

## Syllabus of B.Sc. Sports Science Three Year Degree Course

### Scheme of Examination of B.Sc. Sports Science Three Year Course B.Sc. Part – I Semester - Ist

Paper	Name of Paper	Marks		Time
		Internal	External	
I	Qualifying Hindi*	10	90	3 Hrs.
II	Foundation of Physical Education & Sports	10	90	3 Hrs.
III	Computer Applications	10	30	2 Hrs.
IV(a)	Theory of Games** (Kabaddi, Volleyball, Judo)	5	45	2 Hrs.
IV(b)	Theory of Athletics*** (Sprints, 100 mtr, 200 mtr. & 5000 mtr.)	5	45	2 Hrs.
	<b>Total</b>	<b>30</b>	<b>210</b>	

\*Not included in Grand Total

\*\*Games:- Judo, Kabaddi, Volley ball.

\*\*\*Athletics:- Sprints 100 & 200, 5000 meters.

### Semester - II

Paper	Name of Paper	Marks		Time	Marks Practical
		Inter	External		
I	Qualifying English*	10	90	3 Hrs.	-
II	Anatomy of Fitness	10	90	3 Hrs.	-
III	Computer Applications	10	30	2 Hrs.	20
IV(a)	Theory of Games** (Badminton, Baseball, Archery & weight lifting)	5	45	2 Hrs.	50
IV(b)	Theory of athletics*** (Relay races and High jump)	5	45	2 Hrs.	50
	<b>Total</b>	<b>30</b>	<b>210</b>		<b>120</b>

\*Not included in Grand Total

\*\*Games:- Base ball, Badminton, Archery & weight lifting.

\*\*\*Athletics:- Relay Races, High jumps.

<b>Practicals -</b>	Games	=	50
	Athletics	=	50
	Computer	=	20
	<b>Total</b>	=	<b>120</b>

**Grand Total = Ist sem. + 2nd sem. + practicals**  
**240 + 240 + 120 = 600**

Division of internal marks

- (a) House Exams = 5
- (b) Attendance = 5 In case of only 5 marks an internal than these 5 marks will be awarded on the basis on attendance.

Division of external marks (practical)

- (a) Note book = 10
- (b) Lesson plan – 10
- (c) Progression of skills and fault correction = 15
- (d) Vive – Voca = 15 (Covering all the games prescribed in the syllabus of that year)

**Note- Similar division of marks will be applicable in athletic events in 1<sup>st</sup> year, 2<sup>nd</sup> year & 3<sup>rd</sup> year.**

**Note:-**

1. 7 Supervisory lessons in teaching each in every games & 5 supervisory lessons each from athletics events prepared by students in their note & checked by the concerned teacher during session.
2. Lessons on the games in any one of the games listed B.Sc. 1<sup>st</sup> Year course above (semester 1<sup>st</sup> and semester 2<sup>nd</sup>).
3. Lesson on athletics in any one of the athletics events listed above in B.Sc. 1<sup>st</sup> year course for games and athletics (semester 1<sup>st</sup> and semester 2<sup>nd</sup>)
4. Duration of practical examination will be 3 hrs. per group followed by Viva-Voca.
5. Practical classes for teaching the games and athletics will held throughout the year. However, practical examination will be held at the end of the second, fourth and sixth semester respectively.
6. Final lessons will be prepared on a separate chart for the final exams.
7. The draw for final examination (athletic & games) will be drawn ten days before the final exams.
8. Practical for computer will be held at the end of second semester and duration for computer practical will be 2 hours followed by viva voce.

**Note:** The same guidelines will be applicable in the course of B.Sc. II and B.Sc. III.

## Semester I

बी.एससी.-I  
विषय - हिन्दी

Max. marks: 90  
Internal : 10  
Time: 3 hrs.

### पाठ्य पुस्तक:

- 1- 'काव्य शिखर' – प्राचीन एवं मध्ययुगीन काव्य पर आधारित 'संज्ञक' पुस्तक स० डॉ० रामनरेश मिश्र, हिन्दी विभागाध्यक्ष म०द०वि० रोहतक।
- 2- 'गद्य-शिखर' नामक गद्य संकलन स० हिन्दी विभागाध्यक्ष, कृ० वि० वि० जिसमें पांच कहानियां और पांच निबन्ध संकलित होंगे।

### निर्देश:

- 1- पहला प्रश्न 'काव्य शिखर' नामक काव्य संग्रह से व्याख्या के रूप में होगा। पाठ्यपुस्तक में निर्धारित कवियों में से किन्हीं चार कवियों की चार व्याख्याएं पूछी जाएंगी। परीक्षार्थियों को उनमें से किन्हीं दो की सप्रसंग व्याख्या करनी होगी। प्रत्येक आठ अंक की होगी और पूरा प्रश्न १६ अंकों का होगा।
- 2- किन्हीं दो कवियों का साहित्यिक परिचय पूछा जाएगा जिनमें से परीक्षार्थियों को एक का उत्तर देना होगा। इस प्रश्न के लिए ८ अंक निर्धारित हैं।
- 3- निर्धारित कवियों में से किन्हीं दो पर 'अनुशीलनी' में से दो आलोचनात्मक प्रश्न पूछे जाएंगे। परीक्षार्थियों को किसी एक का उत्तर देना होगा। इस प्रश्न के लिए १२ अंक निर्धारित हैं।
- 4- लघुत्तरी प्रश्न द्रुतपाठ में निर्धारित चार कवियों ;अमीर खुसरों, विद्यापति, भूषण, धनानन्दद्व पर पाठ्य पुस्तक की 'अनुशीलनी' में से ही एक-एक प्रश्न अर्थात् चार प्रश्न पूछे जाएंगे, जिनमें से परीक्षार्थियों को किन्हीं दो प्रश्नों के संक्षिप्त ;प्रत्येक लगभग २५० शब्दों में उत्तर देने होंगे। प्रश्न परिचयात्मक प्रकृति के ही होंगे। प्रत्येक प्रश्न चार अंकों का होगा और पूरा प्रश्न आठ अंकों का होगा।
- 5- निर्धारित पाठ्य पुस्तक 'गद्य-शिखर' में संकलित निबन्धों और कहानियों में से व्याख्या के लिए दो-दो अवतरण दिए जाएंगे जिनमें से परीक्षार्थियों को

- प्रत्येक से एक-एक अवतरण की सप्रसंग व्याख्या करनी होगी। प्रत्येक व्याख्या ८ अंक ही और पूरा प्रश्न १६ अंकों का होगा।
- 6- निर्धारित कहानीकारों और निबन्धकारों में से एक-एक का साहित्यिक परिचय पूछा जाएगा जिनमें से परीक्षार्थियों की किसी एक का उत्तर देना होगा। इस प्रश्न के लिए ८ अंक निर्धारित हैं।
  - 7- निर्धारित लेखकों में से किन्हीं दो पर 'अनुशीलनी' में से दो आलोचनात्मक प्रश्न पूछे जाएंगे। परीक्षार्थियों को किसी एक का उत्तर देना होगा। इस प्रश्न के लिए १२ अंक निर्धारित हैं।
  - 8- लघुत्तरी प्रश्न द्रुतपाठ में निर्धारित दो कहानीकारों ;मोहन, राकेश और मालती जौशीद्ध और निबन्धकारों ;महावीर प्रसार द्विवेदी और सरदार पूर्ण सिंहद्ध पर पाठ्य पुस्तक की 'अनुशीलनी' में से ही एक-एक प्रश्न अर्थात् चार प्रश्न पूछे जाएंगे, जिनमें से परीक्षार्थियों को किन्हीं प्रश्नों के संक्षिप्त ;प्रत्येक लगभग २५० शब्दों में उत्तर देने होंगे। प्रश्न परिचयात्मक प्रकृति के होंगे। प्रत्येक प्रश्न चार अंकों का होगा और पूरा प्रश्न आठ अंकों का होगा।
  - 9- अन्तिम प्रश्न 'काव्य-शिखर' की 'अनुशीलनी' के व्याकरण पर आधारित होगा जिसके लिए बारह अंक निर्धारित हैं। इसके अन्तर्गत वर्तनी, पर्याय, विलोम, वाक्य के लिए एक शब्द, मुहावरे और लोकोक्ति निर्धारित है। इसमें बारह अनिवार्य वस्तुनिष्ठ प्रश्न होंगे। प्रत्येक प्रश्न के लिए चार विकल्प होंगे, जिनमें से एक शु( उत्तर देना होगा।

त्मणिरू.

- 1- काव्य शिखर, लक्ष्मी पब्लिशिंग हाऊस, रोहतक।
- 2- डॉ. मीरा गौतम, डॉ. रामपत यादव, डॉ. बाबू राम यादव। गद्य शिखर, प्रकाशन विभाग, कुरुक्षेत्र विश्वविद्यालय, कुरुक्षेत्र।
- 3- व्याकरण।

## **B.Sc. I**

### **Foundation of Physical Education**

**Max. marks – 90**  
**Internal assessment - 10**  
**Time : 3 hrs**

**Note:- Paper setter is required to set 10 questions from 5 units, two questions from each unit. Candidate is required to attempt five questions in all selecting one question from each unit.**

#### **Unit-I**

Meaning & definition of physical education, aim and objective of physical education. Scope of physical education, need and importance of physical education in modern society. Relationship of physical education with general education. Leisure and physical education. Place of physical in the present system of education.

#### **Unit-II**

National programme of physical education & sports. National institution of physical education & sports – NSNIS Patiala, LNIPE Gwalior, LNCPE Trivendrum (Kerala), sports authority of India (SAI), national sports talent contest scheme, army boys sports company scheme, special area scheme, SAI training center scheme, national coaching scheme, rural sports and national.

#### **Unit-III**

History of physical education in India, division of ancient period, British period till 1947. Physical Education in India after independence, physical education in Greece, Rome, Germany, China, USA.

#### **Unit-IV**

Indian Olympic Association, history, constitution and role of IOA. Organization and State Associations, National Games, Asian Games, SAF Games, Common Wealth Games.

#### **Unit-V**

Olympic movement and its impact in physical education and sports. Games and sports as man's cultural heritage, role of games and sports in national and international integration. Sports policy of India and Haryana, Sports awards – Bhima, Arjun award, Rajiv Gandhi Khel Rattan award, Maulana Abul Kalam Azad Trophy, Dhyanchand life time achievement award and Dronacharya Award.

#### **Ref.:**

1. Buchor, Charlee A Foundation of Physical Education St. Louis: the C.V. Mosby Company 1983.
2. Nixon, Eungance E: and Cozens W. Introduction to Physical Education, London; W.B. Saunders Company, 1974.

3. Oberteuffer, Delbert. Physical Education, New York: Harpur and Brothers Publishers, 1970.
4. Sharman, Bakeen R. Introduction to Physical Education, New Yorks A.S. Bargns and Company, 1964.
5. Williams, Firing. The Principles of Physical Education. London W.B. Saunders Company, 1964.
6. Wakharkar D.G. Manual of Physical Education in India Poorl Publication Publication Pvt. Ltd., Bombay, 1967.
7. Dr. Ajmer Singh, Essential of Physical Education Kalayani Publisher.
8. [www.sportal.nic.in](http://www.sportal.nic.in)
9. [www.SAI](http://www.SAI)



**B.Sc. I**  
**Computer Application**

**Total marks – 40**  
**Theory marks – 30**  
**Internal marks – 10**  
**Time : 2 hrs**

**Note:- Paper setter is required to set 10 questions from 5 units, two questions from each unit. Candidate is required to attempt five questions in all selecting one question from each unit.**

**Unit-I**

Meaning and definition of computer, characteristics of computer, and basic applications of computer.

**Unit-II**

Components of a Computer System, Central Processing Unit, Visual Display Unit, Keyboard.

Input and output devices, mouse, joy stick, scanner, microphone, OCR, MICR; light pen, bar code reader, digital camera, printer, speaker, plotter.

**Unit-III**

Concept of Memory, primary and secondary memory, RAM and ROM, units of memory – byte, kilobytes, megabytes, gigabytes.

**Unit-IV**

Storage devices, floppy disc, hard disc, CD ROM and DVD.

**Unit-V**

Computer languages, machine language, assembly language and high level language, role of assembler and compiler.

**Practical:- The practical examination will be taken from the entire syllabus given above.**

**Ref:-**

1. Essential of computer and network Technology by Dr. N.S. Gill (Khanna Book Publications New Delhi).
2. Fundamental of Computers by V. Rajaramars (Printice Hall – India).
3. Computer Fundamentals by B. Ram.
4. P.C. Software (MS-Excel etc.) by R.K. Taxali (Take Maegrew Hill).
5. Any other book/manual Cenerty-the contents of above syllabus.

## B.Sc. I

### Theory of Games

Total marks – 50  
Theory marks – 45  
Internal marks – 05  
Time : 2 hrs

**Note:-** Paper setter is required to set 6 questions from 3 units, two questions from each unit. Candidate is required to attempt 3 questions in all selecting one question from each unit.

The questions in different units given below should be based on the following games.

1. Judo
2. Kabaddi
3. Volleyball

#### Unit-I

1. History of games.
2. Role of Haryana's people for the development of games.
3. Duties of officials (Pre game, during the game & post game).
4. Technical officials & their duties.
5. Protective equipment used in games.

#### Unit-II

1. Dimension & marking of the play field/area.
2. Rules & regulations of the games mentioned above.
3. Interpretation of rules & regulations.

#### Unit-III

1. Fundamentals of various games.
2. Offensive & defensive strategy employed in the various games.
3. Conduct of tournament & types of fixtures used in the games mentioned above.

#### Ref.:-

1. Wado Allen – The F.A. Guide to training and coaching.
2. Seeton, D.C. Dhyton, I.A. Leib, H.C. and Massumith, I – Basic book of sports, Englewood Cliffs, M.D. Prephlice Hall.
3. Dr. Faaune Hero – The Modern Olympic games Budapest, Pennonic Press.



4. Colbarig A.L. Modern Basketball – A Fundamentals Analysis of Skills and Tactics. London: Nicholes Kaya. 1966.
5. BCC, Chair and Narton Kon – Man to Man Defense and Attack, New York: The Ronald Press Company, 1959.
6. Bee, Clair and Noretton, on Zone Defense and Attack. New York: The Ronald Press Company, 1959.
7. FELDENKRAIS M. Higher Judo: Ground Work, Fredrick Warne and Co. Ltd. London and New York: 1962.
8. SMITH Robert W. Judo its start and Practice. Charle E. Tuttle Company of Rutland, Vermani, Tokyo and Japan, 1958.
9. EVEN Harry: Your Book of Judo Faber and Faber Ltd. 3 Queen Sauare London W.C.I., 1972.
10. Uyenishi S.L. The Text Book of JU – Jutsu – Athletic Publications Ltd. Link House, Store Street, London, W.C.I.



## B.Sc. I

### Theory of Athletics

Theory – 45  
Internal marks – 05  
Time : 2 hrs

**Note:-** Paper setter is required to set 6 questions from 3 units, two questions from each unit. Candidate is required to attempt 3 questions in all selecting one question from each unit.

The questions in different units given below should be based on the following events

- (i) Sprints 100, 200 meters
- (ii) 5000 meter

#### Unit-I

1. History of athletics in Haryana.
2. Selection of an athlete.
3. Interpretation of rules and regulations of the events mentioned above.

#### Unit-II

Fundamentals of various events.

1. Sprints 100-200 (Crouch start, supporting phase & releasing phase).
2. 5000 meter race.

#### Unit-III

1. Dimension & marking of standard track.
2. Dimension & marking of events mentioned above.
2. Equipment and their specifications used in various events given above.

#### Ref.:-

1. Doherty J. Manneth – Modern track and field, Englewood Cliffe, N.J. Prentica Hall, Ino.
2. Wado Allen – The F.A. Guide to training and coaching.
3. Uyenishi S.L. The Text Book of JU – Jutsu – Athletic Publications Ltd. Link House, Store Street, London, W.C.I.

## Semester II

### **B.Sc. I English**

**Max. Marks – 90**

**Internal - 10**

**Time : 3 hrs**

- A. The Pointed Vision: An Anthology of Short Stories by Usha Bande and Krishan Gopal (Oxford University Press, New Delhi.**  
**B. Ideas Ag low edited by Dinesh Kumar & U.B. Abrol.**  
**C. Text Prescribed: A Remedial English Grammar for Foreign Students by F.T. Wood.**

- Q1. Explanation with Reference to the Context.  
The candidate will be required to attempt two passages each (with internal choice) from the book Collection of essays (Ideas Aglow). 10 Marks
- Q2. Short answer type questions on short stories (five questions to be attempted out of the given eight)
- OR
- Four short-answer questions will be set on the prescribed essays. The students will be required to attempt any five out of the given eight questions. 5 mark
- Q3. One essay-type questions (with internal choice) will be set on each of the prescribed texts A & B. Students will be required to attempt one question each from both the texts. 5 marks
- Q4. Comprehension Passage from the book of essays (with five questions at the end)
- Q5. Items based on the exercises appended to the essays in Text (B) 5 marks
- Q6. (a) Idioms and phrases 15 marks  
(b) Synonyms / antonyms  
(c) One word substitution
- Q7. Comprehension passage (with five questions at the end) 5 marks
- Q8. Paragraph: The candidate will be required to write a paragraph on any of the five given topics. 5 marks
- Q9. Letter / Application: Students will be asked to write a letter or an application (The Question will carry internal choice).
- Q10. Translation (From Hindi to English) of a passage consisting of 8 to 10 questions. 10 marks

**Ref.:-**

1. Dr. Usha Bande, Krishan Gopal. The Pointed Vision. Oxford University Press.
2. Dinesh Kumar, V.B. Abra. Ideas Aglow. Publication Bureau K.U.K.
3. Asha Kadyan. Chronicles of Time, an anthology of poems. Oxford University Press.
4. F.T. Wood. A Remedial English Grammar for Foreign Students. Published by Rajiv Beri for Macmillan India Limited.



## **B.Sc. I**

### **Anatomy & Fitness**

**Max. marks – 90**  
**Internal assessment – 10**  
**Time : 3 hrs**

**Note:- Paper setter is required to set 10 questions from 5 units, two questions from each unit. Candidate is required to attempt five questions in all selecting one question from each unit.**

#### **Unit-I**

Meaning of anatomy, cell, structure, properties of living matter. The role of anatomy in physical education & sports, anatomy of bones cartilage's, Names and location and functions of bones, kinds of bones, joints and their types, tissues, organs and system of body.

#### **Unit-II**

Anatomy of muscular system, structure of muscles and their kinds. Properties of muscles. Muscle work and, fatigue, anatomy of respiratory organs, tissue and palmary respiration, anatomy of heart, function of heart, heart beat, stroke volume, cardiac output.

#### **Unit-III**

Anatomy of digestive organs (alimentary canal), structure and functions of excretory system, meaning of endocrine glands and structure of the following glands – pituitary glands, ingroid parathyroid, adunal glands.

#### **Unit-IV**

Physical – fitness:-

Definition of physical fitness components of physical fitness, benefits of physical – activity, development of physical fitness. Controlling and management of your weight, determining the right weight to you, factors influencing physical fitness.

#### **Unit-V**

Planning a fitness programme, identify your fitness goals. Design your programme, causes and prevention of fitness related injuries, selecting a nutrinal plan for fitness.

#### **Ref.:-**

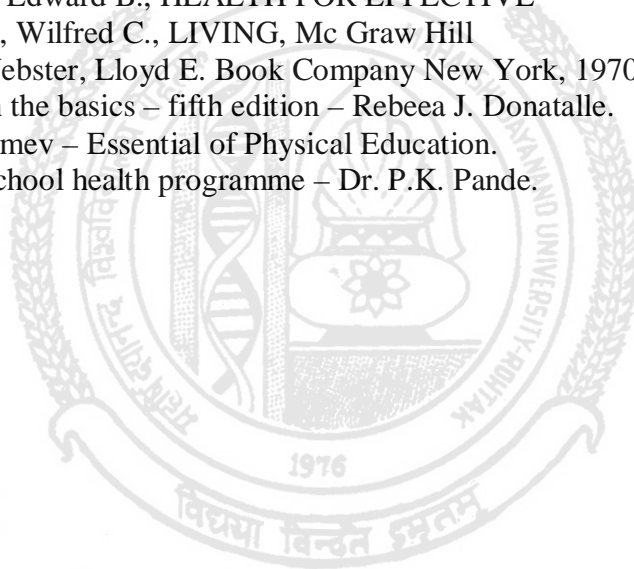
1. Introduction to anatomy & physiology – Dr. Shemsher Singh.
2. Lawrence, Thomas Gordan; Your health and Safety, Har Schiver. Alics; Powers, Courts, Braco & World, inc. Douglas F; and Vorhana Levis J. New York. 1969.
3. Bauer, W.W. (Editor) TODAY'S' Health Guide, American Medical Association, Revised Edition 1968.
4. Harg, Jossie Helen, TODAY'S' SCHOOL HEALTH PROGRAMES, New York Hold, Rinehart and Winston, Inc. 1965 (37/712)

Concepts of SWP components and comients; H 65 S. Roles and responsibilities of Health & Education Personal; Suggested H.E. Unites & Content within H.F. Units; Content with Lesson Plans, etc.

5. Anderson, C.L. SCHOOL HEALTH PRACTICE, ed. 4, Saint Lduis, The C.V. Maby Company, 1968. (371, 76).

Concept of SHP, Components and Contents;  
Criteria for evaluating procures,  
School Health Programme Evaluated Practices,  
❖ Evaluation of Administrative Practices,  
❖ Health Course Inventory,  
❖ Survey of Healthful School living,  
❖ Health Practices Inventory, etc.

6. Johns, Edward B., HEALTH FOR EFFECTIVE  
Suttan, Wilfred C., LIVING, Mc Graw Hill  
and Webster, Lloyd E. Book Company New York, 1970.  
Health the basics – fifth edition – Rebeea J. Donatalle.  
Dr. Ajmev – Essential of Physical Education.  
The School health programme – Dr. P.K. Pande.



**B.Sc. I**  
**Computer Application**

**Total marks – 40**  
**Theory marks – 30**  
**Internal marks – 10**  
**Time : 3 hrs**

**Unit-I            Software & Communication Technology**

- 1.1    System, utility and application software with examples.
- 1.2    Need of networking, LAN, MAN, and WAN.

**Unit-II            Information Technology Tools**

- 1.1    M.S. Windows (Basic concept of an operating system and its function).
- 1.2    Introduction to windows using mouse and moving icons on the screen, my computer, recycle bin, task bar, start menu and menu selection, setting system date and time, windows explorer to you files, folders and directories, creating and renaming of files and folders.
- 1.3    Basic components of windows: desktop, flame, title bar, menu bar, status bar, using right button of mouse, creating short cut.

**Unit-III          Basic Windows Accessories and MS Word**

- 3.1    Note pad, paint, calculator, word pad, using clip board.
- 3.2    Introduction to word processor, creating and saving a document, editing and formatting a document, inserting symbol, printing a document, adding headers and footers, numbering pages.

**Unit-IV          MS Power Point**

- 4.1    Introduction to presentation graphics, understanding the concept of slide show, basic element of slide, different types of slide layouts, creating and saving a presentation, different views of slide, editing and formatting a slide. Adding titles, sub titles, text, background, water mark, headers and footers, numbering slides, inserting picture from files.

**Unit-V            MS Excel**

- 5.1    Introduction to spread sheets, concept of work sheet and workbook, creating and saving a work sheet, working with a spread sheet, inserting numbers, date / time, inserting and deleting cells, rows and columns, formulae – entering a formula in cell, using operators (+ - \* / ) in formula, printing a worksheet, using simple statistical function: sum, average, max, min.

**Practical:- The practical examination will be taken from the entire syllabus given above.**

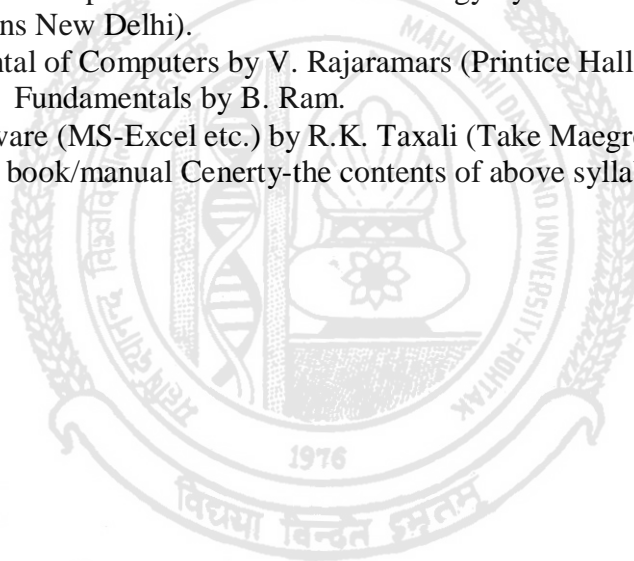
**Practical for Computer:**

1. Windows operating system	5
2. MS Word	5
3. MS Excel	5
4. MS PowerPoint	5

Grand Total - 20

**Ref:-**

1. Essential of computer and network Technology by Dr. N.S. Gill (Khanna Book Publications New Delhi).
2. Fundamental of Computers by V. Rajaramars (Printice Hall – India).
3. Computer Fundamentals by B. Ram.
4. P.C. Software (MS-Excel etc.) by R.K. Taxali (Take Maegrew Hill).
5. Any other book/manual Cenerty-the contents of above syllabus.





## B.Sc. I

### Theory of Games

Total marks – 50  
Theory marks – 45  
Internal marks – 05  
Time : 2 hrs

**Note:-** Paper setter is required to set 6 questions from 3 units, two questions from each unit. Candidate is required to attempt 3 questions in all selecting one question from each unit.

The questions in different units given below should be based on the following games.

- (i) Badminton
- (ii) Baseball
- (iii) Archery
- (iv) Weight lifting

#### Unit-I

1. History of games.
2. Role of Haryana's people for the development of games.
3. Duties of officials (Pre game, during the game & post game).
4. Technical officials & their duties.
5. Protective equipment used in games.

#### Unit-II

1. Dimension & marking of the play field/area.
2. Rules & regulations of the games mentioned above.
3. Interpretation of rules & regulations.

#### Unit-III

1. Fundamentals of various games.
2. Offensive & defensive strategy employed in the various games.
3. Conduct of tournament & types of fixtures used in the games mentioned above.

#### Ref.:-

1. Wado Allen – The F.A. Guide to training and coaching.
2. Seeton, D.C. Dhyton, I.A. Leib, H.C. and Massumith, I – Basic book of sports, Englewood Cliffs, M.D. Prephlice Hall.
3. Dr. Faaune Hero – The Modern Olympic games Budapest, Pennonic Press.

4. Colbarig A.L. Modern Basketball – A Fundamentals Analysis of Skills and Tactics. London: Nicholes Kaya. 1966.
5. BCC, Chair and Narton Kon – Man to Man Defense and Attack, New York: The Ronald Press Company, 1959.
6. Bee, Clair and Noretton, on Zone Defense and Attack. New York: The Ronald Press Company, 1959.
7. FELDENKRAIS M. Higher Judo: Ground Work, Fredrick Warne and Co. Ltd. London and New York: 1962.
8. SMITH Robert W. Judo its start and Practice. Charle E. Tuttle Company of Rutland, Vermani, Tokyo and Japan, 1958.
9. EVEN Harry: Your Book of Judo Faber and Faber Ltd. 3 Queen Sauare London W.C.I., 1972.
10. Uyenishi S.L. The Text Book of JU – Jutsu – Athletic Publications Ltd. Link House, Store Street, London, W.C.I.



## **B.Sc. I**

### **Theory of Athletics**

**Theory – 45**  
**Internal marks – 05**  
**Time : 2 hrs**

**Note:- Paper setter is required to set 6 questions from 3 units, two questions from each unit. Candidate is required to attempt 3 questions in all selecting one question from each unit.**

**The questions in different units given below should be based on the following events.**

- (i) Relay races.
- (ii) High jump.

#### **Unit-I**

- (i) Organization administration of college athletic meet.
- (ii) Duties of officials in athletic meet.
- (iii) Interpretation of rules and regulations of the events mentioned above.

#### **Unit-II**

Fundamentals of various events:-

- (i) High jump - approach run, take off, flight, landing off different techniques.
- (ii) Relay races

#### **Unit-III**

- (i) Dimension and marking of events given above.
- (ii) Equipment and their specifications used in various events mentioned above.

#### **Ref.:-**

1. Doherty J. Manneth – Modern track and field, Englewood Cliffe, N.J. Prentica Hall, Ino.
2. Wado Allen – The F.A. Guide to training and coaching.
3. Uyenishi S.L. The Text Book of JU – Jutsu – Athletic Publications Ltd. Link House, Store Street, London, W.C.I.