

SPORTS AUTHORITY OF INDIA
NETAJI SUBHAS NATIONAL INSTITUTE OF SPORTS, PATIALA

DIPLOMA COURSE IN SPORTS COACHING

“REVISED SYLLABUS” 2015-16

THEORY AND SCIENCE OF HOCKEY

1st Semester

THEORY PAPER-I

<i>Sr.no</i>	<i>Topic</i>	<i>Teaching hours</i>
1 08	History of Hockey	
	Ancient Hockey	
	National History – Sr. National, Jr. National (Men & Women) Asian History – Asian Games, Asia Cup, Asian Champions Trophy (Men & Women)	
	International History – World Cup, Olympic Games, Champions Trophy, Commonwealth Games, Champions Challenge (Men & Women)	
	Structure and function of:-	
	(i) FIH – Executive Board, Rules Board	
	(ii) A.H.F	
	(iii) National Hockey Federation	
	(iv) I.O.A., I.O.C., SAI, NSNIS	
2 06	Terminology	in Hockey
	Rule Book Terminology Coaching Terminology	
3	Facilities and Equipment management	10
	a. Developmental trends in facilities and equipment in hockey	
	b. Construction, marking and maintenance of play-fields:-	

- (i) Synthetic Surface
- (ii) Natural grass, Gravel grounds, and mud fields
- (iii) Indoor – Hockey Halls.

4 Rules of the game and umpiring 22

- a. Evolution of Rules
- b. Recent amendments of Rules
- c. Interpretations of Rules
- d. Tournament Rules and regulations
- e. Qualities and duties of Umpires
- f. Duties of match officials

5 Physical and mental abilities of Hockey player: 08

- a. Specific Motor abilities.
- b. Specific skill abilities.
- c. Psychological abilities
- d. Social abilities

6 The Coach and Coaching 08

- a. Philosophy of coaching
- b. Qualities of a successful coach:
 - c. Communication skills of coach
 - d. SWOT management of coach
- e. Skills of a coach
- f. Coaching Ethics

7. **Organisation and management of competitions:-** 20

a) Qualifying and competition systems:

- (i) Olympic games
- (ii) World Cups (Sr. & Jr.)
- (iii) Champions Trophy, Champions Challenge
- (iv) Regional Championships
- (v) National Championships (Sr. & Jr.)

b) Competition organization:–

- (i) General Rules
- (ii) Technical Rules.
- (iii) Equipment and facilities.
- (iv) Drawing of fixtures
- (v) Functions of various committees
- (vi) Types of tournaments:–
 - League
 - Knockout
 - Pyramid
 - League cum knockout
- (vii) Seeding system

8. Methods of Teaching and Coaching

18

Class Management:– Principles, Organisations, Formations and class control

Methods :

- a) Presentation method
- b) Cooperation method
- c) Task method
- d) Faults – Reasons – Corrections

Total

110

THEORY PAPER-I

<i>Sr.no</i>	<i>Topics</i>	<i>Hours</i>
1.	Conditioning, Warming Up and Limbering Down	10
	(a) Meaning	
	(b) Types	
	i) General ii) Specific	
	(c) Principles and importance	
	(d) Methods and Means	
	(e) Effects of warming up and conditioning	
	(f) Climatic conditions	
	(g) Modern trends of warming up and conditioning	
2	Basic Techniques and their variations:	40
	a. Definition and importance	
	b. Scientific principles used	
	– Motor components	
	– Training load	
	– Motor abilities	
	– Training schedules	
	c. Techniques	

- i. Dribble and Roll
- ii. Hits – Straight Hit, wrong foot Hit, Reverse Hit,
Turn-around and Hit, Left hand reverse hit
- iii. Pushes – Straight Push, Reverse Push, Wrong foot Push,
- iv. Flicks – Straight Flick, Reverse Flick, Wrong foot flick.
- v. Scoops – Straight Scoop, Push Scoop.
- vi. Stopping and Receiving –
 - In front of body
 - On right side
 - On left side
 - Reverse stopping
 - Stopping High Balls in air
 - Stopping low bouncing balls

3. Advance Techniques:
20

- a) Definition and importance
- b) Applied scientific principles
- c) **Technique:** Slap shot, sweep shot, Low back hand reverse hit,
Left hand reverse hit, Drag flick,
- i. Dodging and its variations: elimination skills, Jink
- ii. Tackling and its variations: Interception and variations, Channeling
Lunge, Flat, reverse Flat, Poke
- iii. Dodging, Popping and shooting:
- iv. Tackling, passing and clearances
- v. Anticipation and Interception
- vi. Peripheral vision and its importance
–Types of vision (split, stretch etc.)

4. Passes :
10

- a. Principles of passing
- b. Requirements of passing
- c. Types of Passes:
 - (i) Parallel pass
 - (ii) Through pass
 - (iii) Return pass/Triangular pass
 - (iv) Over head pass
 - (v) Cross pass

(v) Back pass:

- d. Techniques of implementing different passes **with** lead-up games
- e. Application in game situations
- f. Faults –Reasons – Corrections

5. Training Implications of technique: in different age groups 05

- a. Surfaces and Equipment
- b. Fitness level
 - SAQ training
 - Core fitness through gym/Swiss ball training
- c. Game experience
- d. Age group
- e. Training age

6. Evaluation of skill performance: - 05

- a. Skill tests
 - SAI
 - Dr. Mehrotra– Dr. Dureha
 - Dr. Kasi Viswanath
- b. Functional tests
- c. Rating scales
- d. Subjective rating by experts
- e. Game reading
- f. General tests and measurements
- g. Charts, Graphs, Statistics, Records

7. Tactics: In relation to motor action 15

- a. Definition, Importance, Principles
- b. Types:–
- i. Individual Tactics
- ii. Group Tactics
- iii. Teams Tactics
- c. Tactics in different game situations (set play, 23 meters

& Pieces)

8. Principles of skill teaching, training and skill learning. 05

9. Application of Mechanical principles and its application in different types of Techniques.

- Deduction of Faults
- Reasons of faults
- Rectification of faults

Total 110

PRACTICALS.

<i>Sr.n</i>	<i>Topic</i>	<i>Teaching hours</i>
1.	Warming up –general and specific as per the requirements of the player/teams in different situations.	35
2.	Class formations, commands, class control and management, conduct of calisthenics and rhythmic exercises.	20
3.	Fitness training – general to develop motor – abilities. Specific through game exercises, circuit – training, interval training. Pressure training, interval training. Pressure training and specific fitness exercises for flexibility and suppleness.	45
4.	Preparation, maintenance and marking of hockey– fields (Synthetic gravel Natural grass) and the equipment.	20
5.	Conduct of competitions and practical for officiating and as technical	30

	delegates	
6.	Basic techniques in Hockey – teaching, training and perfection for performance on different surfaces with tactics.	60
7	Combination techniques in hockey – teaching training and perfection for performance on different surfaces. Functional skills and tactical play of skill.	50
8.	Practice of teaching stages, analysis of faults and suggestive measures for rectification.	35
9.	Practical experience to control loads. Making judgment of symptoms and signs of over-loading during training	25
10	Organisation of minor games, lead-up game, conditioned games etc.	25
11.	Video-analysis with specific aims to develop training exercises as suggestive measures to overcome the faults/weaknesses and for performance development.	16
12	Pedagogic practice-teaching, training, coaching.	35
	Total	396

2nd Semester

THEORY PAPER-I

<i>Sr.no</i>	<i>Topics</i>	<i>Teaching hours</i>
01.	Talent identification and its development:	
12		
a)	Principles and procedures to select talent for Hockey (Tests and Measurements)	
b)	Development of talent on long-term basis:	
	(i) Fitness for various age groups	
	(ii) Technique training for various age groups	
	(iii) Tactical training for various age groups.	
c)	Progressing talent into elites	
d)	Monitoring of training and development.	

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| 02. | Specific | fitness | requirements | for | players: |
| 12 | | | | | |
| a) | | Fitness for Goal Keeper | with equipment in circle | | |
| b) | | Fitness to play on synthetic surface | | | |
| c) | | Fitness to play with different equipments | | | |
| d) | | Fitness to play special roles in set plays. | | | |
| e) | | Different exercises, S.A.Q. training and core muscles training for Goal Keeper | | | |

- a) Principles in Attack.
- b) Principles in Defense.
- c) Principles in Mid-Attack.

- a) Goal-keeper
- b) Deep Defenders
- c) Mid-fielders
- d) Attackers

- a) Team tactics in attack
- b) Team tactics in defense
- c) Team tactics in mid-field
- d) Match tactics and strategies in relation to the game-situations.
- e) Set plays – Tactical variations
- f) Team communication
- g) Counter defense

		h) Pressing: Types, utility, difficulties & reducing space	
		i) V Hockey	
06	Systems and Formations of Play:		
24			
		– Merit & Demerit and its utility in modern Hockey game	
	a)	5:3:2:1	
	b)	3:3:3:1:1	
	c)	4:3:3:1	
	d)	4:4:2:1	
	e)	3:2:3:2:1 with 3 high strikers	
07			Selection of teams:
10			
	a)	Players on different positions	
	b)	Composition of teams	
	c)	Specialists for set-play.	
	d)	Team Captain	
08	Selection of team officials:		
10			
	a)	Chief Coach, Assistant Coach and skill Coach	
	b)	Physiotherapist and Masseur	
	c)	Sports Medicine Doctor	
	d)	Sports Psychologiste/ mental trainer	
	e)	Sports Scientists	
	f)	Video grapher and analyst	
	g)	Fitness trainer	
Total	<u>100</u>		

<i>Sr.no</i>	<i>Topics</i>	<i>Teaching hours</i>
1.	Planning :	
25	<p>Principles of Planning Training cycles and their aims</p> <p>Periodization:</p> <p>Definition and aim</p> <p>(i) Types of periodisation</p> <ul style="list-style-type: none"> • Single periodization • Double periodization • Multi periodization <p>(ii) Periods of periodization</p> <p>(iii) Aims of different periods</p> <p>(iv) Load distribution in different periods</p> <p>(v) Psychological approach for periodization</p>	
2.	Training Schedules/programmes:	25
	<p>a) Training schedules for short duration coaching camps (4 to 6 weeks)</p> <p>b) Weekly training programmes</p> <p>c) Daily training programmes (lesson plans)</p> <p>d) Isolated training sessions for individuals</p> <p>e) Schedules for set-plays training.</p>	
3.	Competitions:	12
	<p>a) Build up competitions</p> <p>b) Decisive competitions</p> <p>c) Direct preparation for main competitions.</p>	

4.	Match Plans:	15
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- a) Warm up for starters and substitutes
- b) Pep talks before and after match
- c) Pep talks during intervals
- d) Guidance to substitutes and suspended players
- e) Coaching during game
- f) Finalisation of game strategies in consultation with captain and team officials.
- g) Improvement of match intelligence

5.	Team Management in Competition:	10
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- a) Cooperation with tournament officials/organizers
- b) Control over team players : on and off the field
- c) Cooperation with team officials
- d) Briefings to media.
- e) Team meetings – all types and level

6.	General Topics	12
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- a) Specific Nutrition –Pre game, Post game
- b) Hydration for hockey Players
- c) Injury management – an important aspect of modern Hockey
- d) Hydrotherapy and its importance
- e) Recovery– different phases of recovery before, during & after

the game

Total 100

7.	Sports Marketing	06
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- a) Introduction to Sport Marketing**
Definition and explanation of Sport Marketing, Marketing pioneers, unique features of Marketing.
- b) Consumer Behavior**
 - i) Sport Consumers (Professional setting, Educational setting, Recreational setting)
 - ii) Internal & External Influences
 - iii) Decision – Making process
 - iv) Customer Motives, customer satisfaction
- c) Public Relations and Sponsorship:**

	i) Media & community Relations, Public Relations tools, image enhancement.	
	ii) Sponsorship Trends, Endorsement, Planning & Sales Process, Sales Promotions, Advertisement event promotion	
8.	Computer Application	06

Note: There shall not be any examination for topics number 7 & 8.

2nd semester

PRACTICALS.

<i>Sr.n</i>	<i>Topics</i>	<i>Teaching hours</i>
1.	Warming-up-General and specific with special exercises.	35
2.	Practical organisation of tests to measure physical,technical and tactical abilities of players of various age groups.	20
3.	Development of special physical abilities required for positions in different formations and to be effective in playing the set-plays.	35
4.	Fitness through relays with stick and ball, tactical games, technique/skill based minor and lead-up games.	20
5.	Functional training of all positions based on players role in different systems of play.	55
6.	Practice of technique and tactics of set-plays corner, penalty-corner, penalty-stroke, free-hits, hit-ins, start and restart, bully etc.	45
7.	Practice of combinations in attack, mid-field, defence and scoring successes in different systems	30
8.	Practical training for performance development in individual tactics, group tactics, team tactics and situational (improvised) tactics.	20
9.	Practical teaching and training of various systems of play and coaching during functioning of the formations against other systems of play- controlled game.	55
10	Organisation of drills, minor games and 6-a side (indoor) hockey game etc.	15
11.	Pedagogics-teaching, training and coaching.	50
Total	380	

RECOMMENDED BOOKS (HOCKEY)

Australian Hockey Association. *Coaching Manual Level-I. Edited by M. Ryan, B. Shea, V. Klye, I. Speding*

Australian Hockey Association. *Coaching Hockey – The Australian Way*, Australian Hockey Association. Denis Glencross

Cyril Walter. (1989) *Hockey, The Gold Medal Way*, Tur Borren Demi Moldings Ltd., Auckland.

David Whitaker (1986). *Coaching Hockey* The Crowood Press.

Dilip K.Dureha, Akhil Mehrotra (2003). *Teaching and Coaching Hockey*, Janvarin Praskashan (P) Ltd.

Dr. Lew Hardy.(1984) *Skill Development*. The National Coaching Foundation College Close Leads,L56 3QH Leeds BM Printers Huddersfield.

Harmik Singh, Tejinder Singh & Inderjeet Singh Gill (2002). *Teaching Manual Hockey*, Sports Authority of India.

Hockey Association (1975). *Hockey Coaching – The official Manual of the Hockey Association*, Hodder and Stoughton.

Horst Wein (1973). *The Science of Hockey*, S.Chand and Company.

Horst Wein (1981). *The Advanced Science of Hockey*, Pelham Books.

Ian Taylor (1989) . *Behind the Mask*, Macdonald Queen Anne Press, Macdonald and Co. (Pelhams) Ltd 66-73 Shoe Lane London BC4P 4AB.

Ivan Spedding , Margaret Ryan (1985) *Hockey Aussie Sports Coaching Programme*, ACHPER Publication, 214 Port Road, Hindmarsh, South Australia.

Joh Sheddan et al.(1984) *Role of the Coach*. The National Coaching Foundation College Close Leads,L56 3QH Leeds BM Printers Huddersfield.

John Cadman (1985). *Hockey the skills of the game*,The Crowood Press.

John Fazey. (1984) *Mental Preparation for Competition*, The National Coaching

Foundation College Close Leads,L56 3QH Leeds BM Printers Huddersfield.
John Fazey.(1984) *Acquiring Skills*. The National Coaching Foundation College Close
Leads,L56 3QH Leeds BM Printers Huddersfield.
Kapoor, M.L. (1968).*Romance of Hockey*, Workers Printing Press.
Kathleen A. Partridge (1991). *The Rebound Revolution*, Lazer Dazzle.
Nevill Mirey (1986). *The History of Hockey*, LielineLd.
Richard Beddoes, San Fisher, Ira Gitler (1969). *Hockey the Story of World's Fastest
Sport*, The Macmillan Company.

Recommended Web sites

<http://www.fihockey.org/>

www.stick2hockey.com