10+10 = 20Marks)

PC 402 (Game Specialization) Kabaddi / Kho-Kho / Baseball / Cricket / Football / Hockey / Softball / Volleyball / Basketball / Netball / Table Tennis / Squash / Tennis / Yoga (Any One)

Internal – Playing Efficiency (10 Marks) + Marking (10 Marks) + Officiating (10 Marks) = Total 30 Marks

External – Record Book (10 Marks) + Viva – On Rules & Regulation (20 Marks) + Playing Efficiency (20 Marks) + Officiating (20 Marks) = Total 70 Marks

TEACHING PRACTICE (Part C)

TP 401 Teaching Practice on Sports Specialization (Any One) Track & Field / Swimming / Gymnastic

Internal – 5 lessons x 6 = 30 Marks

External – 1 lesson x 70 = 70 Marks

TP 402 - Teaching Practice on Game Specialization

Internal – 5 lessons x 6 = 30 Marks

External – 1 lesson x 70 = 70 Marks

B.P.Ed. (Two year)
Semester – I
Scheme of Practical Examination

Table No. 1**PC 101 Track & Field (Running, Walking and Hurdle Events)**

Internal – 30 Marks

(Events-100M, 200M, 400M, 800M, 1500M, Hurdle, Relay, Walking) (Any two)

Roll No.	Events	Performance	Marks (20M)	Demonstration Any one x 10 M	Total (30 M)
	1	1	1		
	2	2	2		

External – 70 Marks

Roll No.	Record Book (10M)	Viva on Rules & Regulation (20M)	Performance any three events		Track Marking (10M)	Total (70M)
				Marks (30 M)		
			1			
			2			
			3			

Table No. 2 Gymnastics / Swimming / Aerobics / Mallakhamb**PC 102****(A) Gymnastics / Mallakhamb**

Internal – 30 Marks

Roll No.	Demonstration of any Five Skills					Total (30M)	Marks obtd. Out of 30 M
	Skill I (6M)	Skill 2 (6M)	Skill 3 (6M)	Skill – 4 (6M)	Skill – 5 (6M)		

External – 70 Marks

Roll No.	Record Book (10M)	Viva on Officiating and Rules (20M)	Skill Demo				Total (70M)	Marks obtd. Out of (70 M)
			Skill-1 (10M)	Skill-2 (10M)	Skill-3 (10M)	Skill-4 (10M)		

B. Swimming

Internal – 30 Marks

Roll No.	Demonstration of any two strokes		Total
	Stroke-1 (15M)	Stroke – 2 (15M)	

			(30M)

External – 70 Marks

Roll No.	Record Book (10M)	Viva on Officiating and Rules (20M)	Skill Demonstration Any two		Performance		Total (70M)
			Stroke-1 (10M)	Stroke-2 (10M)	50 / 100 M (10M)	200 / 400M (10M)	

C. Aerobics

Internal – 30 Marks

Roll No.	Demonstration of one set of 12 skills	Total (30M)

External – 70 Marks

Roll No.	Record Book (10M)	Viva (20M)	Demonstration of skills with equip (4 Skills) (20M)	Without equip (12 skills) (20M)	Total (70M)

PC 103

Indigenous Sports: Kabaddi/ Kho Kho
Kabaddi

Internal – 30 Marks

Roll No.	Court Marking (10M)	Playing Efficiency (20M)	Total (30M)

External – 70 Marks

Roll No.	Record Book (10M)	Viva on Rules & Regulation (20M)	Demonstration of skills				Total (70M)
			Raider skill		Anti Rider Skill		
			Skill-1 (10M)	Skill-2 (10M)	Skill-1 (10M)	Skill-2 (10M)	

PC 104

Mass Demonstration Activities and Band

(A) Mass Demonstration

Internal – 20 Marks

Roll No.	Group Demonstration				Total (20M)
	Dumbbell (5M)	Lezium (5M)	Marching (5M)	Wands (5M)	

External – 40 Marks

Roll No.	Group Demonstration (Any one activity)				Total (40M)
	Ex-1 (10M)	Ex-2 (10M)	Ex-3 (10M)	Ex-4 (10M)	

(B) Band
Internal – 10 Marks

Roll No.	All Rhythms of		Total (10M)
	Drum (5M)	Side Drum (5M)	

External – 30 Marks

Roll No.	Flute (10M)	Drum (10M)	Side Drum (10M)	Total (30M)

Appendix B**Semester – II****PRACTICAL (Part B)**

PC 201

Track & Field Events (Throws)

Throws – (Shot Put, Discus Javelin and Hammer)

Internal – 30 Marks

Roll No.	Demonstration		Performance		Total
	Throws (10 M)	Throws (10M)	Throw (5M)	Throw (5M)	(30M)

External – 70 Marks

Roll No.	Record Book (10M)	Viva on Rules & Regulation (20M)	Demonstration of Throws		Performance		Total (70M)
			Throw (10M)	Throw (10 M)	Throw (10M)	Throw (10M)	

PC 202 (A) Compulsory Yoga

Internal – 15 Marks

Roll No.	Demonstration					Kriya (5M)	Total (15M)
	Surynamskar (5M)	Asanas					
		A-1 (1M)	A-2 (1M)	A-3 (1M)	A-4 (1M)		

External – 35 Marks

Roll No.	Record Book (10M)	Viva (10 M)	Demonstration				Bandh / Mudra (2M)	Prana yams (3M)	Total (35M)
			Asanas		Kriyas				
			A-1 (2.5M)	A-2 (2.5 M)	With Equipm ent (3M)	Without Equipment (2M)			

(B) Swimming

Internal – 15 Marks

Roll No.	Demonstration of any one Stroke (10M)	Performance on any one Event (5M)	Total (15M)

External – 35 Marks

Roll No.	Record Book	Viva on Officiating	Skill Demonstration Any two	Performance any one	Total (35M)

	(5M)	and Rules (10M)	Stroke-1 (5M)	Stroke-2 (5M)	(10 M)	
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PC 203**Racket Sports**

Badminton, Table Tennis, Tennis (Any two) Common format for all these three games.

Internal – 15 Marks for each game

Roll No.	Playing Efficiency (10 M)	Officiating (5M)	Total (15M)
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External – 35 Marks for each game

Roll No.	Record Book (10M)	Viva on Rules & Regulation (10M)	Skill Demonstration (10M)	Playing Efficiency (5M)	Total (35M)
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PRACTICE TEACHING (Part C)**TP 201**

Teaching Practice (Classroom and Outdoor Teaching)

Internal – 30 Marks

Roll No.	5 Class Room Teaching (Theory Subjects of Phy. Edu.) (15M)					5 Outdoor Teaching Practical Activities (15M)					Total(30 M)
	L1 (3M)	L2 (3M)	L3 (3M)	L4 (3M)	L5 (3M)	L-1 (3M)	L2 (3M)	L3 (3M)	L4 (3M)	L5 (3M)	

External – 70 Marks

Outdoor Teaching = (70 M)

Roll No.	Personal Preparation (15M)	Technical Preparation (15M)	Total Effect (5M)	Total (35M)
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Appendix C

Semester III

PRACTICAL (Part B)

PC 301

Track & Field Events (Jumps) (Long Jump, Triple Jump, High Jump, Pole Vault)

Internal – 30 Marks

Roll No.	Demonstration		Performance		Total
	Jump (10 M)	Jump (10M)	Jump (5M)	Jump (5M)	(30M)

External – 70 Marks

Roll No.	Record Book (10M)	Viva on Rules & Regulation (20M)	Demonstration of Jump		Performance		Total (70M)
			Jump (10M)	Jump (10 M)	Jump (10M)	Jump (10M)	

PC 302 Combative Sports (Any Two)**Martial Arts, Karate, Judo, Boxing, Tae-Kwando, Wrestling (Any two)**

Internal (15 + 15) = 30 Marks

Roll No.	Demonstration			Total
	Skill / Tech I (5M)	Skill / Tech-2 (5M)	Skill / Tech-3 (5M)	(15M)

External (35 + 35) = 70 Marks

Roll No.	Viva on Rules & Regulation (10M)	Demonstration			Performance (Any one) (10M)	Total (35M)
		Skill 1 (5M)	Skill -2 (5M)	Skill -3 (5M)		

PC 303– Team Games (Any two)**Baseball, Cricket, Football, Hockey, Softball, Volleyball, Handball, Basketball**

Internal - (15 +15 = 30 Marks) 15 Marks for each game

Roll No.	Playing Efficiency (10M)	Field Marking (5M)	Total (15M)

External - (35 + 35 = 70) 35 Marks for each game

Roll No.	Record Book (10M)	Viva on Rules & Regulation (20M)	Demonstration of Skills		Playing Efficiency (5M)	Total (35M)
			Skill (1) (5M)	Skill- (2) (5M)		

**TP 301 - Teaching Practice –
5 Internal within Institution and 5 External at School
Internal = 30 Marks**

Roll No.	Lessons										Total (30M)
	Internal					External					
	L1 (3M)	L2 (3M)	L3 (3M)	L4 (3M)	L5 (3M)	L-1 (3M)	L2 (3M)	L3 (3M)	L4 (3M)	L5 (3M)	

External – 70 Marks

Roll No.	Personal Preparation (35M)	Technical Preparation (35M)	Total Marks (70M)

Appendix D**B.P.Ed. (Two year)****PC 401 Sports Specialization****Track & Field/ Swimming/ Gymnastics (Any one)****Internal – 30 Marks**

Roll No.	Demonstration		Performance		Total
	Event-1 (10M)	Event-2 (10M)	Event-1 (5M)	Event-2 (5M)	(30M)

External – 70 Marks

Roll No.	Record Book (10M)	Viva on Rules & Regulations (20M)	Demonstration		Performance		Total (70M)
			Event-1 (10M)	Event-2 (10M)	Event-1 (10M)	Event-2 (10M)	

PC 402 Game Specializations**(Badminton, Basketball, Baseball, Cricket, Football, Handball, Hockey, Kabaddi, Kho-Kho, Softball, Table Tennis, Tennis, Volleyball) (Any one)****Internal – 30 Marks**

Roll No.	Playing Efficiency (10M)	Field Marking (10M)	Officiating (10M)	Total (30M)

External – 70 Marks

Roll No.	Record Book (10M)	Viva on Rules & Regulation (20M)	Playing Efficiency (20M)	Officiating (20M)	Total (70M)

TP 401 Teaching Practice on Sports Specialization**(Track & Field, Swimming, Gymnastics) (Any one)****Internal – 30 Marks**

Roll No.	Lessons					Total(30M)
	L-1 (6M)	L-2 (6M)	L-3 (6M)	L-4 (6M)	L-5 (6M)	

External – 70 Marks

Roll No.	Personal Preparation (35M)	Technical Preparation (35M)	Total Marks (70M)

TP 402 Teaching Practice on Game Specialization (Any one)**Internal – 30 Marks**

Roll No.	Lessons					Total (30M)
	L-1 (6M)	L-2 (6M)	L-3 (6M)	L-4 (6M)	L-5 (6M)	

External – 70 Marks

Roll No.	Personal Preparation (35M)	Technical Preparation (35M)	Total Marks (70M)

GRADING SYSTEM

The following scale of grading system shall be applied to indicate the performance of students in terms of letter grade and grade points as given below:

Percentage of marks obtained in a course (in semester plus end semester)	Letter grade	Grade point	Description of performance	Classification of final result
85 & above	O	8.5-10.0	Outstanding	First class with Distinction
70-84.99	A ⁺	7.0-8.49	Excellent	
60-69.99	A	6.0-6.99	Very Good	First Class
55-59.99	B ⁺	5.5-5.99	Good	Higher Second Class
50-54.99	B	5.0-5.49	Above Average	Second Class
40-49.99	C	4.0-4.99	Average	Pass Class
Below 40	F	0.0	Fail/ Dropped	Dropped
	AB		Absent	

Calculation of Grading

SGPA (Semester Grade Point Average)

$$SGPA = \frac{\sum_{i=1}^n C_i G_i}{\sum_{i=1}^n C_i}$$

CGPA (Cumulative Grade Point Average)

$$CGPA = \frac{\sum_{j=1}^N SGPA_j}{N}$$

Where C_i is the Credit earned for the course in any semester; G_i is the Grade point obtained by the student for the course i and n number of courses obtained in that semester; $SGPA_j$ is SGPA of semester j and N number of semester. Thus CGPA is average of SGPA of all the semesters starting from the first semester to the current semester.

The CGPA earned by a candidate may be converted to equivalent percentage of marks by multiplying the CGPA by 10 (ten).