

-363-

(8)

**Department of Community Education and Disability Studies  
Panjab University, Chandigarh**

**Value Added Course  
On  
Introduction to Disabilities**

Contact Hours: 30  
Max. Marks: 50  
Theory: 40 Marks  
Int. Assess.: 10 Marks  
Total credits: 2

**INTRODUCTION**

The course is designed to provide an introduction to different disabilities like Neuro Developmental disabilities, Sensory disabilities, and Physical disabilities. It fosters the acquisition of broad-based knowledge and skills among students to understand the causes, needs and rights of persons with disability.

The faculty of Community Education and Disability studies shall facilitate the students of different disciplines who can implement professional standards, advocate the Children/ persons with disabilities, and adhere to the beliefs and values about Children/ Persons with disabilities that there are parts of a larger community. The larger mission of education is best served when students collaborate with persons with disability families and develop lifelong positive attitudes, behaviour toward persons with disability. The course material is intended to provide students with an overview of the different types of disabilities on an offline mode at the Department of Community Education and Disability Studies.

**GUIDELINES:**

- 1 The value-added course's duration shall be 30 working hours and is both for Undergraduate and Postgraduate students. This course is designed to introduce to those who are at the beginning of a special education course or are not in the field of special education.
- 2 A person who possesses the following qualifications shall be eligible to join the course: Minimum of 50% (45% in case of SC/ST) marks or an equivalent degree at 12<sup>th</sup> and undergraduate level seeking admission for undergraduate and post-graduation respectively, from a recognized school/ University. Admission will be done as per the merit list.
3. The Teaching learning pedagogy will be as follows: Lecture method, demonstrations, discussions, ICT techniques, fieldwork, surveys, activity-based projects etc.
4. Only those students shall be eligible to appear in the examination who possess the qualification laid down in Regulation '2' and has attended the prescribed course of instruction during the semester in the academic year in the University and should also be of good character and have attended at least 75 per cent of (i) Lectures
5. The students' performance shall be evaluated continuously throughout the Course

The guidelines for continuous assessment shall be followed as under:

- |                              |           |
|------------------------------|-----------|
| i. Theory Paper Evaluation - | 40 Marks  |
| ii. Internal Assessment -    | 10 Marks, |

which includes:

- |   |           |
|---|-----------|
| a) Assignment/case study/ Presentations | -7 Marks  |
| b) Attendance -                         | -3 Marks, |

**NO. OF SEATS:** 50

**FEE STRUCTURE:** As per university rules

6. The Controller of Examinations shall publish the result of the examination within four

20

*[Signature]*  
Chairperson  
Department of Community  
Education and Disability Studies  
Panjab University, Chandigarh

-364-

weeks after the termination of the examination, or as soon as possible.  
Evaluation/ Paper Setting of the Papers shall be done as per Panjab University norms.

### **INSTRUCTIONS FOR PAPER-SETTER/EXAMINERS**

The Theory paper which is of 40 marks will be of 2 hours duration, the evaluation shall be as follows:

- Shall comprise seven questions in all. The candidates shall be required to attempt four questions.
- Question No. 1 shall be compulsory, consisting of 8 short answer type questions, spread over evenly the whole syllabus, to be answered in 20 to 25 words. A candidate will select any four short questions from the first question carrying 4 marks each. (4x4=16 marks)
- In addition to Question No. 1, candidates shall be required to attempt 3 long answer-type questions by selecting one from each of the three units. Each unit shall have two questions of 08 marks each. (8x3=24 marks)

### **Objectives of Introduction to Disabilities**

- To acquaint the students with the basics of neuro-disabilities like Learning Disability, Autism Spectrum disorder and Intellectual Disability
- To make them understand sensory-motor disabilities like hearing impairment, deaf and blind
- To have awareness about physical disabilities and its types.
- To enable the students to Develop the knowledge of educational provisions for persons with benchmark disabilities in the Indian Act.

### **COURSE OUTCOME:**

- Develop insight into symptoms of different disabilities. (To be assessed by identifying the symptoms of a person with a disability).
- Produce personal insight and learn from all their experiences. (To be assessed as dialogue/ discussions)
- Identify and address the diverse needs of persons with disabilities. to be assessed by writing a case study of a person with a disability

### **Content**

#### **Unit 1: Neuro-Developmental Disabilities**

- 1.1 Learning Disability: Definition, Types & Characteristics, Causes, needs.
- 1.2 Intellectual Disability: Definition, Types, Characteristics, Causes, needs.
- 1.3 Autism Spectrum Disorder: Definition, Types, Characteristics, Causes, needs.
- 1.4 Educational Provisions

#### **Unit 2: Sensory Disabilities**

- 2.1 Hearing Impairment: Definition; Types and Characteristics; causes,
- 2.2 Blindness and Low Vision--Definition and Classification; Causes, needs.
- 2.3 Deaf blindness: Definition, classification and characteristics; causes, needs
- 2.4 Educational Provisions as per PwD Act 2016

#### **Unit 3: Physical Disabilities**

- 3.1 Locomotor disability: definition; types and characteristics; causes, needs.
- 3.2 cerebral palsy and muscular dystrophy: Definition, Types and Characteristics; Causes, needs.
- 3.3 Dwarfism, acid attack victims (Definition and symptoms);

### 3.4 Educational Provisions as per Provision of PwD 2016

#### Practical/ Field Engagement/Project Work Any one of the following


- Preparation of self-study report on any person with a disability
- To identify and address the diverse needs of persons with disabilities
- Prepare a leaflet on challenges faced by persons with disabilities
- Preparation of multimedia presentation on any type of disability

#### Suggested Readings

- Alice, M., Raj, K., & Rao, D. B. (2004). Deaf Education. New Delhi: Sonali Publications
- Bala, Jampala & Madhu (2007) Hearing Impaired Students: Adjustments, Achievement Motivation and Academic Achievement, New Delhi – Discovery
- Begam, Sara (2006) Cognitive Development in Blind Children, New Delhi – Discovery.
- Bentwal, Anuradh; Nandurkar, Aparna & Jalvi, Rajeev (2010) Fundamentals of Hearing, Hearing Impairment and Audiological Management, New Delhi – Kanishka.
- Bentwal, Anuradh; Nandurkar, Aparna & Jalvi, Rajeev (2006) Introduction to Hearing Impairment, New Delhi – Kanishka.
- Chadha A. (2010) Guide to educating Children with Learning Disabilities, Noida – Vikas Pub.
- Dash M. (2007) Education of Exceptional Children, New Delhi – Atlantic.
- Dyson, Alan & Millward, Alan (2000), School and Special needs; issues of innovation and inclusion, London – Paul Chapman
- Learner, Janet W 5<sup>th</sup>ed (1988) Learning Disabilities: theories, diagnosis and teaching strategies, Boston Houghton Mifflin.
- Mangal SK (2009) Educating Exceptional Children: Introduction to Special Education, New Delhi Prentice Hall of India.
- Martin, Lucy C (2009) Strategies for teaching students with learning Disabilities, California Corwin.
- Nick W., Roulstone A & Thomas C. (2014). Routledge Handbook of Disability Studies, Landon Routledge.
- Northcott, W. H. (1973). The Hearing-Impaired Child in a Regular Classroom. Washington: The Alexander Graham Bell Association for the Deaf Inc.
- Panda KC (2007) Education of Exceptional Children, New Delhi – Vikas Pub.
- Reddy, Lokanadha G, Ramar R. & Kusuma, A. (2007) Education of Children with Special Needs, New Delhi – Discovery.
- Ratra, Amiteshwar (2007) Locomotor Disabled: Psychological Pattern, New Delhi – Mittal.
- Relekar, Sadhana; Dalvi, Usha and Kant, Anjali (2006) Fundamentals of Speech and Speech teaching, New Delhi – Kanishka.
- Shukla, Indra etal (2009) Education of children with Hearing Impairment, New Delhi – Kanishka.
- Tebbett, Kate (2006) Management of Cerebral Palsy: A Transdisciplinary Approach, New Delhi – Sage.

22  
Chairperson  
Department of Community  
Education, University of  
Jammu, Jammu

- Vijayan, Premavathy and Victoria, G. (2010) Education of Children with Low Vision, New Delhi – Kanishka.
- Vijayan, Premavathy and Victoria, G (2009) Education of Visually impaired children with advanced disabilities, New Delhi – Kanishka.
- Ysseldyke, James E & Algozzine, Bob (2007) Special Education: Practical Approach for Teachers, New Delhi – Kanishka.

  
Chairperson  
Department of Community  
Education & Disability Studies  
Panjab University, Chandigarh

**B.A./B.Sc.(GENERAL) FIRST YEAR (SEMESTER SYSTEM) 2023-24**

**SYLLABUS**  
(Education).  
**SEMESTER-I**

**MAJOR DISCIPLINES SPECIFIC CORE (COURSE- CORE- I): EDUCATION**

Total Credits: 4 credits

Semester: 15 weeks

Class lecture: 60 hours (three 1 hour lecture per week)

Field based learning/project/workshop/activities: One 2 hour duration per week

Max. marks: 100 marks

Theory: 90 marks

Internal assessment: 10 marks

**INSTRUCTIONS FOR PAPER-SETTERS AND THE CANDIDATES:**

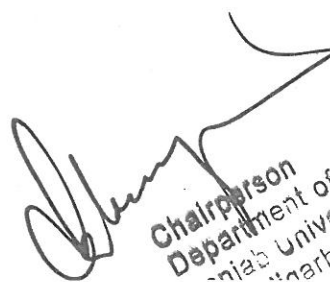
- i. There shall be 9 questions in all.
- ii. In Question No. One, 15 short answer type questions be asked spreading over whole syllabus to be answered in 10-20 words each. The students shall have to attempt 9 short answer type questions i.e. 2 marks of each. It shall carry 18 marks and shall be a compulsory question.
- iii. Rest of the paper shall contain 4 units. Each unit shall have 2 questions and the candidate shall be given internal choice. The candidates shall attempt 1 question from each unit i.e. in all of 18 marks each.
- iv. For private and re-appear candidates, who have not been assessed earlier for internal assessment, the marks secured by them in theory paper will proportionately be increased to maximum marks of the paper in lieu of internal assessment.

The paper-setter must put note (d) in the question paper.

**Learning Objectives**

To enable the students to understand :

1. The Meaning, Nature and Scope of Education along with its types.
2. Functions of Education in light of its aims.
3. Role of Education viz-a-viz present day needs.

  
Chairperson  
Department of Education  
Mizab University  
Muzh-160014

**Course Contents :**

- UNIT-I** : (a) Meaning and Nature of Education : Education as a Socio-Political Process and Developmental Process.  
(b) Informal, Formal and Non-Formal Education.
- UNIT-II** : (a) Aims of Education – Individual, Social, Vocational and Democratic.  
(b) Functions of Education – Individual Development, Transmission of Cultural Heritage and Education for Social Change.
- UNIT-III** : (a) Education for Democratic Citizenship.  
(b) National Integration and International Understanding.
- UNIT-IV** : (a) Value Education –Meaning of Values, their Development  
(b) Transactional Strategies.

**Books recommended:**

1. Bhatia, K.K. and Narang, C.L. : *Teacher and Education in Emerging Indian Society, Tandon Publishers, Ludhiana, 2002.*
2. Bhatia, K.K. and Sharma, S. : *Bhartiya Shiksha Ki Adhunik Samasyaein. Parkash et al Bros., Ludhiana, 1986*
3. Kumar, Krishna : *What is worth teaching; Orient Black Swan*
4. Kumar, Krishna : *Political agenda of Education, Sage Publishers*
5. Kaur, Satvinderpal : *Padhaun Yog Ki Hai? Saptrishi Publishers*
6. Dewey, J. : *Democracy & Education, Macmillan Publishers*
7. Bhatnagar, S. : *Kothari Commission Recommendations and Evaluation with a Text on National Policy on Education, Loyal Book Depot, Meerut, 1982.*
8. Govt of India : *National Policy on Education, New Delhi, 1986, 1992, 2020.*
9. Sharma, T.R. : *Sikhya de Sidhant, Punjabi University, Patiala.*
10. Kansal, M.R. : *Sikhya de Sidhant, Punjab State University Textbook Board, Chandigarh*
11. Freire, Paulo : *Pedagogy of the Oppressed, Penguin Classics.*
12. Pathak, Avijit : *Social Implications of Schoolin, Aakar Books, 2013.*


  
Chairperson  
Department of Education  
Panjab University  
Chandigarh-160014

**MINOR DISCIPLINE COURSE (COURSE - I):**

Total Credits : 4 credits  
Semester : 15 weeks  
Class lecture : 60 hours (three 1 hour lecture per week)  
Field based learning/project/workshop activities/ visit to school : one 2 hour duration per week  
Max.Marks :100 marks  
Theory :90 marks  
Internal Assessment : 10 marks

**Any student opting Education as his/her minor course would be taking up the discipline specific course as his/her minor course.**

**The students would choose core paper from any other discipline (4 credits)**

  
Chairperson  
Department of Education  
Panjab University  
Chandigarh-160014

**B.A./B.Sc.(GENERAL) FIRST YEAR (SEMESTER SYSTEM) 2023-24  
SYLLABUS**

**SEMESTER- II**

**MAJOR DISCIPLINES SPECIFIC CORE (COURSE- CORE- II): EDUCATION**

Total Credits: 4 credits

Semester: 15 weeks

Class lecture: 60 hours (three 1 hour lecture per week)

Field based learning/project/workshop/activities: One 2 hour duration per week

Max. marks: 100 marks

Theory: 90 marks

Internal assessment: 10 marks

**INSTRUCTIONS FOR PAPER-SETTERS AND THE CANDIDATES:**

- i. There shall be 9 questions in all.
- ii. In Question No. One, 15 short answer type questions be asked spreading over whole syllabus to be answered in 10-20 words each. The students shall have to attempt 9 short answer type questions i.e. 2 marks of each. It shall carry 18 marks and shall be a compulsory question.
- iii. Rest of the paper shall contain 4 units. Each unit shall have 2 questions and the candidate shall be given internal choice. The candidates shall attempt 1 question from each unit i.e. in all of 18 marks each.
- iv. For private and re-appear candidates, who have not been assessed earlier for internal assessment, the marks secured by them in theory paper will proportionately be increased to maximum marks of the paper in lieu of internal assessment.

The paper-setter must put note (d) in the question paper.

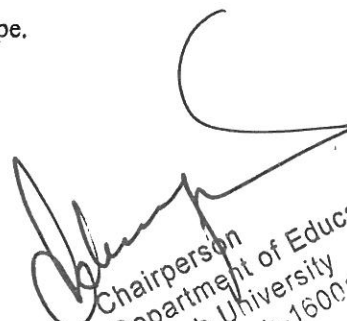
**Objectives :**

To make the students understand :

1. The meaning, scope and uses of psychology in education.
2. Human growth and development upto the stage of childhood.
3. Meaning, purpose of learning and factors influencing learning.
4. The concept of intelligence - its meaning and measurements.
5. Causes and significance of individual differences.

**Course Contents :**

**UNIT-I** : (a) *Educational Psychology* : Meaning, Nature and Scope.

  
Chairperson  
Department of Education  
Panjab University  
Chandigarh-160014



(b) Individual Differences – Causes, Significance and Educational Implications.


UNIT-II : (a) Nature of Human Growth and Development – Physical, Mental, Emotional and Social.  
(b) *Stages of Human Development* : Infancy and Childhood, their Needs, Significance and Problems.

UNIT-III : (a) *Learning* : Meaning and Definition.  
(b) Theories of Learning - Trial and Error by Thorndike and Classical Conditioning by Pavlov.

UNIT-IV : (a) *Intelligence* : Meaning, Types  
(b) Measurement of Intelligence.

**Readings  
Recommended :**

1. Aggarwal, J.C. : *Essentials of Educational Psychology*, Vikas Publishing House, Private Ltd., New Delhi, 1995.
2. Bhatia, H.R. : *A Textbook of Educational Psychology*, Asia Publishing House, New Delhi, 1977.
3. Bhatnagar, S. : *Shiksha Manovigyan*, International Publishing House, Meerut, 1977.
4. Dhingra, R. : *Educational Psychology and Guidance*, Punjab Katab Ghar, Jalandhar.
5. Kagan, J. and Lang, C. : *Psychology and Education*, Harcourt Brace Jovanovich, Inc., New York, 1978.
6. Kundu, D. : *Modern Educational Psychology*, Sterling Publishers (P.) Ltd., New Delhi, 1974.
7. Kuppaswamy, B. : *Advanced Educational Psychology*, Sterling Publishers (P.) Ltd., New Delhi, 1994.
8. Mangal, S.K. : *Advanced Educational Psychology*, Prentice Hall of India Ltd., New Delhi, 2002.
9. Mathur, S.S. : *Educational Psychology*, Vinod Pustak Mandir, Agra, 1998.
10. Kumar, Krishna : *What is worth teaching*; Orient Black Swan
11. Kumar, Krishna : *Political agenda of Education*, Sage Publishers
12. Kaur, Satvinderpal : *Padhaun Yog Ki Hai?* Saptrishi Publishers
13. Dewey, J. : *Democracy & Education*, Macmillan Publishers

  
Chairperson  
Department of Education  
Panjab University  
Chandigarh-160014

**MINOR DISCIPLINE COURSE (COURSE - II):**

Total Credits : 4 credits  
Semester : 15 weeks  
Class lecture : 60 hours (three 1 hour lecture per week)  
Field based learning/project/workshop activities/ visit to school: one 2 hour duration per week  
Max.Marks :100 marks  
Theory :90 marks  
Internal Assessment : 10 marks

**Any student opting Education as his/her minor course would be taking up the discipline specific course as his/her minor course.**

**The students would choose core paper from any other discipline (4 credits)**

  
Chairperson  
Department of Education  
Panjab University  
Chandigarh-160014

**B.A./B.Sc.(GENERAL) FIRST YEAR (SEMESTER SYSTEM ) 2023-24 SYLLABUS**

**ADULT EDUCATION  
SEMESTER-I**

**MAJOR DISCIPLINES SPECIFIC CORE (COURSE- CORE- I): EDUCATION**

Total Credits: 4 credits

Semester: 15 weeks

Class lecture: 60 hours (three 1 hour lecture per week)

Field based learning/project/workshop/activities: One 2 hour duration per week

Max. marks: 100 marks

Theory: 90 marks

Internal assessment: 10 marks

**INSTRUCTIONS FOR PAPER-SETTERS AND THE CANDIDATES:**

- i. There shall be 9 questions in all.
- ii. In Question No. One, 15 short answer type questions be asked spreading over whole syllabus to be answered in 10-20 words each. The students shall have to attempt 9 short answer type questions i.e. 2 marks of each. It shall carry 18 marks and shall be a compulsory question.
- iii. Rest of the paper shall contain 4 units. Each unit shall have 2 questions and the candidate shall be given internal choice. The candidates shall attempt 1 question from each unit i.e. in all of 18 marks each.
- iv. For private and re-appear candidates, who have not been assessed earlier for internal assessment, the marks secured by them in theory paper will proportionately be increased to maximum marks of the paper in lieu of internal assessment.

The paper-setter must put note (d) in the question paper.

**OBJECTIVES OF THE COURSE:**

The main objectives of the paper are;

1. To introduce students with meaning, scope and components of adult education.
2. To provide an overview of history of adult education.
3. To equip students with objectives, strategies and implementation of National Literacy Mission's Programs.
4. To acquaint students with structuring of teaching- learning environment for an adult learner.
5. To explain to students the various forms of Adult Education.

  
Chairperson  
Department of Education  
Panjab University  
Chandigarh-160014

**THEORY:****Unit-I**

- *Adult Education*: Concept, Meaning, Brief History during Post-Independence Period.
- *Village Level Planning Committees*: Structural Organisation, Functions, Preparation of Annual Plans, Recent Development.

**Unit-II**

- Scope and Components of Adult Education i.e. Literacy, Numeracy, Awareness and Functionality.
- *Post Literacy & Follow up*: Objectives, Scope and Strategies.

**Unit-III**

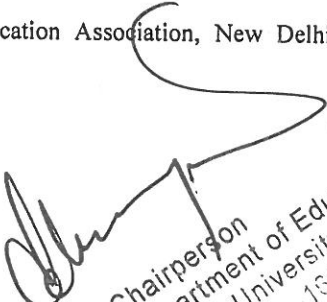
- *National Literacy Mission*: Objectives, Strategies and Implementation.
- *Sarv Siksha Abhiyaan*: Objectives, Implementation and Strategies.

**Unit-IV**

- *Sakshar Bhart Mission*: Objectives, Strategies and Implementation.
- *Life Long Learning*: Meaning, Concept and Importance.

**Books Recommended:**

1. Datta, S.C. : Adult Education in India, Indian Adult Education Association, New Delhi, 1986.
2. Directorate of Adult Education : The National Adult Education Programme, 1978.
3. Directorate of Adult Education, 1980 : Training of Adult Education Functionaries I-4, D.A.E., Ministry of Education, Govt. of India.
4. Directorate of Adult Education : Fifty years of Adult Education in India.
5. Dept. of Education, Ministry of Human Resource Development : National Literacy Mission, 1988.  
Govt. of India
6. Kundu, C.L. : Adult Education : Principles, Practices and Prospects  
sterling Publishers, Delhi, 1984.
7. Mali, M.G. : Adult Education in India, Deep and Deep Publication,  
New Delhi, 1984.
8. Mathur, B.M. : Adult Education & Social Change, The Associated  
Publishers, Ambala Cantt., 1989.
9. Pangotra, N.N. : Adult Education & Social Change, The Associated  
Publishers, Ambala Cantt., 1989.
10. Sharma, I.P. : Adult Education in India, National Book Organization,  
1985
11. Singh, Sohan : History of Adult Education, The Indian Adult  
Education Association, New Delhi, 1957.
12. Styler, W.E. : Adult Education in India, Oxford University Press, 1986.
13. Yadav, R.S. : Adult Education Training & Productivity. The Indian  
publications, Ambala Cantt., 1991.
14. N. Markandan : Village Planning Committee Origin and Evolution,  
Gandhigram Rural Institute (Deemed University,  
Gandhigram, Tamil Nadu, 1986.
15. R.Rengasamy : A Hand Book on Post Literacy and Follow up  
Madurai Kamaraj University, Madurai-625002, 1985.
16. J.C. Saxena : Role of Adult Education and Mass Media for Civic  
Education  
J.L. Sachdeva : Indian Adult Education Association, New Delhi, 1986

  
 Chairperson  
 Department of Education  
 Panjab University  
 Chandigarh-160014

17. S.R.Ranganathan : Literature for Neo-Literates,  
Indian Adult Education Association, New Delhi, 1966
18. S.R. Ranganathan : Human Values in Adult Education, Indian Adult  
Education : Association, R.M. Chetsingh Delhi, 1958.  
N.D. Godbole  
Kesari Hanuman
19. S.C. Dutta & : Training of Adult Educators, Shakuntala Publishing House,  
H.J. Fischer : Bombay-1972.
20. R.Rangasamy & : Teaching AIDS for Adult Education, Madurai Kamaraj  
S. Raju : University

**MINOR DISCIPLINE COURSE (COURSE - I):**

Total Credits : 4 credits  
Semester : 15 weeks  
Class lecture : 60 hours (three 1 hour lecture per week)  
Field based learning/project/workshop activities/ visit to school : one 2 hour duration per week  
Max.Marks :100 marks  
Theory :90 marks  
Internal Assessment : 10 marks

**Any student opting Education as his/her minor course would be taking up the discipline specific course as his/her minor course.**

**The students would choose core paper from any other discipline (4 credits)**

  
Chairperson  
Department of Education  
Panjab University  
Chandigarh-160014

**ADULT EDUCATION  
SEMESTER-II**

**MAJOR DISCIPLINES SPECIFIC CORE (COURSE- CORE- I): EDUCATION**

Total Credits: 4 credits

Semester: 15 weeks

Class lecture: 60 hours (three 1 hour lecture per week)

Field based learning/project/workshop/activities: One 2 hour duration per week

Max. marks: 100 marks

Theory: 90 marks

Internal assessment: 10 marks

**INSTRUCTIONS FOR PAPER-SETTERS AND THE CANDIDATES**

- i. There shall be 9 questions in all.
- ii. In Question No. One, 15 short answer type questions be asked spreading over whole syllabus to be answered in 10-20 words each. The students shall have to attempt 9 short answer type questions i.e. 2 marks of each. It shall carry 18 marks and shall be a compulsory question.
- iii. Rest of the paper shall contain 4 units. Each unit shall have 2 questions and the candidate shall be given internal choice. The candidates shall attempt 1 question from each unit i.e. in all of 18 marks each.
- iv. For private and re-appear candidates, who have not been assessed earlier for internal assessment, the marks secured by them in theory paper will proportionately be increased to maximum marks of the paper in lieu of internal assessment.


The paper-setter must put note (d) in the question paper.

- UNIT-I :**
1. Structuring Teaching Learning Environment for Adult Learners: Identification of Areas.
  2. Survey of the Community, Identification of Learners.
  3. Human Values in Adult Education.
  4. Meaning of Human Values, Aspects of Human Values ; Emotional, Intellectual , Spiritual and their Development.

- UNIT-II:**
1. Campaign for enrolment of Adult Learning, enrolment of the learners and day-to- day functioning of Adult Education Centre, Involvement of Community & Developmental Agencies.
  2. Development of Material for Post Literary and Follow up.

- UNIT-III :**
1. Various forms of Adult Education i.e. Social Education, Social Education as Remedial Education for Removing Tensions, for strengthening Social Consciousness, for Expanding Mental Horizons and Family Life Education.
  2. Vocational Skill Development for Adults.

- UNIT-IV:**
1. Basic Education and Life Long Education.
  2. Impact of ICTs on Life Long Education, Integrated approaches to Life Long Education.

  
Chairperson  
Department of Education  
Panjab University  
Chandigarh-160014


**PRACTICAL/FIELD WORK :**

Participation of the students in the following and preparation of Project Report:

1. Preparation of profile of the area.
2. Organization of Adult Education Centres for Basic Literacy Development.

**Books Recommended:**

1. Datta, S.C. : Adult Education in India, Indian Adult Education Association, New Delhi, 1986.
2. Directorate of Adult Education, Ministry of Education, Govt. of India. : Training of Adult Education Functionaries I-4, D.A.E., 1980
3. Directorate of Adult Education : Fifty years of Adult Education in India.
4. Dept. of Education, Ministry of Human Resource Development Govt. of India : National Literacy Mission, 1988.
5. Kundu, C.L. : Adult Education : Principles, Practices and Prospects sterling Publishers, Delhi, 1984.
6. Mali, M.G. : Adult Education in India, Deep and Deep Publication, New Delhi, 1984.
7. Mathur, B.M. : Adult Education & Social Change, The Associated Publishers, Ambala Cantt., 1989.
8. Pangotra, N.N. : Adult Education & Social Change, The Associated Publishers, Ambala Cantt., 1989.
9. Sharma, I.P. : Adult Education in India, National Book Organization, 1985
10. Singh, Sohan : History of Adult Education, The Indian Adult Education Association, New Delhi, 1957.
11. Styler, W.E. : Adult Education in India, Oxford University Press, 1986.
12. Yadav, R.S. : Adult Education Training & Productivity. The Indian publications, Ambala Cantt., 1991.
14. N. Markandan : Village Planning Committee Origin and Evolution, Gandhigram Rural Institute (Deemed University), Gandhigram, Tamil Nadu, 1986.
18. S.R. Ranganathan : Human Values in Adult Education, Indian Adult Education Association, R.M. Chetsingh Delhi, 1958.  
N.D. Godbole  
Kesari Hanuman
19. S.C. Dutta & : Training of Adult Educators, Shakuntala Publishing House, H.J. Fischer Bombay-1972.
20. R.Rangasamy & : Teaching AIDS for Adult Education, Madurai Kamaraj S. Raju University

  
Chairperson  
Department of Education  
Panjab University  
Chandigarh-160014

**MINOR DISCIPLINE COURSE (COURSE -II):**

Total Credits : 4 credits  
Semester : 15 weeks  
Class lecture : 60 hours (three 1 hour lecture per week)  
Field based learning/project/workshop activities/ visit to school : one 2 hour duration per week  
Max.Marks :100 marks  
Theory :90 marks  
Internal Assessment : 10 marks

**Any student opting Education as his/her minor course would be taking up the discipline specific course as his/her minor course.**

**The students would choose core paper from any other discipline (4 credits)**

  
Chairperson  
Department of Education  
Panjab University  
Chandigarh-160014



**UNDERGRADUATE PROGRAMME UNDER NEP-2020  
PHYSICAL EDUCATION  
SEMESTER - I**

Course Type	Course Code	Course Title	Marks	Credit
DISCIPLINE SPECIFIC CORE	DSC -I	Introduction to Physical Education and Sports.	100	4
MINOR DISCIPLINE COURSE	MDC-I	Physical Education	100	4
ABILITY ENHANCEMENT COURSE	AEC-I	Can be opted from the common basket of Languages	50	2
	AEC-II		50	2
VALUE ADDED COURSE	VAC -I	Health and Wellness	50	2
SKILL ENHANCEMENT COURSE	SEC-I	Physical Education	75	3
MULTI DISCIPLINARY	MDSC -I	Physical Education	75	3
COMMUNITY SERVICE / OUTREACH	CEOIF-I	Community Service / Outreach	50	2
<b>Total</b>			<b>550</b>	<b>22</b>

**SEMESTER - II**

Course Type	Course Code	Course Title	Marks	Credit
DISCIPLINE SPECIFIC CORE	DSC -II	Physical Education	100	4
DISCIPLINE SPECIFIC CORE	DSC -II	Introduction to Physical Education and Sports.	100	4
MINOR DISCIPLINE COURSE	MDC-II	Physical Education	100	4
ABILITY ENHANCEMENT COURSE	AEC-III	Can be opted from the common basket of Languages	50	2
	AEC-IV		50	2
VALUE ADDED COURSE	VAC -II	Yoga	50	2
SKILL ENHANCEMENT COURSE	SEC-II	Physical Education	75	3
MULTI DISCIPLINARY	MDSC -II	Physical Education	75	3
INTERNSHIP	CEOIF-II	Internship	50	2
<b>Total</b>			<b>550</b>	<b>22</b>

*24/05/2023*

(Prof. Th. Nandalal Singh)

Officiating Chairperson  
Chairman (Officiating)  
Department of Physical Education,  
Panjab University, Chandigarh


<b>PHYSICAL EDUCATION</b> ✓	
<b>DISCIPLINE SPECIFIC CORE (DSC) -I</b>	<b>SEMESTER-I</b>
<b>Course Objectives</b>	<ol style="list-style-type: none"> <li>1. To understand the Introduction of Physical Education and Sports.</li> <li>2. To teach the concept of health and wellness.</li> <li>3. To understand the Physical Education as a separate discipline.</li> </ol>
<b>Course Outcome</b>	<ol style="list-style-type: none"> <li>1. Students will come to know the meaning and concept of physical education and sports.</li> <li>2. Students will understand the basics of Games and Sports.</li> <li>3. Physical fitness of students will improve.</li> </ol>
<b>Outline Syllabus</b>	Introduction to Physical Education and Sports.
<b>Credit</b>	4
<b>Marks</b>	100
<b>Contact Hrs</b>	60
<b>UNITS</b>	<b>TOPICS</b>
<b>Unit 1</b>	<ol style="list-style-type: none"> <li>1. Meaning and concept of Education and Physical Education.</li> <li>2. Aim and Objectives of Physical Education.</li> <li>3. Need and Importance of Physical Education in modern society.</li> <li>4. Relationship of Physical Education with other allied sciences (Anatomy, physiology, bio mechanics, psychology and anthropometry).</li> </ol>
<b>Unit 2</b>	<ol style="list-style-type: none"> <li>1. History of Physical Education and Sports in Pre and Post Independence Era in India.</li> <li>2. Ancient Olympic Games and Modern Olympic Games.</li> <li>3. Asian Games, Common Wealth Games.</li> <li>4. Paraspports (sports for people with physical and intellectual disability)</li> </ol>
<b>Unit 3</b>	<ol style="list-style-type: none"> <li>1. Rajiv Gandhi Khel Ratna</li> <li>2. Dronacharya Award</li> <li>3. Arjuna Award</li> <li>4. Maharaja Ranjit Singh Award</li> </ol>
<b>Unit 4</b>	<ol style="list-style-type: none"> <li>1. Netaji Subash National Institution of Sports</li> <li>2. Sports Authority of India</li> <li>3. Indian Olympic Association</li> <li>4. International Olympic Committee</li> </ol>
<b>DISCIPLINE SPECIFIC CORE (DSC) -II</b>	<b>SEMESTER-II</b>
<b>Unit 1</b>	<ol style="list-style-type: none"> <li>1. Meaning and concept of Warming Up and Cooling Down in Sports, Types of Warming Up.</li> <li>2. Importance of Warming Up and Cooling Down in Sports.</li> <li>3. Meaning, definition and components of Physical Fitness.</li> <li>4. Factors influencing Physical Fitness (age, gender, body composition, diet, climate, exercise)</li> </ol>
<b>Unit 2</b>	<ol style="list-style-type: none"> <li>1. Human Cell, Structure and function of human cell.</li> <li>2. Meaning of Anatomy.</li> <li>3. Meaning and functions of Skelton system.</li> <li>4. Types of bones and name of various bones of the body.</li> </ol>

Chairman  
Department of Physical Education,  
Panjab University, Chandigarh

<b>Unit 3</b>	<ol style="list-style-type: none"> <li>1. Types of joints of the human body.</li> <li>2. Various movements around the joints.</li> <li>3. Effects of exercise on skeletal system.</li> </ol>
<b>Unit 4</b>	<ol style="list-style-type: none"> <li>1. Meaning and Importance of First Aid in Sports.</li> <li>2. Prevention of Sports Injuries.</li> <li>3. First Aid for sports injuries: Sprain, Strain, Dislocation, Tennis Elbow, Fracture, Laceration, Abrasion, Contusion, Drowning.</li> <li>4. Rehabilitation of Sports Injuries.</li> </ol>
<b>Practical Syllabus</b>	
<b>Sprints (Types of Start and Finish)</b>	<ol style="list-style-type: none"> <li>1. Crouch start-fixing of starting blocks, getting in and off the block, emphasizing on body position, need of starting blocks in a sprint race.</li> <li>2. Practice of starts with starting blocks using proper commands.</li> <li>3. Training the students for correct running style.</li> <li>4. Practice of finishing the sprint with different techniques.</li> </ol> <p>Rules and Regulations of Sprint races.</p>
<b>Middle Distance, Long Distance and Walking Events</b>	<ol style="list-style-type: none"> <li>1. Marking of standard tracks, width of lanes and starting points for various races.</li> <li>2. Practical of Standing Start.</li> <li>3. Correct running and walking style, emphasis on proper body position and foot placement.</li> <li>4. Running Tactics, Rules of competition.</li> </ol>
<b>Physical Exercises (Speed and agility)</b>	<p>Test -1 SPEED: 50 Metre Dash Test.</p> <p>Test- 2 AGILITY: Shuttle Run Test.</p>

## REFERENCES

1. Barrow, H. M. (1983): "Man and Movements: Principles of Physical Education", Philadelphia, Lea and Febiger.
2. Bucher, C. A. (1979) : "Foundations of Physical Education," St. Louis C.V. Mosby Company. 4. Chauhan, S.S. (1985) : "Advanced Educational Psychology", New Print-India Pvt. Ltd., Sahibabad, U.P.
3. Moslon (1976) : "The Olympian", Olympic House, Canada. 8. Puni, A.T. (1980) : "Sports Psychology", An abridged Translated by G.S.Sandhu, NIS, Patiala.
4. Sharma, P.D. (1996) : "Olympics : Athens to Atlanta, 1896-1996", Friends Publications (India) Delhi.
5. Sheldon, W.H. (1940) : "The Varieties of Human Physique", New York, Harper and Row Publishers.
6. Singh, Ajmer et al (2000) : "Modern Text Book of Physical Education, Health and Sports", Kalyani Publishers, Ludhiana.
7. Skinner, C. E. (1964) : "Educational Psychology", 4 th edition, Prentice Hall of India Pvt. Ltd. 13. Narayanan T. C. and Hariharan : "An Analytical History of Physical Education", S. (1975) South India Press, Karaikudi

  
 Chairman  
 Department of Physical Education,  
 Panjab University, Chandigarh


<b>PHYSICAL EDUCATION</b>	
<b>MINOR DISCIPLINE COURSE (MDC)-I</b>	<b>SEMESTER-I</b>
<b>Course Objectives</b>	<ol style="list-style-type: none"> <li>1. To highlight the aim and objectives of Physical Education.</li> <li>2. To teach the importance of first aid and good posture.</li> <li>3. To understand the importance of health, nutrition, physiological and physical fitness components</li> </ol>
<b>Course Outcome</b>	<ol style="list-style-type: none"> <li>1. Students will come to know the meaning and concept of physical education.</li> <li>2. Students will come to know the the importance of first aid and good posture.</li> <li>3. Students will understand the importance of health, nutrition, physiological and physical fitness components.</li> </ol>
<b>Credit</b>	4
<b>Marks</b>	100
<b>Contact Hrs</b>	60
<b>UNITS</b>	<b>TOPICS</b>
<b>Unit 1</b>	Introduction. <ul style="list-style-type: none"> <li>▪ Meaning and definition of physical education</li> <li>▪ Aim and objectives of physical education</li> <li>▪ Need and importance of physical education in modern Era</li> </ul> Historical Perspective of Physical Education <ul style="list-style-type: none"> <li>▪ Pre-independence development of physical education</li> <li>▪ Post- independence development</li> </ul>
<b>Unit 2</b>	First Aid. <ul style="list-style-type: none"> <li>▪ Meaning and importance of first-aid,</li> <li>▪ First-aid, in case of dislocation of joints, fracture of bone, drowning</li> <li>▪ Sports injuries and their management</li> <li>▪ Sprain, strain, concussion, abrasion</li> </ul> Prevention of injuries <ul style="list-style-type: none"> <li>▪ Warming up - meaning, definition, types and importance</li> <li>▪ Cooling down - meaning, and importance</li> </ul>
<b>Unit 3</b>	Posture and Postural Deformities <ul style="list-style-type: none"> <li>▪ Meaning, types and importance of good posture</li> <li>▪ Causes, prevention and remedial measures of poor posture</li> <li>▪ Postural deformities; kyphosis, lordosis, scoliosis, flat foot, bowlegs, knock knees, (their causes and corrective exercises)</li> </ul> Disability and Rehabilitation <ul style="list-style-type: none"> <li>▪ Meaning, types, causes and preventive measures of disability</li> <li>▪ Physical activity and health for disabled</li> <li>▪ Meaning and scope of rehabilitation</li> </ul>
<b>Unit 4</b>	General Physiological Concepts <ul style="list-style-type: none"> <li>▪ Oxygen debt</li> <li>▪ Vital capacity</li> <li>▪ Second wind</li> <li>▪ Stitch in the side</li> <li>▪ Blood pressure</li> <li>▪ Muscular contraction</li> </ul>

Chairman  
 Department of Physical Education,  
 Panjab University, Chandigarh

	<ul style="list-style-type: none"> <li>▪ Obesity</li> </ul> <p>International Sports Events and Awards.</p> <ul style="list-style-type: none"> <li>▪ Olympic games; (objectives of Olympics Olympic Moto, flag, emblem, torch, opening and closing ceremony)</li> <li>▪ Asian games</li> <li>▪ Common wealth games</li> <li>▪ Special Olympic games</li> </ul>
<b>MINOR DISCIPLINE COURSE (MDC)-II</b>	<b>SEMESTER-II</b>
<b>Unit 1</b>	<p>Health and Health Education</p> <ul style="list-style-type: none"> <li>▪ Health- meaning and definition of health</li> <li>▪ Health education- meaning, definition, aim and principles of health education</li> </ul> <p>Nutrition and Weight Management</p> <ul style="list-style-type: none"> <li>▪ Concept of nutrients, nutrition and balance diet</li> <li>▪ Obesity – concept causes and management</li> <li>▪ Obesity related health problems</li> <li>▪ BMI</li> </ul>
<b>Unit 2</b>	<p>Personality – meaning, definition and role of physical education and sports in development of personality</p> <p>Psychological problems of adolescents – role of physical education and sports in solving the problems of adolescents</p>
<b>Unit 3</b>	<p>Careers in Physical Education.</p> <ul style="list-style-type: none"> <li>▪ Career options in fitness, teaching, coaching, sports management, sports, journalism, media, commentator, officials</li> <li>▪ Professional Courses in physical education and sports in India</li> <li>▪ Institutes for physical education courses.</li> </ul> <p>Physical Fitness</p> <ul style="list-style-type: none"> <li>▪ Meaning, components, factors affecting physical fitness</li> </ul>
<b>Unit 4</b>	<p>Competitions</p> <ul style="list-style-type: none"> <li>▪ meaning of competitions</li> <li>▪ Meaning and types of tournaments</li> <li>▪ Drawing fixtures of various tournaments</li> </ul> <p>Athletic Meet and Camps</p> <ul style="list-style-type: none"> <li>▪ Organization of athletic meet</li> <li>▪ importance of athletic meet</li> <li>▪ Camp – meaning, aim and objectives</li> <li>▪ Organization of sports camps</li> </ul>

**REFERENCES**

1. Barrow, H. M. (1983): "Man and Movements: Principles of Physical Education", Philadelphia, Lea and Febiger.
2. Bucher, C. A. (1979) : "Foundations of Physical Education," St. Louis C.V. Mosby Company.
3. Chauhan, S.S. (1985) : "Advanced Educational Psychology", New Print-India Pvt. Ltd., Sahibabad, U.P.
3. Moslon (1976) : "The Olympian", Olympic House, Canada.
4. Puni, A.T. (1980) : "Sports Psychology", An abridged Translated by G.S.Sandhu, NIS, Patiala.
4. Sharma, P.D. (1996) : "Olympics : Athens to Atlanta, 1896-1996", Friends Publications (India) Delhi.
5. Sheldon, W.H. (1940) : "The Varieties of Human Physique", New York, Harper and Row Publishers.
6. Singh, Ajmer et al (2000) : "Modern Text Book of Physical Education, Health and Sports", Kalyani Publishers, Ludhiana.

  
 Chairman  
 Department of Physical Education,  
 Panjab University, Chandigarh

<b>VALUE ADDED COURSE</b> <b>(Health and Wellness)</b>	
<b>VALUE ADDED COURSE (VAC) -I</b>	
<b>Course Objectives</b>	<ol style="list-style-type: none"> <li>1. To introduce the concepts of health and wellness.</li> <li>2. To provide a general understanding of balanced diet and stress management.</li> <li>3. To familiarize the students regarding yoga and other activities for developing fitness and wellness.</li> </ol>
<b>Course Outcome</b>	<ol style="list-style-type: none"> <li>1. Students will learn the concepts of health and wellness.</li> <li>2. Students will learn about the balanced diet and stress management techniques.</li> <li>3. Students will learn about yoga and other activities for developing their fitness and wellness.</li> </ol>
<b>Outline Syllabus</b>	<b>Health and Wellness</b>
<b>Credit</b>	2
<b>Marks</b>	50
<b>Contact Hrs</b>	30
<b>UNITS</b>	<b>TOPICS</b>
<b>Unit 1</b>	<p><b>Concept of Physical Education and Health</b></p> <ul style="list-style-type: none"> <li>▪ Definition, Aims and Objectives of Physical Education</li> <li>Importance and Scope of Physical Education</li> <li>▪ Modern concept of Health, Physical fitness and Wellness</li> </ul> <p><b>Components of wellness</b></p> <ul style="list-style-type: none"> <li>▪ Physicals components - Speed, Strength, Endurance, Flexibility and Coordinative Abilities</li> <li>▪ Emotional component, Social components, Psychological component</li> </ul>
<b>Unit 2</b>	<p><b>Principles of Exercise Programme</b></p> <ul style="list-style-type: none"> <li>▪ Activities for developing Fitness Components</li> <li>▪ Nutrition, Food supplements and their importance</li> <li>▪ Balanced Diet</li> </ul> <p><b>Yoga and Stress Management</b></p> <ul style="list-style-type: none"> <li>▪ Asanas and its effects, Padmasana, Halasana, Bhujangasana, Shalabhasana, Dhanurasana, Shavasana, Vajrasana, Chakrasana</li> </ul>
<b>Practical Syllabus</b>	<ol style="list-style-type: none"> <li>1. Practice of all yoga asana mentioned in theory syllabus</li> <li>2. AAPHER Physical Fitness Test.</li> <li>3. Postural Deformities – Corrective measures Stress Management and Relaxation Techniques</li> </ol>

**REFERENCES**


1. Frank, H. & Walter, H. (1976). *Turners school health education*. Saint Louis: The C.V. Mosby Company.
2. Giam, C.K & The, K.C. (1994). *Sport medicine exercise and fitness*. Singapore: P.G. Medical Book.
3. Shankar, G. (1998) *Holistic approach of yoga*. New Delhi: Aditya Publishers.
4. Sharkey, B. J. (1990). *Physiology of fitness*, Human Kinetics Book.
5. Shekar, K. C., (2003). *Yoga for health*. Delhi: Khel Sahitya Kendra.

Chairman  
Department of Physical Education,  
Panjab University, Chandigarh

VALUE ADDED COURSE (YOGA) ✓	
VALUE ADDED COURSE (VAC)-II	
Course Objectives	1. To understand the Foundation of Yoga. 2. To highlight the importance of Yoga and Meditation. 3. To provide a general understanding of Asanas, Kriya, Pranayama
Course Outcome	1. Students will be able to understand the Foundation of Yoga. 2. Students will learn the importance of Yoga and Meditation. 3. Students will learn Asanas, Kriya, Pranayama.
Outline Syllabus	Yoga
Credit	2
Marks	50
Contact Hrs	30
UNITS	TOPICS
Unit 1	Introduction and Foundation of Yoga <ul style="list-style-type: none"> <li>▪ Origin of yoga and it's development</li> <li>▪ Meaning of yoga and its importance</li> <li>▪ Meditation; meaning, definition, meditation types and principles</li> </ul>
Unit 2	Asanas, Pranayama and Kriya <ul style="list-style-type: none"> <li>▪ Principles of yogic practices</li> <li>▪ Asanas; meaning and definition of asanas, its types</li> <li>▪ Pranayama; meaning and definition of pranayama, it's types</li> <li>▪ Kriya; meaning and definition of Kriya, it's types</li> </ul>
Practical syllabus	<ul style="list-style-type: none"> <li>▪ Standing Asanas- vrikshasana, Tadasana</li> <li>▪ Sitting asanas - Padmasana, vrikshasana, Paschimuttanasana</li> <li>▪ Lying asanas- (supine position)- Halasana, Sarvangasana, Naukasana</li> <li>▪ Prone position asanas - Bhujangasana, Dhanurasna, Navasana</li> <li>▪ Suryanaskar</li> <li>▪ Practice of pranayama- bhastrika, kapalbhati, anulom vilom</li> </ul>

**REFERENCES:**


1. Brown, F. Y.,(2000). *How to use yoga*. Delhi:Sports Publication.
2. Gharote, M. L. & Ganguly, H.(1988). *Teaching methods for yogic practices*. Lonawala: Kaixydahmoe.
3. Rajjan, S. M. (1985). *Yoga strengthening of relaxation for sports man*. New Delhi: Allied Publishers.
4. Shankar,G. (1998) *Holistic approach of yoga*. New Delhi:Aditya Publishers.
5. Shekar,K. C., (2003).*Yoga for health*. Delhi: Khel Sahitya Kendra.

  
Chairman  
Department of Physical Education,  
Panjab University, Chandigarh

<b>VALUE ADDED COURSE (Sports and Fitness)</b>	
<b>VALUE ADDED COURSE (VAC) -III</b>	
<b>Course Objectives</b>	1. To highlight the importance of Sports 2. To highlight the concept of fitness and 3. To understand concept of sports training methods
<b>Course Outcome</b>	1. Students will learn the importance of Sports 2. Students will understand the concept of fitness 3. Students will understand the concept of different training methods
<b>Outline Syllabus</b>	<b>Sports and Fitness</b>
<b>Credit</b>	2
<b>Marks</b>	50
<b>Contact Hrs</b>	30
<b>UNITS</b>	<b>TOPICS</b>
<b>Unit 1</b>	<b>SPORTS</b> <ul style="list-style-type: none"> <li>▪ Sports: meaning, definition and importance</li> <li>▪ Meaning and Definition of Sports Training</li> <li>▪ Aim and Objective of Sports Training</li> <li>▪ Principles of Sports Training</li> <li>▪ Concept of warming up and cooling down.</li> <li>▪ Role of weight training in games and sports.</li> <li>▪ Recreational and Lead up games</li> </ul>
<b>Unit 2</b>	<b>FITNESS</b> <ul style="list-style-type: none"> <li>▪ Fitness: meaning, definition and importance</li> <li>▪ Speed: meaning, definition and its types</li> <li>▪ Strength: meaning, definition and its types</li> <li>▪ Flexibility: meaning, definition and its types</li> <li>▪ Endurance: meaning, definition and its types</li> <li>▪ Coordinative abilities</li> <li>▪ Training Load, Principles of load, Over Load (Causes and symptoms)</li> </ul>
<b>Practical Syllabus</b>	<ul style="list-style-type: none"> <li>▪ Continuous Training Method</li> <li>▪ Interval Training Method</li> <li>▪ Circuit Training Method</li> <li>▪ Fartlek Training Method</li> <li>▪ Weight Training Method</li> <li>▪ Exercises: stretching, jumping, rotational</li> </ul>


**REFERENCES:**

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

  
 Chairman  
 Department of Physical Education,  
 Panjab University, Chandigarh



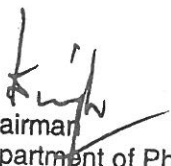
PHYSICAL EDUCATION	
<b>SKILL ENHANCEMENT COURSE (SEC)-I</b>	<b>SEMESTER-I</b>
<b>Course Objectives</b>	<ol style="list-style-type: none"> <li>1. To handle sports events professionally.</li> <li>2. To provide first aid safely and effectively.</li> <li>3. To improve professional communication skills.</li> </ol>
<b>Outcome</b>	<ol style="list-style-type: none"> <li>1. Students will be able to manage the sports competition and will be able to report effectively.</li> <li>2. Students will be able to assess situations and circumstances in order to provide first aid safely and effectively.</li> <li>3. Students will also learn effective gym management and communication.</li> </ol>
<b>Credit</b>	3
<b>Marks</b>	75
<b>Contact Hrs</b>	45
<b>UNITS</b>	<b>TOPICS</b>
<b>Unit 1</b>	<ol style="list-style-type: none"> <li>1. First aid- Meaning, Principals of giving first aid and its importance in common life.</li> <li>2. Modern gym and its importance in society and gym management.</li> <li>3. Physiotherapy, Naturopathy and Yogic Therapy for maintaining good health.</li> </ol>
<b>Unit 2</b>	<ol style="list-style-type: none"> <li>1. Sports Management: meaning, importance and concept of sports management.</li> <li>2. Scope of sports management.</li> <li>3. Various sports mega events and their management.</li> </ol>
<b>Unit 3</b>	<ol style="list-style-type: none"> <li>1. Sports Journalism: Meaning and Definition.</li> <li>2. Types of sports journalism.</li> <li>3. Scope of Sports Journalism.</li> </ol>
<b>SKILL ENHANCEMENT COURSE (SEC)-II</b>	<b>SEMESTER-II</b>
<b>Units</b>	<b>Topics</b>
<b>Unit 1</b>	<ol style="list-style-type: none"> <li>1. Adventure Sports: Meaning and its definition.</li> <li>2. Types and risk associated with adventure sports.</li> <li>3. Professional avenues in adventure sports</li> </ol>
<b>Unit 2</b>	<ol style="list-style-type: none"> <li>1. Meaning and scope of sports psychology.</li> <li>2. Aims and objectives of sports psychology.</li> <li>3. The role of sports Psychologist in maintaining performance of sports persons.</li> </ol>

  
 Chairman  
 Department of Physical Education,  
 Panjab University, Chandigarh

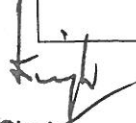
<b>Practical Syllabus</b>	<ol style="list-style-type: none"><li>1. First aid Training.</li><li>2. Project work on sports journalism and management.</li><li>3. Understanding Physiotherapy.</li><li>4. AAHPER Physical Fitness Test</li></ol>
---------------------------	---

**REFERENCES:**

1. Ashton, D. (1968). Administration of physical education for women. New York: The Ronal Press
2. Bucher, C.A. (1978). Administration of physical education and athletic programme. 7th Edition, St. Louis: The C.V. Mosby Co.
4. Christine, M. D. (1999). *Physiology of sports and exercise*. USA: Human Kinetics.
5. Conley, M.(2000). *Bioenergetics of exercise training*. In T.R. Baechle, & R.W. Earle, (Eds.), *Essentials of Strength Training and Conditioning* (pp. 73-90). Champaign, IL: Human Kinetics.
6. Daughtrey, G. & Woods, J.B. (1976). Physical education and intramural programmes, organization and administration. Philadelphia U.S.A. : W.B. Saunders Cp.
7. Earl, F. Z,& Gary, W. B. (1963). Management competency development in sports and physical education. Philadelphia: W. Lea and Febiger.
8. Kamlesh, M.L. (1998). Psychology in physical education and sport. New Delhi: Metropolitan Book Co.
9. Wilmore, Jack H and Costill, David L. (1994). *Physiology of Sports and Exercise*. Human Kinetics.

  
Chairman  
Department of Physical Education,  
Panjab University, Chandigarh

PHYSICAL EDUCATION ✓	
<b>MULTI DISCIPLINARY (MDSC) -I</b>	<b>SEMESTER-I</b>
Credit	3
Contact Hrs	45
Course objectives	<ol style="list-style-type: none"> <li>1. To understand the modern lifestyle.</li> <li>2. To know inter-disciplinary approach to physical education.</li> <li>3. To understand the guidelines of various health management agencies.</li> </ol>
Course Outcomes	<ol style="list-style-type: none"> <li>1. Students will learn the variety of motor skills and leisure time activities.</li> <li>2. They will understand the importance of maintaining a healthy lifestyle.</li> <li>3. Students will maintain a health related physical fitness.</li> </ol>
<b>UNITS</b>	<b>TOPICS</b>
Unit 1	<ol style="list-style-type: none"> <li>1. Understanding modern life style, side effects of modern life style.</li> <li>2. Physical education in modern India and its importance in nation building.</li> <li>3. WHO (World Health Organization) and its guidelines for physical activity.</li> <li>4. Indian Health Ministry and its role in health management.</li> </ol>
Unit 2	<ol style="list-style-type: none"> <li>1. Physical education as an art and science</li> <li>2. Philosophical foundation (Different philosophy of physical education) Sports and physical education in traditional India</li> <li>3. Indian rural sports.</li> </ol>
Unit 3	<ol style="list-style-type: none"> <li>1. Sociological foundation of Physical Education.</li> <li>2. Family and role of family in sports men life.</li> <li>3. Education institution and their role in promoting physical education and sports.</li> <li>4. Role of society in promoting physical education and sports.</li> </ol>
<b>MULTI DISCIPLINARY (MDSC) -II</b>	<b>SEMESTER-II</b>
<b>Units</b>	<b>Topics</b>
Unit 1	<ol style="list-style-type: none"> <li>1. Meaning, definition and components of physical fitness.</li> <li>2. Meaning of Physical activity and yoga.</li> <li>3. Role of physical activity and yoga in maintaining physical fitness.</li> <li>4. Various yoga asana to improve physical health.</li> </ol>
Unit 2	<ol style="list-style-type: none"> <li>1. Various factors effecting physical fitness.</li> <li>2. Influence of age, Sex, body composition on physical fitness.</li> <li>3. Diet, climate and their effects on physical fitness.</li> <li>4. Various methods to maintain physical fitness.</li> </ol>

  
 Chairman  
 Department of Physical Education,  
 Panjab University, Chandigarh

<b>Unit 3</b>	<ol style="list-style-type: none"><li>1. Meaning and definition of Hygiene.</li><li>2. Importance of personal and social hygiene.</li><li>3. Methods of maintaining personal and social hygiene.</li><li>4. Principle of yoga in maintaining personal hygiene.</li></ol>
<b>Practical Syllabus</b>	<ol style="list-style-type: none"><li>1. <b>Fitness Tests:</b> More emphasis shall be given on general physical fitness and principles of physical exercises (Speed and agility). Test- 1 SPEED : 50 Metre Dash Test. Test -2 AGILITY : Shuttle Run Test.</li><li>2. <b>Yoga Asanas:</b> Practice of Surya Namaskar. Tadasana, Trikon Asana and Bhujang Asana.</li><li>3. Project work on hygiene.</li></ol>

## REFERENCES

1. Barrow, H. M. (1983): "Man and Movements: Principles of Physical Education", Philadelphia, Lea and Febiger.
2. Bucher, C. A. (1979) : "Foundations of Physical Education," St. Louis C.V. Mosby Company.
4. Chauhan, S.S. (1985) : "Advanced Educational Psychology", New Print-India Pvt. Ltd., Sahibabad, U.P.
3. Moslon (1976) : "The Olympian", Olympic House, Canada. 8. Puni, A.T. (1980) : "Sports Psychology", An abridged Translated by G.S.Sandhu, NIS, Patiala.
4. Sharma, P.D. (1996) : "Olympics : Athens to Atlanta, 1896-1996", Friends Publications (India) Delhi.
5. Sheldon, W.H. (1940) : "The Varieties of Human Physique", New York, Harper and Row Publishers.
6. Singh, Ajmer et al (2000) : "Modern Text Book of Physical Education, Health and Sports", Kalyani Publishers, Ludhiana.
7. Skinner, C. E. (1964) : "Educational Psychology", 4 th edition, Prentice Hall of India Pvt. Ltd. 13. Narayanan T. C. and Hariharan : "An Analytical History of Physical Education", S. (1975) South India Press, Karaikudi



Chairman  
Department of Physical Education,  
Panjab University, Chandigarh

**PANJAB UNIVERSITY, CHANDIGARH**

From

Assistant Registrar (General)  
Panjab University  
Chandigarh.

To

Chairperson  
Deptt. of Education  
P.U., Chd.

No. \_\_\_\_\_/GM

Date: \_\_\_\_\_

Sub:- Eligibility for admission to M.A. (Education) Course

Madam,

This has reference to your letter No. 3699/Edu. dated 14.03.2023 addressed to DUI on the subject cited above.

It is to inform you that the Hon'ble Vice-Chancellor, in anticipation approval of the Academic Council, Regulation Committee, Syndicate and Senate has approved the following eligibility criteria for admission to M.A. (Education) w.e.f. the session 2023-24 duly recommended by the Faculty of Education dated 26.03.2023 (para 7):

**PRESENT REGULATION**

1.2 A person who has passed one of the following examinations from the Panjab University or an examination recognized by the Syndicate as equivalent thereto, shall be eligible to join the M.A. degree course, other than in Physical Education :-

- (i) A Bachelor's degree obtaining at least 45 per cent marks in the subject of Postgraduate course, or 50 per cent marks in the aggregate.
- (ii) B.A. with Honours in the subject of the Postgraduate course or B.Sc. Hons. School course.
- (iii) Master's degree examination in any other subject.

Provided that:

- (a) Bachelor's degree in any discipline/stream with 50% marks from only recognized Indian University with B.Ed.

**PROPOSED REGULATION**

1.2 No Change

**For Indian Nationals:**

- (i) A Bachelor's degree in any stream from a UGC recognized University with 50% marks in aggregate.
- (ii) To be Deleted
- (iii) No Change

Provided that:

- (a) To be Deleted

OR

A student who has passed B.A./B.Sc. examination with Education or Philosophy or Psychology or Sociology or Public Administration or History or Economics or Geography or Political Science or Anthropology with 50% marks.

(b) For Foreign National students who have 50% marks in the qualifying examination or equivalent grade from Foreign University having the equivalent graduate degree certificate by the Association of Indian University (AIU)

(b) For Foreign National students who have 50% marks in the qualifying examination or equivalent grade from Foreign University having the equivalent graduate degree certificate by the Association of Indian University (AIU)

Yours faithfully

Sd/-

Assistant Registrar (General)

Endst. No. 7130 /GM

Dated 3/5/23

Copy of the above is forwarded to the following for information and necessary action:

- 1. DUI
- 2. Controller of Examination
- 3. Chairperson, USOL
- 4. D.R. (Examinations)
- 5. D.R. (Colleges)
- 6. D.R. (Secrecy)
- 7. A.R (R & S)
- 8. A.R.(CET)
- 9. O.S.M-I with file to place the matter before Academic Council for information
- 10. O.S. (Regulations)

*Not:- Related files, penalty of Amt's need*

*2/5/23*

Assistant Registrar (General)

**PANJAB UNIVERSITY, CHANDIGARH**

(Established under the Panjab University Act VII of 1947- enacted by the govt. of India)

&amp;

**BORDER SECURITY FORCE**

Under – MoU

**COURSE CALAENDER- 2023-24**

Sl No	NAME OF COURSE	Duration	Course Code	DURATION OF COURSE	PERIOD	
					FROM	TO
1	Sports Physiotherapy Assistant Course	20 weeks plus 04 weeks internship	SPA	20 weeks regular plus 04 weeks internship	Jan' 2024	June' 2024
2	Fitness Trainer /Gym trainer	12 weeks	FTGT	12 weeks	Oct' 2023	Dec' 2023
3	Scientific Recruit Training Methodologies-01	08 weeks	SRTM	08 weeks	01/05/2023	23/06/2023
	Scientific Recruit Training Methodologies-02	08 weeks	SRTM	08 weeks	14/08/2023	06/10/2023
	Scientific Recruit Training Methodologies-03	08 weeks	SRTM	08 weeks	06/11/2023	29/12/2023

Pro. Prashant Kumar Gautam

Prof. Dalwinder Singh

Dr. Rakesh Malik

Dr. Rakesh Kumar

Dr. Manjit Singh

-392-

# PANJAB UNIVERSITY, CHANDIGARH

(Established under the Panjab University Act VII of 1947-enacted by the Govt. of India)

&

## BORDER SECURITY FORCE

(MHA, Govt. of India)



Under – MOU

SYLLABI

### FOR CERTIFICATE COURSE IN SPORTS PHYSIOTHERAPY ASSISTANT

(CODE- SPA)

For the session of 2023-24

*Handwritten signatures and notes:*  
1. A signature on the left.  
2. A signature in the center with the word 'Name' written below it.  
3. A signature on the right with the word 'Rank' written below it.  
4. The text '11 Page 1' at the bottom right.



**OUTLINES OF TEST, SYLLABI SCORING, GRADING FOR THE SPORTS  
PHYSIOTHERAPY ASSISTANT COURSE- (SPA)**

The course of instructions for the Sports physiotherapy Assistant (SPA) examination consists of two parts as under-

PART-1	*Theory Papers (SPA-1, SPA-2, SPA-3)	300 Marks
PART-2	**Practical Course (Skill and Prowess)	200 Marks

**Total: 500 Marks**

**Note I:**

*\*Part-I: -Examination process considering of paper setting, evaluation etc. will be carried out internally by the experts approved by JAC of Directorate of Sports, Panjab University. The result will be prepared by BSF in coordination with Directorate of Sports Panjab University, Chandigarh and same will be notified by Controller of Examination, Panjab University Chandigarh for award of degree and certificate.*

*\*\*Part-II: -All practical activities shall be evaluated by the Board of Officers (BOOs) as per latest SOP duly approved by DG BSF vide No-42/S-Trg/SOP (Physio course)/BSF/2022/2181-2222 dated 28 Nov 2022 with Co-opted member/observer from PU, PGI, PIS, NSNIS or as when the SOP for the same will be revise.*

**PART-I THEORY PAPERS  
CORE COURSE**

*Language: - Both theory and practical paper can be attempted in English or Hindi.*

Course Code	Title of the Papers	Internal Marks	External marks	Total Marks
SPA-1	Aim And Scope of Sports Physiotherapy, Basic Human Sciences, Biomechanics, Movement, Posture & Gait	20	80	100
SPA-2	Sports specific injuries, Management, Methods of physiotherapy, Physical manipulation, Handling & Treatment by various physiotherapy equipment, Handling & Treatment by various physical exercises, Taping & CPR	2	80	100
SPA-3	Endurance, strength & conditioning, basics of sports nutrition, yoga (breathing exercises), acupressure, trigger points isolation & releasing, massage, stretching, early detection of sports injuries, recovery strategies, anti-doping awareness, basic knowledge of IOC ruling of specific games,	20	80	100
<b>PART-II PRACTICAL PAPERS</b>				
Course Code	Title of the Papers	External marks		Total Marks
SPA-04	Lab work	75		200
	Outdoor/ Ground workout	75		
	Viva	25		
	Project	25		

Handwritten signatures and initials, including a large signature on the left and several initials and names on the right, some with lines through them.

-2941-

**COURSE OF STUDY (SYLLABUS)**

**PAPER CODE: SPA-01  
(THEORY)**

**80 Marks  
Time: 3 hours**

**Subject: PAPER SPA-I**

**Objectives:** To provide basic knowledge of aim and scope of sports physiotherapy, basic human anatomy and physiology, basics of posture, movements, bio mechanics and gait.

**Instructions for paper Setters:**

There will be two parts of theory paper (Part 'A' & Part 'B') of 40 marks each.

**Part 'A'**

**(40 Marks)**

- Eight questions from the four units.
- Eight questions shall be selecting in such a way that there will be at least two questions from each unit. One question may be divided into two or three parts. The nature of the answer should be essay type.
- The students have to choose at least one question from the two questions of each unit.
- Each question shall carry 10 marks.

**Part 'B'**

**(40 Marks)**

- Twenty questions from entire syllabus. There will be no choice and students have to attempt all the 20 questions.
- The 20 questions shall be of short answers / one word type. One question may be divided into two parts.
- Each question will be of 02 marks.

Time Allowed for Theory Examination	*External Theory Paper Marks	**Internal Assessment on marks based on average of monthly exam, attendance, behaviour of students	Total Marks for this subject
03 Hours	80	20	100

**Note: -**

*\*Theory paper setting, evaluation etc. will be carried out internally by the experts approved by JAC of Directorate of Sports department Panjab University.*

*\*\*Internal evaluation of the theory paper for 20 marks shall be done by the Sports Performance Enhancement Centre (SPEC) of the BSF by assessing the overall performance of trainee during the course through monthly exams, attendance, behavior, dedication etc.*

*Handwritten signatures and marks at the bottom of the page, including a date "11" and a page number "71 Page".*

**DETAIL OF SYLLABI FOR SPA-01 (THEORY)**

<b>PAPER SPA-01</b> <b>AIM AND SCOPE OF SPORTS PHYSIOTHERAPY, BASIC HUMAN SCIENCES, BIOMECHANICS, MOVEMENT, POSTURE &amp; GAIT</b>			
S. no	Subject	Theory Lectures	Practical/ Demo classes
UNIT-I	<b>AIM AND SCOPE OF SPORTS PHYSIOTHERAPY</b> <ul style="list-style-type: none"><li>• Definition of Sports Physiotherapy and how it is difference from a normal physiotherapy</li><li>• Role of Sports physiotherapy in a team</li><li>• Responsibility of Sports physiotherapy in team</li><li>• Professionalism and management</li><li>• Sportsman ship</li></ul>	20	-
UNIT-II	<b>MUSCULOSKELTAL SYSTEM,</b> <ul style="list-style-type: none"><li>• Mechanism of muscles action</li><li>• Bone – Functions, types of bones, Named Markings</li><li>• Joints- Types- Fibrous, Cartilaginous, synovial, condyloid, Pivot, saddle, Ball &amp; socket</li><li>• Muscle – Name, structure, muscle movement &amp; types</li><li>• Various Bursa in human body</li><li>• Tendon- Facia</li></ul>	30	30
UNIT-III	<b>HUMAN SCIENCES</b> (a) <b>ANATOMY</b> <ul style="list-style-type: none"><li>• Introduction to human Anatomy</li><li>• Study of Internal &amp; External structure of human body</li><li>• Branches of Anatomy</li></ul> Gross Anatomy- Upper extremity region, back region, Head and Neck region, thorax region, abdomen region, pelvic & perinium region and lower extremity region Microscopic Anatomy <ul style="list-style-type: none"><li>• Anatomical terminology: -Basic of terminology, Terms of position and direction</li><li>• Major organs and their functions</li></ul> (b) <b>HUMAN PHYSIOLOGY</b> Basics of: - -Cardiovascular systems / Respiratory system /Nervous system /Cell physiology/ Physiology of specific organs	50	50
UNIT-IV	<b>BIOMECHANICS MOTION AND GAIT, POSTURE</b> a) Biomechanics and its applications in sports <ul style="list-style-type: none"><li>- Plane and sections of body</li><li>- Definition of Biomechanics</li><li>- Sports biomechanics, Role of Biomechanics in injury prevention/ Role of Biomechanics in athletics performance</li><li>- Clinical assessment of footwear</li><li>- Condition related to suboptimal lower limb biomechanics</li><li>- Management of lower limb biomechanics</li></ul> b) Types of motions in human body c) Normal Gait and its determinants, Gait Parameter- Kinetic, Kinematics, Time- Space, Running, Stair climbing (c) Anatomical aspects of posture <ul style="list-style-type: none"><li>- Types of posture / Assessment of posture/ Factors affecting posture /Posture deviation</li></ul>	30	50

*Handwritten signatures and marks:*  
Kuph  
12  
10/11  
A. N. S.  
R. S.  
h

ESSENTIAL READINGS/ REFERENCES

1. Practical Exercise Therapy, Margaret Hollis & Phyl Fletcher-Cook, 4<sup>th</sup> edition
2. Clayto's Electrotherapy 10 E, Sheila Kitchen and Sarah Bazin
3. Tidy's Physiotherapy, Ann Thomson Alison Skinner Joan Piercy, 12<sup>th</sup> Edition.
4. The Team Physician's Handbook, 2<sup>nd</sup> edition.
5. Physiotherapy Technician, Physiotherapy theory & Practical - Technician NSQF4.
6. Physiotherapy Ek Parichay (Hindi Book)
7. Asian Physiotherapy Theory & Practical
8. Khel Chkitsa, Physiotherapy tathaPunarvas- Hindi edition
9. Orthopaedics and Rheumatology for physiotherapists, Patricia A. Downie.
10. 10-Brukner & Khan's- Clinical sports medicine- (5<sup>th</sup> Ed.)
11. Gregory. Haff, Travis & Triplett, (2006) - Essentials of Strength Training and Conditioning, Human Kinetics Book.
12. W. Larry Kenney, Jack H. Wilmore, David L. Costill- Physiology of sports and exercise (5<sup>th</sup> Ed.).
13. Michael W. Whittle- Gait Analysis (4<sup>th</sup> Ed.).
14. Tudor O. Bompa, PHD, G. Gregory Haff, PHD - Periodization Theory and Methodology of Training (5<sup>th</sup> Ed.).
15. William E. Prentice, PHD-Athletic Training.
16. Baechle, T. (1989). Essentials of strength training and conditioning (4th ed.)
17. Advances in Functional Training - Mike Boyle
18. McGlynn, G. (1993). Dynamics of fitness. Madison: W.C.B Brown.
19. Sharkey, B. J. (1990). Physiology of fitness, Human Kinetics Book.

High  
✓

13  
Nally

10/11  
Rahn  
Nov. 9 Page  
h

PAPER CODE – SPA-02

(THEORY)

80 Marks

Time: 3 hours

Subject: PAPER SPA-02

**Objectives:-**To provide basic knowledge of sports specific injuries and management by physical manipulation, physical exercises, taping. Methods of physiotherapy, handling of various physiotherapy equipment and cardio pulmonary resuscitation (CPR).

**Instructions for paper Setters:**

There will be two parts of theory paper (Part 'A' & Part 'B') of 40 marks each.

**Part 'A'**

(40 Marks)

- Eight questions from the four units.
- Eight questions shall be selecting in such a way that there will be at least two questions from each unit. One question may be divided into two or three parts. The nature of the answer should be essay type.
- The students have to choose at least one question from the two questions of each unit.
- Each question shall carry 10 marks.

**Part 'B'**

(40 Marks)

- Twenty questions from entire syllabus. There will be no choice and students have to attempt all the 20 questions.
- The 20 questions shall be of short answers / one word type. One question may be divided into two parts.
- Each question will be of 02 marks.

Time Allowed for Theory Examination	*External Theory Paper Marks	**Internal Assessment on marks based on average of monthly exam, attendance, behaviour of students	Total Marks for this subject
03 Hours	80	20	100

Note: -

*\*Theory paper setting, evaluation etc. will be carried out internally by the experts approved by JAC of Directorate of Sports department Panjab University.*

*\*\*Internal evaluation of the theory paper for 20 marks shall be done by the Sports Performance Enhancement Centre (SPEC) of the BSF by assessing the overall performance of trainee during the course through monthly exams, attendance, behavior, dedication etc.*

Handwritten signatures and notes at the bottom of the page, including the name "Rakesh" and the page number "14".

-398-

## DETAIL OF SYLLABI FOR SPA-02 (THEORY)

PAPER CODE SPA-02			
SPORTS SPECIFIC INJURIES, MANAGEMENT, METHODS OF PHYSIOTHERAPY, PHYSICAL MANIPULATION, HANDLING & TREATMENT BY VARIOUS PHYSIOTHERAPY EQUIPMENTS, HANDLING & TREATMENT BY VARIOUS PHYSICAL EXERCISES, TAPING & CARDIO PULMONARY RESUSCITATION (CPR)			
Sl no	Subject	Theory Lectures	Practical/ Demo classes
UNIT-I	<b>SPORTS INJURIES (Upper extremity)</b> <ul style="list-style-type: none"> <li>- Acute and overuse</li> <li>- Pain, causes, clinical aspect and management</li> <li>- Regional problems related to sports                             <ul style="list-style-type: none"> <li>a) Neck pain</li> <li>b) Shoulder pain</li> <li>c) Elbow and arm pain</li> <li>d) Writ pain</li> <li>e) Hand and finger injuries</li> <li>f) Thoracic and chest pain</li> <li>g) Low back pain</li> </ul> </li> </ul>	50	25
UNIT-II	<b>SPORTS INJURIES (Lower extremity)</b> <ul style="list-style-type: none"> <li>a) Buttock pain /Hip pain</li> <li>b) Grown pain</li> <li>c) Interiors thigh pain / Posterior thigh pain</li> <li>d) Knee-pain Anterior, Lateral, Medial and posterior</li> <li>e) Acute knee injuries</li> <li>f) Leg pain</li> <li>g) Calf pain</li> <li>h) Pinn in achilles region</li> <li>i) Acute ankle injuries</li> <li>j) Ankle pain / Foot pain</li> </ul>	50	25
UNIT-III	<b>INJURY MANAGEMENT &amp; METHODS OF PHYSIOTHERAPY</b> <p><b>ACUTE INJURY MANAGEMENT -</b></p> <ul style="list-style-type: none"> <li>a) PRICE protocol</li> <li>b) Manual treatment - Joint and mobilization and manipulation</li> <li>c) Soft tissue therapy</li> <li>d) Neurodynamic techniques</li> <li>e) Taping</li> <li>f) Electro physical equipment- US, Tens, Neuromuscular stimulators, IFTs, Laser, Elector magnetic therapy, ESWT</li> </ul> <p><b>PRINCIPAL OF SPORTS INJURY REHABILITATION</b></p> <ul style="list-style-type: none"> <li>- General principal</li> <li>- Setting goals and targeted interventions</li> <li>- Phases of rehabilitation</li> <li>- Return to play</li> </ul>	20	50
UNIT-IV	<b>CARDIO PULMONARY RESUSCITATION (CPR)</b> <ul style="list-style-type: none"> <li>• Definition</li> <li>• BLS and ALS</li> <li>• Purpose</li> <li>• Procedure</li> </ul>	10	20

11 | Page

*High*  
*Naik* ← *15* / *1000*  
*Rakher*

ESSENTIAL READINGS/ REFERENCES

1. Practical Exercise Therapy, Margaret Hollis & Phyl Fletcher-Cook, 4<sup>th</sup> edition
2. Clayto's Electrotherapy 10 E, Sheila Kitchen and Sarah Bazin
3. Tidy's Physiotherapy, Ann Thomson Alison Skinner Joan Piercy, 12<sup>th</sup> Edition.
4. The Team Physician's Handbook, 2<sup>nd</sup> edition.
5. Physiotherapy Technician, Physiotherapy theory & Practical - Technician NSQF4.
6. Physiotherapy Ek Parichay (Hindi Book)
7. Asian Physiotherapy Theory & Practical
8. Khel Chkitsa, Physiotherapy tatha Punarvas- Hindi edition
9. Orthopaedics and Rheumatology for physiotherapists, Patricia A. Downie.
10. 10-Brukner & Khan's- Clinical sports medicine- (5<sup>th</sup> Ed.)
11. Gregory. Haff, Travis & Triplett, (2006) - Essentials of Strength Training and Conditioning, Human Kinetics Book.
12. W. Larry Kenney, Jack H. Wilmore, David L. Costill- Physiology of sports and exercise (5<sup>th</sup> Ed.).
13. Michael W. Whittle- Gait Analysis (4<sup>th</sup> Ed.).
14. Tudor O. Bompa, PHD, G. Gregory Haff, PHD - Periodization Theory and Methodology of Training (5<sup>th</sup> Ed.).
15. William E. Prentice, PHD-Athletic Training.
16. Baechle, T. (1989). Essentials of strength training and conditioning (4th ed.)
17. Advances in Functional Training - Mike Boyle
18. McGlynn, G. (1993). Dynamics of fitness. Madison: W.C.B Brown.
19. Sharkey, B. J. (1990). Physiology of fitness, Human Kinetics Book.

High  
A  
Nels

16

100  
Rosen

12 | Page

12

(THEORY)

80 Marks  
Time: 3 hours

**Subject: PAPER SPA-03**

**Objectives:** To provide basic knowledge of endurance, strength & conditioning, basics of sports nutrition, yoga (breathing exercises), acupressure, trigger points isolation & releasing, massage, stretching, early detection of sports injuries, recovery strategies, anti-doping awareness, basic knowledge of IOC ruling of specific games.

**Instructions for paper Setters:**

There will be two parts of paper (Part 'A' & Part 'B') of 40 marks each.

**Part 'A'**

(40 Marks)

- Eight questions from the four units.
- Eight questions shall be selecting in such a way that there will be at least two questions from each unit. One question may be divided into two or three parts. The nature of the answer should be essay type.
- The students have to choose at least one question from the two questions of each unit.
- Each question shall carry 10 marks.

**Part 'B'**

(40 Marks)

- Twenty questions from entire syllabus. There will be no choice and students have to attempt all the 20 questions.
- The 20 questions shall be of short answers / one word type. One question may be divided into two parts.
- Each question will be of 02 marks.

Time Allowed for Theory Examination	*External Theory Paper Marks	**Internal Assessment on marks based on average of monthly exam, attendance, behaviour of students	Total Marks for this subject
03 Hours	80	20	100

**Note: -**

\*Theory paper setting, evaluation etc. will be carried out internally by the experts approved by JAC of Directorate of Sports department Panjab University.

\*\*Internal evaluation of the theory paper for 20 marks shall be done by the Sports Performance Enhancement Centre (SPEC) of the BSF by assessing the overall performance of trainee during the course through monthly exams, attendance, behavior, dedication etc.

17  
1/200  
13 | Page  
h



-401-

## DETAIL OF SYLLABI FOR SPA-03 (THEORY)

S. no	Subject	Theory Lectures	Practical/ Demo classes
<p><b>ENDURANCE, STRENGTH &amp; CONDITIONING, BASICS OF SPORTS NUTRITION, YOGA (BREATHING EXERCISES), ACUPRESSURE, TRIGGER POINTS ISOLATION &amp; RELEASING, MASSAGE, STRETCHING, EARLY DETECTION OF SPORTS INJURIES, RECOVERY STRATEGIES, ANTI DOPING AWARENESS, BASIC KNOWLEDGE OF IOC RULING OF SPECIFIC GAMES,</b></p>			
UNIT-I	<p><b>ENDURANCE</b>                      HIIT/ Anaerobic workout                      LIIS/ Aerobic workout                      Heart rate monitor workout                      Cal asthenic workout                      Plyometric work out                      Speed workout                      Agility workout                      Game specific workout                      Program design for endurance</p> <p><b>STRENGTH</b>                      Own body weight workout                      Free weight workout                      Equipment workout                      Ground work out /circuit workout/ cross workout                      Variable resistance training methods                      Nontraditional implement training methods                      Unilateral training                      Program design</p> <p><b>WARMUP, COOLDOWN &amp; STRETCHING</b></p> <ul style="list-style-type: none"> <li>• Definition</li> <li>• Static, dynamic and PNF stretching</li> <li>• Importance of warmup, cooldown and stretching</li> <li>• Flexibility</li> <li>• Proprioception</li> </ul> <p><b>RECOVERY STRATEGIES</b></p> <ul style="list-style-type: none"> <li>• Compression</li> <li>• ICE bath</li> <li>• Steam Sauna</li> <li>• Massages</li> <li>• Stretching</li> <li>• Breathing exercise</li> <li>• Recovery exercise</li> <li>• Water exercise</li> </ul> <p><b>PERIODIZATION</b></p> <ul style="list-style-type: none"> <li>• Definition</li> <li>• General concepts related to periodization</li> </ul>	35	90

*Handwritten signature*

*Handwritten signature* 18/10/11  
*Handwritten signature*

UNIT-II	<b>BASICS OF BIOENERGETICS &amp; SCIENTIFIC DIET/ NUTRITION &amp; HYDRATION</b> <ul style="list-style-type: none"><li>• Bioenergetics of exercise and training</li><li>• Biological energy system</li><li>• BMI</li><li>• Nutrients energy metabolism</li><li>• Calories calculation</li><li>• Macro and micronutrients in diet</li><li>• Various types of diets like detox diet, low carb diet, dash diet, Keto diet, amino diet.</li><li>• Water intake and its importance.</li><li>• Intermittent fasting and its importance in weight management</li><li>• OMAD</li><li>• Food combinations and its effects</li><li>• Cooking oil and its importance in weight management</li><li>• Glycemic index of various foods and its importance</li><li>• BMR and its association with diet</li><li>• Nutrition and weight management</li></ul>	25	42
UNIT-III	<b>ACUPRESSURE &amp; YOGA, TRIGGER POINT RELEASING POINT &amp; MASSAGE</b> <ul style="list-style-type: none"><li>• Introduction</li><li>• Definition of acupressure</li><li>• Principle of acupressure</li><li>• Modusoperandi of acupressure</li><li>• Acupressure points</li><li>• Difference between acupressure and Acupuncture</li><li>• Referral pain points</li><li>• Advantage of acupressure</li></ul> <b>YOGA (BREATHING EXERCISES)</b> <ul style="list-style-type: none"><li>• Introduction to Yoga</li><li>• Fundamental of Yoga</li><li>• Yoga practice for healthy and wellness</li><li>• Types of Yoga</li><li>• Precaution during Yoga</li><li>• Disease treatment by Yoga</li><li>• Importance of Yoga in human life.</li></ul>	25	20
UNIT-IV	<b>PSYCHOLOGY</b> <ul style="list-style-type: none"><li>• Psychology of athletics preparation and performance</li><li>• Role of sports psychology</li></ul> <b>ANTI DOPING AWARENESS</b> <ul style="list-style-type: none"><li>• What is doping</li><li>• Anti-doping codes</li><li>• Rule and laws NADA and WADA</li></ul>	25	10

*Handwritten signatures and dates:*  
19/11/20  
15 | Page

ESSENTIAL READINGS/ REFERENCES

1. Practical Exercise Therapy, Margaret Hollis & Phyl Fletcher-Cook; 4<sup>th</sup> edition
2. Clayto's Electrotherapy 10 E, Sheila Kitchen and Sarah Bazin
3. Tidy's Physiotherapy, Ann Thomson Alison Skinner Joan Piercy, 12<sup>th</sup> Edition.
4. The Team Physician's Handbook, 2<sup>nd</sup> edition.
5. Physiotherapy Technician, Physiotherapy theory & Practical - Technician NSQF4.
6. Physiotherapy Ek Parichay (Hindi Book)
7. Asian Physiotherapy Theory & Practical
8. Khel Chkitsa, Physiotherapy tatha Punarvas- Hindi edition
9. Orthopaedics and Rheumatology for physiotherapists, Patricia A. Downie.
10. 10-Brukner & Khan's- Clinical sports medicine- (5<sup>th</sup> Ed.)
11. Gregory. Haff, Travis& Triplett, (2006) - Essentials of Strength Training and Conditioning, Human Kinetics Book.
12. W. Larry Kenney, Jack H. Wilmore, David L. Costill- Physiology of sports and exercise (5<sup>th</sup> Ed.).
13. Michael W. Whittle- Gait Analysis (4<sup>th</sup> Ed.).
14. Tudor O. Bumpa, PHD, G. Gregory Haff, PHD - Periodization Theory and Methodology of Training (5<sup>th</sup> Ed.).
15. William E. Prentice, PHD-Athletic Training.
16. Baechle, T. (1989). Essentials of strength training and conditioning (4th ed.)
17. Advances in Functional Training - Mike Boyle
18. Mcglynn, G. (1993). Dynamics of fitness. Madison: W.C.B Brown.
19. Sharkey, B. J. (1990). Physiology of fitness, Human Kinetics Book.

*Handwritten initials/signature*

*Handwritten signature*

*Handwritten signature*  
 16 | Page

-409 -  
PAPER CODE – SPA-04  
(PRACTICAL)

200 Marks

**Subject:** PAPER SPA-04

**Objectives:** To provide basic knowledge of body composition BMR, BMI, water mark, measurement of BP, temperature, pulse, height, weight and skin folds, identification of bones and muscles, surface marking, taping, handling of various physiotherapy equipment, CPR, acupressure points, trigger points, various out door works.

**Instructions for examiner:**

All practical activities shall be evaluated by the Board of Officers of BSF constituted by the competent authority along with one observer/co-opted member from the Panjab University/ any elite institute like PU, PGI Chandigarh, PIS Mohali, NSNIS Patiala.

Time Allowed for Theory Examination	Practical Paper Marks	Project	Viva	Total Marks for this subject
03 Hours	150	25	25	200

*Handwritten signature*

*Handwritten signature*

*Handwritten signature*

21

*Handwritten signature*

*Handwritten signature*

17/03/21

*Handwritten signature*

PAPER CODE SPA-04

(PRACTICAL)

Marks-200  
(For A&B parts)

DETAIL OF SYLLABI FOR SPA-04

(A) LAB WORK:

75 Marks

- Body composition & Handling of body analysis system.
- Calculation of BMR, BMI, Water intake.
- Measurement of height, weight and various body parts.
- Measurement of BP, Temperature and pulse.
- Measurement of skinfold
- Identification of bones and muscles on skeleton
- Surface marking of clinical importance
- Detection of congenital deformation for prevention of sports injuries.
- Taping
- Handling of various equipment related to physiotherapy i.e IFT, TENS, Ultrasonic, Laser, ESWT, Microwave Diathermy & Vacuum.
- CPR
- Acupressure points
- Triger points

(B) OUTDOOR/GROUND WORKOUT

75 Marks

This will cover:

- Functional movement test for performance analysis & injury prevention
  - YOYO/Beep test
  - Vertical jump
  - Broad jump
  - Pull ups
  - Pushups
  - Plank hold
  - Flexibility
  - Nordic hold
  - Wobble board
  - Proprioception one leg stand test eyes closed.
- FPET- (Field Physical Efficiency Test)
  - ✓ 4 Kms run
  - ✓ 6 fit wall
  - ✓ Monkey crawl (Rope hold)
  - ✓ Broad jump
- Calculation of 1 RM
- Demonstration of various own body weight exercises for circuit training
- Demonstration of various free weight exercise
- Demonstration of various machines & dumbbell exercise.
- Preparation of workout scheduled
- Preparation of circuit plan
- Whole body stretching
- Joint mobilization
- Joint Manipulation /Re-adjustment

High a ✓

22 Nave

100  
Raker

- 406-
- Steam/sauna bath
  - FIFA-11 for warm up and injury prevention
  - Group classes management
  - Trigger point isolation and release
  - Warmup cool down
  - Myofascial release
  - Isolation of acupressure points and stimulation
  - Meditation

(c) Viva  
(d) Project

25 marks  
25 marks

### EVALUATION OF PAPERS

1. Examination process considering of paper setting, evaluation etc. will be carried out internally by the experts approved by JAC of Directorate of Sports department Panjab University. The theory papers of 80 marks each, an examination shall be conducted by the PU Chandigarh by subjective-objective mode with the following breakup: -
  - (a) In each paper, there will be total eight long questions (10 marks each) and selected in such a way that there will be 02 question from each unit (10x4=40 Marks). Besides, this there will be 20 short answers/ one-word answers (each valued at one marks) to be compulsorily answered by the candidate. (20x2 = 40), thus, making a total of 80 marks maximum.)
  - (b) Internal evaluation of the theory paper for 20 marks shall be done by the Sports Performance Enhancement Centre of the BSF by assessing the overall performance of students during the course through monthly exams, attendance, behavior, dedication etc.
2. All practical activities shall be evaluated by the BOOs constituted by the competent authority as per SOP No-42/S-Trg/SOP (Physio course)/BSF/2022/2181-2222 dated 28 Nov 2022, along with one observer/ co-opted member from the University/ any elite institute like PU, PGI Chandigarh, PIS Mohali & NS NIS Patiala or as when the SOP for the same will be revise.
3. Examination will be carried out at BSF location under the supervision of BOOs constituted by CA as per latest SOP.
4. In case a candidate is not satisfied with the evaluation in theory or practical activities partially or wholly, he can represent his case to the University for re-evaluation within fifteen days of declaration of result with re-evaluation fee as admissible by PU.
5. Individual less than 35 % in theory and 40 % in practical will declare fail and will reappear during the next course. For appearing in next course trainee have to re-pay examination fee as admissible as per norms of PU.

*Handwritten signature*

*Handwritten signature*

*Handwritten signature*

23

*Handwritten signature*

19 | Page

-407-

# PANJAB UNIVERSITY, CHANDIGARH

(Established under the Panjab University Act VII of 1947-enacted by the Govt. of India)

&

## BORDER SECURITY FORCE

(MHA, Govt. of India)



Under – MOU

SYLLABI

### FOR CERTIFICATE COURSE IN FITNESS TRAINER /GYM TRAINER

(CODE- FTGT)

For the session of 2023-24

*Handwritten signature*

*Handwritten signature*

24/100  
*Handwritten signature*  
Rajesh H.S.

*Handwritten signature*  
1 Page

**OUTLINES OF TEST, SYLLABI SCORING, GRADING FOR THE FITNESS TRAINER / GYM TRAINER COURSE (FTGT)**

The course of instruction for the Fitness trainer / Gym Trainer examination consists of two parts as under:

PART-1	*Theory Papers (FTGT-1, FTGT-2)	200 Marks
PART-2	**Practical Course (Skill and Prowess)	200 Marks

**Total: 400 Marks**

**Note I:**

\*Part-I: -Examination process considering of paper setting, evaluation etc. will be carried out internally by the experts approved by JAC of Directorate of Sports, Panjab University. The result will be prepared by BSF in coordination with Directorate of Sports Panjab University, Chandigarh and same will be notified by Controller of Examination, Panjab University Chandigarh for award of degree and certificate.

\*\*Part-II: -All practical activities shall be evaluated by the Board of Officers (BOOs) as per SOP. SOP is under preparation and will be attached soon.

**PART-I THEORY PAPERS  
CORE COURSE**

Language: - Both theory and practical paper can be attempted in English or Hindi.

Course Code	Title of the Papers	Internal Marks	External marks	Total Marks
FGTGT-1	VARIOUS BODY SYSTEMS, BIOMECHANICS, BIOENERGETIC NUTRITION, ADAPTATION & GYM MANAGEMENT	20	80	100
FGTGT-2	PSYCHOLOGY, EXERCISE TECHNIQUES & PERIODIZATION	20	80	100
<b>PART-II PRACTICAL PAPERS</b>				
Course Code	Title of the Papers	External marks		Total Marks
FGTGT-3	LAB /GYM WORK	75		200
	OUTDOOR/ GROUND WORKOUT	75		
	VIVA	25		
	PROJECT	25		

Singh  
 Nair  
 28  
 10/11  
 Rakesh H.S.  
 5 | P a g e



# COURSE OF STUDY (SYLLABUS)

## PAPER CODE: FTGT-01

### (THEORY)

**80 Marks**  
**Time: 3 hours**

Subject: PAPER FTGT-I

**Objectives:** - To provide basic knowledge about various body systems, biomechanics, bioenergetic nutrition, Adaptation & Gym management.

**Instructions for paper Setters:**

There will be two parts of paper (Part 'A' & Part 'B') of 40 marks each.

**Part 'A'**

**(40 Marks)**

- Eight questions from the four units.
- Eight questions shall be selecting in such a way that there will be at least two questions from each unit. One question may be divided into two or three parts. The nature of the answer should be essay type.
- The students have to choose at least one question from the two questions of each unit.
- Each question shall carry 10 marks.

**Part 'B'**

**(40 Marks)**

- Twenty questions from entire syllabus. There will be no choice and students have to attempt all the 20 questions.
- The 20 questions shall be of short answers / one word type. One question may be divided into two parts.
- Each question will be of 02 marks.

Time Allowed for Theory Examination	*External Theory Paper Marks	**Internal Assessment on marks based on average of monthly exam, attendance, behavior of students	Total Marks for this subject
03 Hours	80	20	100

**Note: -**

*\*Theory paper setting, evaluation etc. will be carried out internally by the experts approved by JAC of Directorate of Sports department Panjab University.*

*\*\*Internal evaluation of the theory paper for 20 marks shall be done by the Sports Performance Enhancement Centre (SPEC) of the BSF by assessing the overall performance of trainee during the course through monthly exams, attendance, behavior, dedication etc.*

*Handwritten signature*

*Handwritten signature with '50' and '100' written above it*

*Handwritten signature with '71 P' and 'PGE' written below it*

DETAIL OF SYLLABI FOR FTGT-01 (THEORY)

PAPER CODE – FTGT-01			
VARIOUS BODY SYSTEMS, BIOMECHANICS, BIOENERGETIC NUTRITION, ADAPTATION & GYM MANAGEMENT.			
S. no	Subject	Theory Lectures	Practical/ Demo classes
UNIT-I	<b>Various body system</b> - Structure and function of body system - Basics of Musculoskeletal system - Basics of Neuromuscular system - Basics of Cardio respiratory system	32	22
	<b>Basics of Biomechanics</b> - Biomechanics of joints & resistance exercise - Anatomical planes and major body movements - Strength and power - Source of resistance to muscle contraction	22	20
UNIT-II	<b>Basics of Bioenergetics</b> - Bioenergetics of exercise and training - Biological energy system	20	36
	<b>Basics of Nutrition</b> - Micro & macro nutrients - Fluid and electrolytes - Nutrition strategies for alerting body composition - Feeding and eating disorders	20	25
UNIT-III	<b>Adaptation</b> - Adaptation to anaerobic & aerobic training programs - Neural, Muscular and connective tissue Adaptation - Acute & chronic responses to aerobic exercise	20	40
UNIT-IV	<b>Gym management</b> - Handling of Gym equipment, Set up and placement of equipment - List of equipment to be introduced, mechanical functioning of equipment, wear, tear and maintenance of facilitates - Classroom management- Preparation for the class – Grouping of participants – time schedule	20	48

*Handwritten signature*

*Handwritten signature*  
31/1/2020  
Rajesh Kumar

8 | P a g e

ESSENTIAL READINGS/ REFERENCES

1. Brukner & Khan's- Clinical sports medicine- (5<sup>th</sup> Ed.)
2. Gregory. Haff, Travis& Triplett, (2006) - Essentials of Strength Training and Conditioning, Human Kinetics Book.
3. W. Larry Kenney, Jack H. Wilmore, David L. Costill- Physiology of sports and exercise (5<sup>th</sup> Ed.).
4. Michael W. Whittle- Gait Analysis (4<sup>th</sup> Ed.).
5. Tudor O. Bomp, PHD, G. Gregory Haff, PHD - Periodization Theory and Methodology of Training (5<sup>th</sup> Ed.).
6. William E. Prentice, PHD-Athletic Training.
7. Baechle, T. (1989). Essentials of strength training and conditioning (4th ed.)
8. Advances in Functional Training - Mike Boyle
9. Mcglynn, G. (1993). Dynamics of fitness. Madison: W.C.B Brown.
10. Sharkey, B. J. (1990). Physiology of fitness, Human Kinetics Book.

acutis

High  
32  
100  
Raven Hill  
9 | Page

(THEORY)

80 Marks  
Time: 3 hours

**Subject: PAPER FTGT-02**

**Objectives:** - To provide knowledge about Psychology, Warm-up and flexibility training, Exercise technique for free weight and machine training, periodization, Exercise technique for alternative modes and nontraditional implement training & program design and technique for aerobic endurance training.

**Instructions for paper Setters:**

There will be two parts of paper (Part 'A' & Part 'B') of 40 marks each.

**Part 'A'**

(40 Marks)

- Eight questions from the four units.
- Eight questions shall be selecting in such a way that there will be at least two questions from each unit. One question may be divided into two or three parts. The nature of the answer should be essay type.
- The students have to choose at least one question from two questions of each unit.
- Each question shall carry 10 marks.

**Part 'B'**

(40 Marks)

- Twenty questions from entire syllabus. There will be no choice and students have to attempt all the 20 questions.
- The 20 questions shall be of short answers / one word type. One question may be divided into two parts.
- Each question will be of 02 marks.

Time Allowed for Theory Examination	*External Theory Paper Marks	**Internal Assessment on marks based on average of monthly exam, attendance, behavior of students	Total Marks for this subject
03 Hours	80	20	100

**Note: -**

*\*Theory paper setting, evaluation etc. will be carried out internally by the experts approved by JAC of Directorate of Sports department Panjab University.*

*\*\*Internal evaluation of the theory paper for 20 marks shall be done by the Sports Performance Enhancement Centre (SPEC) of the BSF by assessing the overall performance of trainee during the course through monthly exams, attendance, behavior, dedication etc.*

33

100  
Rakn Mar. 10 | Page

High  
Nails

**DETAIL OF SYLLABI FOR FTGT-02 (THEORY)**

<b>PAPER CODE FTGT-02</b>			
<b>PSYCHOLOGY, WARM-UP AND FLEXIBILITY TRAINING, EXERCISE TECHNIQUE FOR FREE WEIGHT AND MACHINE TRAINING, PERIODIZATION, EXERCISE TECHNIQUE FOR ALTERNATIVE MODES AND NONTRADITIONAL IMPLEMENT TRAINING &amp; PROGRAM DESIGN AND TECHNIQUE FOR AEROBIC ENDURANCE TRAINING.</b>			
<b>S. no</b>	<b>Subject</b>	<b>Theory Periods (40 Min)</b>	<b>Practical</b>
<b>UNIT-I</b>	<b>Psychology</b> -Psychology of athletics preparation and performance -Role of sports psychology	20	20
	<b>Warm-up and flexibility training</b> -Warm-up & flexibility, -Static & dynamic stretching techniques	05	45
<b>UNIT-II</b>	Age and sex related differences and their implications for resistance exercise	05	06
	<b>Exercise technique for free weight and machine training</b> -Fundamentals of exercise techniques -Spotting free weight, machines exercise	05	34
<b>UNIT-III</b>	<b>Periodization</b> -Central concepts related to periodization	05	06
	<b>Exercise technique for alternative modes and nontraditional implement training</b> -Bodyweight training methods -Core stability and balance training methods -Variable -resistance training methods, Nontraditional implement training, Unilateral training	10	40
<b>UNIT-IV</b>	<b>Program design for resistance training</b> -Principles of anaerobic exercise, Exercise selection, Training frequency -Training load and repetitions	10	12
	<b>Program design and technique for aerobic endurance training</b> -Designing and aerobic endurance program -Special issue related to aerobic endurance training	05	10

High  
 34  
 100  
 2016  
 Hsk  
 11 | 798

-414-

ESSENTIAL READINGS/ REFERENCES

1. Brukner & Khan's- Clinical sports medicine- (5<sup>th</sup> Ed.)
2. Gregory. Haff, Travis & Triplett, (2006) - Essentials of Strength Training and Conditioning, Human Kinetics Book.
3. W. Larry Kenney, Jack H. Wilmore, David L. Costill- Physiology of sports and exercise (5<sup>th</sup> Ed.).
4. Michael W. Whittle- Gait Analysis (4<sup>th</sup> Ed.).
5. Tudor O. Bompa, PHD, G. Gregory Haff, PHD - Periodization Theory and Methodology of Training (5<sup>th</sup> Ed.).
6. William E. Prentice, PHD- Athletic Training.
7. Baechle, T. (1989). Essentials of strength training and conditioning (4th ed.)
8. Advances in Functional Training - Mike Boyle
9. McGlynn, G. (1993). Dynamics of fitness. Madison: W.C.B Brown.
10. Sharkey, B. J. (1990). Physiology of fitness, Human Kinetics Book.

High  
of New

35. ~~100~~  
Race Post

12 | Page

-415-

**PAPER CODE – FTGT-03  
(PRACTICAL)**

**200 Marks**

**Subject: PAPER FTGT-03**

**Objectives:** BMI, Measurement of Height /weight and various body parts, Measurement of BP, Temperature and pulse, Calculation of BMR, water intake, Handling of Gym Equipment, CPR & Handling of AED. Preparing of workout schedule as per demand, Calculation of 1 RM, 5 RM test - Squat, Bench Press, Deadlift, Demonstration of various free weight compound machine and own body weight exercises, Demonstration of breathing exercise, Preparation of exercise plan, Preparation of circuit plan, Whole body stretching, Joint mobilization, Movement Skills - 5 tests, Strength/Power, VJ, SBJ, 3 Hop, Sitting BB throw, pull up, Push up and other parameters & Group classes

**Instructions for examiner:**

All practical activities shall be evaluated by the board of officers of BSF constituted by the competent authority along with one observer from the Panjab University/ any elite institute like PU, PGI Chandigarh, PIS Mohali, NSNIS Patiala...

Time Allowed for practical Examination	Practical Paper Marks	Project	Viva	Total Marks for this subject
03 Hours	150	25	25	200

Handwritten notes and signatures at the bottom of the page:

- Handwritten number: 38
- Handwritten signature: Nally
- Handwritten signature: Pawan
- Handwritten text: Pawan Mohali 13/1/2020
- Handwritten text: 13/1/2020

-416-

PAPER CODE FTGT-03

Mar. -200

(For A & B parts)

DETAIL OF SYLLABI FOR FTGT-03 (PRACTICAL)

PART - II PRACTICAL

A) Lab

75 Marks

- Body composition
- Measurement of Height /Weight and various body parts
- Measurement of BP, Temperature and pulse
- Calculation of BMR, BMI, WATER intake
- Handling of Gym equipment
- Preparing of workout schedule as per demand
- CPR & Handling of AED
- Calculation of 1 RM
- Own body weight exercises
- Demonstration of breathing exercise
- Preparation of exercise plan
- Preparation of circuit plan
- Whole body stretching
- Joint mobilization

B) Outdoor

75 Marks

- Movement Skills - 5 tests
- 30m. Sprint, 505, Hexa, 'T-test, 6 X 10m shuttle Run
- Strength/Power
- VJ, SBJ, 3 Hop, Sitting BB throw
- Pull up, Push up and other parameters
- Group classes

Viva

25 marks

Project

25 marks

High  
37  
Rajen



EVALUATION OF PAPERS

1. Examination process considering of paper setting, evaluation etc. will be carried out internally by the experts approved by JAC of Directorate of Sports department Panjab University. The theory papers of 80 marks each, an examination shall be conducted by the PU Chandigarh by subjective-objective mode with the following breakup: -
  - (a) In each paper, there will be total eight long questions (10 marks each) and selected in such a way that there will be 02 question from each unit (10x4=40 marks). Besides, this there will be 20 short answers/ one-word answers (each valued at one marks) to be compulsorily answered by the candidate. (20 x 2 = 40), thus, making a total of 80 marks maximum.)
  - (b) Internal evaluation of the theory paper for 20 marks shall be done by the Sports Performance Enhancement Centre of the BSF by assessing the overall performance of students during the course through monthly exams, attendance, behavior, dedication etc.
2. All practical activities shall be evaluated by the BOOs constituted by the competent authority as per SOP. SOP is under preparation and will be attached soon or as when the SOP for the same will be revise.
3. Examination will be carried out at BSF location under the supervision of BOOs constituted by CA as per SOP.
4. In case a candidate is not satisfied with the evaluation in theory or practical activities partially or wholly, he can represent his case to the University for re-evaluation within fifteen days of declaration of result with re-evaluation fee as admissible by PU.
5. Individual less than 35 % in theory and 40 % in practical will declare fail and will reappear during the next course. For appearing in next course trainee have to re-pay examination fee as admissible as per norms of PU.

Handwritten signatures and notes at the bottom of the page. Includes a signature on the left, the number '38' in the center, a signature 'Datta' on the right, and a date '15/7/20' written below the signature.

-418-

# PANJAB UNIVERSITY, CHANDIGARH

(Established under the Panjab University Act VII of 1947-enacted by the Govt. of India)

&

## BORDER SECURITY FORCE

(MHA, Govt. of India)



Under – MOU

SYLLABI

### CERTIFICATE COURSE IN SCIENTIFIC RECRUIT TRAINING METHODOLOGIES

(CODE- SRTM)

For the session of 2023-24

*[Handwritten signature]*

*[Handwritten signature]* 39  
Rajinder Kaur

*[Handwritten signature]*

*[Handwritten signature]*

4/9

**OUTLINES OF TEST, SYLLABI SCORING, GRADING FOR THE SCIENTIFIC RECRUIT TRAINING METHODOLOGIES COURSE (SRTM).**

The course of instructions for the scientific recruit training methodologies examination consists of two parts as under: -

PART-1	Theory Papers (SRTM)	100 Marks
PART-2	Practical Course (Skill and Prowess)	200 Marks

**Total: 300 Marks**

High  
✓

100  
42  
- Catch Mark

Mark ✓

-420-

**PART-I THEORY PAPERS  
CORE COURSE**

Course Code	Title of the Papers	Internal Marks	External marks	Total Marks
SRTM-1	STRUCTURE OF PHYSICAL FITNESS, VARIOUS COMPONENT OF PHYSICAL FITNESS, KIND OF PHYSICAL FITNESS, TRAINING METHODOLOGY, USE OF RIGHT GADGET, INJURY MANAGEMENT & PERFORMANCE ENHANCEMENT	20	80	100
<b>PART-II PRACTICAL PAPERS</b>				
Course Code	Title of the Papers	External marks		Total Marks
SRTM-1	LAB			200
	OUTDOOR/ GROUND WORKOUT	75		
	VIVA	75		
	PROJECT	25		
		25		

**Note:** Since this is a professional course aimed at improving the injury management, injury preventions and performance enhancement. It is essential that special attention be given to the practical aspect at lab and outdoor workout, Therefore, specified 20 hours per week must be devoted to the practical teaching.

*Handwritten signature*

*Handwritten signature*

*Handwritten signature with '10/43' written above it*

*Handwritten signature*

## COURSE OF STUDY (SYLLABUS)

PAPER CODE: SRMT-01

(THEORY)

80 Marks

Time: 3 hours

Subject: PAPER SRMT-I

**Objectives:** - To provide basic knowledge about structure of physical fitness, various component of physical fitness & kind of physical fitness, training methodology, use of right gadgets, injury management & performance enhancement.

**Instructions for paper Setters:**

There will be two parts of paper (Part 'A' & Part 'B') of 40 marks each.

**Part 'A'**

(40 Marks)

- Eight questions from the four units.
- Eight questions shall be selecting in such a way that there will be at least two questions from each unit. One question may be divided into two or three parts. The nature of the answer should be essay type.
- The students have to choose at least one question from two questions of each unit.
- Each question shall carry 10 marks.

**Part 'B'**

(40 Marks)

- Twenty questions from entire syllabus. There will be no choice and students have to attempt all the 20 questions.
- The 20 questions shall be of short answers / one word type. One question may be divided into two parts.
- Each question will be of 02 marks.

Time Allowed for Theory Examination	*External Theory Paper Marks	**Internal Assessment on marks based on average of monthly exam, attendance, behavior of students	Total Marks for this subject
03 Hours	80	20	100





Note: -

\*Theory paper setting, evaluation etc. will be carried out internally by the experts approved by JAC of Directorate of Sports department Panjab University.

\*\*Internal evaluation of the theory paper for 20 marks shall be done by the Sports Performance Enhancement Centre (SPEC) of the BSF by assessing the overall performance of trainee during the course through monthly exams, attendance, behavior, dedication etc.

DETAILS OF SYLLABUS OF THEORY

PAPER CODE-SRMT-1				
STRUCTURE OF PHYSICAL FITNESS, VARIOUS COMPONENT OF PHYSICAL FITNESS & KIND OF PHYSICAL FITNESS, TRAINING METHODOLOGY, USE OF RIGHT GADGETS & INJURY MANAGEMENT				
S. no	Subject	Theory Periods (40 Min)	Practical	Total Pds
UNIT-1	Basic understanding of various fitness components of body like flexibility, strength, Power, explosive power, endurance, balance, co-ordination, reflexes & posture	15	35	
	<ul style="list-style-type: none"> <li>- Musculoskeletal System</li> <li>- Cardio vascular system</li> <li>- Nervous system,</li> <li>- Respiratory System</li> <li>- Energy System</li> </ul>	15	35	
UNIT-II	Basics of Stretching & recovery	15	25	
	Evaluation of basic fitness components during start of training like aerobic endurance, anaerobic capacity, core development, flexibility, lower and upper body strength. Balance and periodic evaluation for holistic development	10	25	
	Basic of Nutrition, Basics of Biomechanics Basics of hydration	14	30	
	Adaptations and reversal of adaptations	08	12	
UNIT-III	Use of right gadgets while training	08	20	
	Basic of scientific running	04	10	
	Early detection of training related injuries, prevention & management	10	10	
UNIT-IV	Mental health /stress management & Sleep	05	10	
	Periodization of training	10	10	
	Post training fitness program	06	10	

PAPER CODE SRTM-02

Marks-200  
(For A & B)

DETAIL OF SYLLABI FOR SRTM -02 (PRACTICAL)

Subject: PAPER SRMT- 02

- **Objectives:** HB testing, BMI calculation, Measurement of BP, temperature and pulse, Detection of congenital deformities , Joint mobilization , Taping, FMT- YOYO test, Vertical jump, Broad jump, Pull ups, pushups, Plank hold, flexibility, Nordic hold, Wobble board & proprioception one leg stand test eyes closed, FPET- (Field Physical Efficiency Test) , FIFA-11 for warm up and injury prevention, Group classes management, Demonstration of various own body weight exercises for circuit training , Preparation of exercise plan, Preparation of circuit plan, Whole body stretching, Trigger point isolation and release Breathing exercises.

Instructions for examiner:

All practical activities shall be evaluated by the board of officers of BSF constituted by the competent authority along with one observer from the Panjab University/ any elite institute like PU, PGI Chandigarh, PIS Mohali, NSNIS Patiala.

Time Allowed for practical Examination	Practical Paper Marks	Project	Viva	Total Marks for this subject
03 Hours	150	25	25	200

Handwritten signatures and marks at the bottom of the page, including the number 46 and a signature that appears to read "Rajinder Singh".

PAPER CODE SRTM-02

Marks 200  
(For A & B)

DETAIL OF SYLLABI FOR SRTM-02 (PRACTICAL)

a) LAB WORK:

75 Marks

- HB testing
- BMI calculation
- Measurement of BP, temperature and pulse
- Detection of congenital deformities
- Joint mobilization
- Taping

(a) OUTDOOR/GROUND WORKOUT

75 Marks

Functional movement Test-

- Y-OYO test
  - Vertical jump
  - Broad jump
  - Pull-ups
  - Pushups
  - Plank hold
  - Flexibility
  - Nordic hold
  - Wobble board
  - Proprioception one leg stands test eyes closed.
- FPET- (Field Physical Efficiency Test)
  - Male-
    - ✓ 3.2 Kms run
    - ✓ 6 fit wall
    - ✓ Monkey crawl
    - ✓ 9 fit Ditch
    - ✓ Fire man lift
  - Female-
    - ✓ 2 Km run
    - ✓ 100-yard sprint
    - ✓ 7.5 fit ditch
    - ✓ Vertical rope 12 feet
    - ✓ Pushups -20
- FIFA-11 for warm up and injury prevention
- Group classes management
- Demonstration of various own body weight exercises for circuit training
- Preparation of exercise plan
- Preparation of circuit plan
- Whole body stretching
- Trigger point isolation and release
- Breathing exercises

(c) Viva

25 marks

(d) Project

25 marks

*[Handwritten signature]*

*[Handwritten signature]*

47  
*[Handwritten signature]*  
2018 No.

*[Handwritten signature]*

*[Handwritten signature]*



ESSENTIAL READINGS/ REFERENCES

1. W. Larry Kenney, Jack H. Wilmore, David L. Costill - Physiology of sports and exercise (5<sup>th</sup> Ed.).
2. Michael W. Whittle- Gait Analysis (4<sup>th</sup> Ed.).
3. Tudor O. Bompa, PHD, G. Gregory Haff, PHD - Periodization Theory and Methodology of Training (5<sup>th</sup> Ed.).
4. William E. Prentice, PHD-Athletic Training.
5. Gregory. Haff, Travis& Triplett, (2006) - Essentials of Strength Training and Conditioning, Human Kinetics Book.
6. Baechle, T. (1989). Essentials of strength training and conditioning (4th ed.)
7. Advances in Functional Training - Mike Boyle
8. Mcglynn, G. (1993). Dynamics of fitness. Madison: W.C.B Brown.
9. Sharkey, B. J. (1990). Physiology of fitness, Human Kinetics Book.

*High*

*Q*

48

*100*  
*100*  
*100*

*Key*

*fu*

### EVALUATION OF PAPERS

1. Examination process considering of paper setting, evaluation etc. will be carried out internally by the experts approved by JAC of Directorate of Sports department Panjab University. The theory papers of 80 marks each, an examination shall be conducted by the PU Chandigarh by subjective-objective mode with the following breakup: -
  - (a) In each paper, there will be total eight long questions (10 marks each) and selected in such a way that there will be 02 question from each unit (10x4=40 marks). Besides, this there will be 20 short answers/ one-word answers (each valued at one marks) to be compulsorily answered by the candidate. (20 x 2 = 40 marks), thus, making 80 marks maximum.)
  - (b) Internal evaluation of the theory paper for 20 marks shall be done by the Sports Performance Enhancement Centre of the BSF by assessing the overall performance of students during the course through monthly exams, attendance, behavior, dedication etc.
2. All practical activities shall be evaluated by the BOOs constituted by the competent authority as per SOP. SOP is under preparation and will be attached soon or as when the SOP for the same will be revise.
3. Examination will be carried out at BSF location under the supervision of BOOs constituted by CA as per SOP.
4. In case a candidate is not satisfied with the evaluation in theory or practical activities partially or wholly, he can represent his case to the University for re-evaluation within fifteen days of declaration of result with re-evaluation fee as admissible by PU.
5. Individual less than 35 % in theory and 40 % in practical will declare fail and will reappear during the next course. For appearing in next course trainee have to re-pay examination fee as admissible as per norms of PU.

Kamph

Q

49/1/2011  
Rajinder Singh

1/1/11