

ODISHA PUBLIC SERVICE COMMISSION

ADVERTISEMENT NO. 05 OF 2020-2021

RECRUITMENT TO THE POST OF LECTURER IN GOVERNMENT COLLEGE OF PHYSICAL EDUCATION IN GROUP-B UNDER SPORTS AND YOUTH SERVICES DEPARTMENT.

WEBSITE - <http://opsc.gov.in>

Online applications are invited from the prospective candidates through the Proforma Application to be made available on the WEBSITE (<http://opsc.gov.in>). The link for registration/re-registration and payment of examination fee shall be available from **09.10.2020 to 09.11.2020 (Note- 16.11.2020 is the last date for submission of Registered Online Application)** for recruitment to 05 (Five) posts of Lecturers in Physical Education in Group-B, under Sports & Youth Services Department, in the scale of pay of Rs.9,300-34,800/- carrying grade pay of Rs.4600/- in Level-10 of pay matrix under ORSP Rules-2017 with usual Dearness and other allowances as may be sanctioned by the Government of Odisha from time to time.

2. **VACANCY POSITION: As per requisition filed by the Sports & Youth Services Department, the vacancy position along with reservation thereof is given below:**

Sl. No.	Category	Total Vacancy position
1	Un-reserved	03
2	S.T.	02

TOTAL - 05

The number of vacancies to be filled up on the basis of this recruitment is subject to change by Government without notice depending upon the exigencies at the discretion of the Government.

3. **AGE :** A candidate must be under 32 (thirty two) years and above 21 (twenty one) years of age on the 1st day of January, 2020 i.e. he/she must have been born not earlier than 2nd January, 1988 and not later than 1st January, 1999.

Provided that the upper age limit shall be relaxable by 05(five) years for Scheduled Tribe candidates, Women & Ex-servicemen.

SAVE AS PROVIDED ABOVE, THE AGE LIMITS PRESCRIBED CAN IN NO CASE BE RELAXED.

Date of birth entered in the High School Certificate or equivalent Certificate issued by the concerned Board/Council will only be accepted by the Commission.

NOTE:- Candidates should also note that once a Date of birth has been claimed by them and entered in the records of the Commission for the purpose of admission to an examination, no change will be allowed subsequently on any grounds whatsoever. If, on verification at any subsequent stage, any variation is found in their date of birth from the one entered in their High School Certificate or equivalent certificate, the candidature of the candidate concerned, will be rejected and or she/he may be debarred from present and future recruitments.

4. EDUCATIONAL QUALIFICATION:

A candidate must have possessed a Master's Degree in Physical Education (M.P.Ed.) with 55% of marks or its equivalent grade from a recognized University in India.

5. PLAN OF EXAMINATION:

(a) The recruitment examination for the posts of Lecturers in Physical Education will consist of the following successive stages:-

- (i) Written Examination;
- (ii) Viva Voce Test.

(b) The written examination will be in **General English, General Knowledge and concerned subject**. General English (Part-A) and General Knowledge (Part-B) will be covered in one paper carrying **100 marks** with 50 marks for each part. The examination in the **concerned subject** will be for **400 marks** consisting of two papers, i.e. Paper-I and Paper-II having 200 marks for each paper. **Each paper will be of 3 hours duration.**

(c) The candidates shall be called for interview by the Commission in order of merit equal to 03 times the number of vacancies if the vacancies are up to 50 and such numbers not less than twice and not more than thrice the number of vacancies as the Commission may determine, when the vacancies exceed 50.

Provided that for the vacancies up to 2, ten candidates and for the vacancies between 03 to 05, fifteen candidates shall be called by the Commission for Viva Voce test.

(d) The Commission shall conduct the **Viva Voce Test** for **50 marks**.

(e) **The Commission shall be competent to fix-up the qualifying marks in the Examination and Viva Voce.**

(f) The details of the syllabus is appended to this advertisement at **Annexure-A.**

6. EXAMINATION FEE :

A candidate is required to pay a non-refundable and non-adjustable fee of Rs.500/-(Rupees five hundred) only. Candidates belonging to Scheduled Caste/Scheduled Tribe of Odisha by birth only are exempted from payment of this fee.

The candidates are required to make Online payment of applicable Examination Fee(s) through OPSC portal using Debit Card/Credit Card/Net Banking facilities and other financial instruments enlisted in the Payment Page/Gateway of the Odisha Government Treasury Portal. The fee(s) paid shall neither be refunded under any circumstances nor can be adjusted or held in reserve for any other examination or recruitment.

7. PLACE OF EXAMINATION :

The written examination will be held at Cuttack. It may be held at Balasore, Berhampur, Bhubaneswar & Sambalpur depending on the number of candidates from the respective Zones. The candidates are to mention their choice of examination zones at appropriate place in the on-line application form.

8. OTHER ELIGIBILITY CONDITIONS :

- (i) The candidate must be a citizen of India;
- (ii) The candidate must be able to speak, read and write Odia and must have passed either the Middle School standard language test in Odia conducted by the Director of Secondary Education, Odisha or the Matriculation (Class-X/ 10th standard) Examination with 'Odia' as a subject.
- (iii) A candidate, who has more than one spouse living, will not be eligible for appointment unless the State Government has exempted his/her case from operation of this limitation for any good and sufficient reasons;
- (iv) Government servants, whether temporary or permanent, are eligible to apply provided that they possess the requisite qualification and are within the prescribed age-limit as provided under Para-3 & 4 of the Advertisement. They must inform their respective Heads of Offices in writing regarding submission of their applications for this recruitment and obtain "No Objection Certificate";
- (v) If a candidate has at any time, been debarred for a certain period/chance(s) by the Odisha Public Service Commission or other State Public Service Commission or U.P.S.C. from appearing at any examination/interview, he/she will not be eligible for such recruitment for that specified period/chance(s);

- (vi) Only those candidates, who possess the requisite qualification & are within the prescribed age limit etc. by the closing date of submission of online application, will be considered eligible;
- (vii) The candidates must be very much careful to fill-up and darken his/her Roll No, Question Booklet Series in the Answer Sheets and also to fill-up Question Booklet Series, Question Booklet Serial Number and Answer Sheet Serial Number in the Attendance Sheets carefully and correctly. Wrongly filled up Answer Sheets are liable for rejection.
- (viii) A candidate must have good moral character. Also he/she must be of good mental condition and bodily healthy and free from any physical defect likely to interfere with the discharge of he/her duties as an officer of the Service/Posts.
- (ix) Every candidate selected for appointment shall be examined by the Medical Board. A candidate, who fails to satisfy the Medical Board, shall not be appointed;
- (x) A candidate who claims change in his/her name after having passed the High School Certificate Examination or equivalent examination, is required to furnish copy of publication of the changed name in local leading daily newspaper as well as copy of notification in the Odisha Gazette in support of his/her change of name.

9. **OTHER CONDITIONS :**

- (i) A candidate found guilty of seeking support for his/her candidature by offering illegal gratification or applying pressure on any person connected with the conduct of the recruitment process or found indulging in any type of malpractice in course of the selection or otherwise, shall, in addition to rendering himself/herself liable to criminal prosecution, be disqualified not only for the recruitment for which he/she is a candidate, but also may be debarred, either permanently or for a specified period, from any recruitment or selection to be conducted by the Commission;
- (ii) The provisions of the Odisha Conduct of Examination Act 1988 (Odisha Act-2 of 1988) are applicable to the examination conducted by the Odisha Public Service Commission. Any violation of the above Act and violation of "**instructions to candidates**" (as provided in the advertisement, application form, Brochure, Admission Certificate & Answer Script etc.) will be seriously viewed and disciplinary action will be taken against the concerned candidates as deemed proper.

- (iii) Applications submitted to OPSC if found to be incomplete in any respect are liable to rejection without entertaining any correspondence with the applicants on that score.
- (iv) Admission to Examination/Viva Voce will be provisional. If on verification at any stage before or after the examination/viva voce, it is found that a candidate does not fulfil all the eligibility conditions, his/her candidature will be liable to rejection. Decision of the Commission in regard to eligibility or otherwise of candidate shall be final.
- (v) This advertisement should not be construed as binding on the Government to make appointment.
- (vi) **Concessions meant for SC & ST by Birth are admissible to the Scheduled Caste and Scheduled Tribe of Odisha only.**
- (vii) The posts are Temporary and likely to be Permanent. The period of probation is two years from the date he/she actually joins in the post and may be extended at the discretion of the Govt. The appointment can be terminated on one months notice from either side without assigning any reason thereof.
- (viii) Candidates are required to take due care to annex with the printout/hard copy of online applications, the copies of certificates and other documents as stated under Para-10 of this advertisement.
- (ix) No one will be admitted to the examination centre unless he/she holds a certificate of admission. The eligible candidates are required to download their admission certificate from the website of Commission and produce the same before the Centre Supervisor for admission to the Examination Centre.
- (x) All persons appointed under the Government of Odisha on or after 1st January, 2005 shall not be eligible for pension as defined under sub-rule(1) of Rule-3 of the Odisha Civil Service (Pension) Rules, 1992; but shall be covered by the defined Contribution Pension Scheme in accordance with the Odisha Civil Service (Pension) Amendment Rules, 2005.
- (xi) Any misrepresentation or suppression of information by the candidate in the online application, will result in cancellation of the candidature or penalty, as decided by the Commission be imposed on the candidate.
- (xii) Mere empanelment in the select list shall not confer any right for appointment unless the Government is satisfied after making such enquiry as may be deemed necessary that the candidate is suitable in all respects for appointment to the service.

10. **CERTIFICATES/DOCUMENTS TO BE ATTACHED:**

Candidates, those who qualify in the written examination are required to bring with them the hard copy of online application form, along with true copies of the following certificates/documents/mark sheets etc. duly attested by the candidate along with originals of the same for verification of their eligibility as per terms and conditions of the advertisement, the date of which will be notified later in due course, failing which his/her application will be rejected for the said post. The candidates are also required to mention on each document "submitted by me" and put their full signature on the same. They must not attach original certificates to their applications.

- (i) H.S.C. or equivalent certificate in support of declaration of age issued by the concerned Board/Council;
- (ii) Intermediate/+2 Examination Certificate or equivalent Certificate issued by the concerned Board/Council;
- (iii) Bachelor's. Degree Certificate from recognized University;
- (iv) Master's Degree Certificate issued by the recognized University;
- (v) Mark-lists in support of all aforesaid Examinations passed (i.e. H.S.C. to Master's. Degree) including fail marks if any, issued by the concerned Board/Council/University;
- (vi) Two character certificates in original issued by two respectable persons, one of which must be a Government Servant not below the rank of Group-B.

NOTE - (a) Candidates who have not been awarded percentage of marks, but only "GRADE MARKS", should, along with their applications, produce the conversion certificate from the concerned University indicating the actual equivalent percentage of marks and the conversion formula failing which, their applications are liable to be rejected.

(b) While filling up the relevant box of the online application form, the candidate has to mention details of marks secured in annual examination leading to award of Degree (excluding the marks secured in the Extra Optional Subjects).

- (vii) Two recent passport size photographs(unsigned & unattested) which has been uploaded with online application in printout/hard copy of online application form.
- (viii) Certificates of conduct from the Principal/Proctor/Dean or Professor in charge of a Department of Teaching of the College or University in which he/she last studied;
- (ix) Caste Certificate by birth in support of claim as S.C./S.T., wherever applicable.

- (x) No Objection Certificate from the competent authority in case of Government Servants.
- (xi) Required pass certificate in Odia language in M.E. School Standard or HSC examination.
- (xii) Discharge Certificates issued by the Commanding Officer of the Unit last served; Ex-Servicemen must submit an Affidavit undertaking that he has not been appointed against any civil post after retirement from Military service, wherever applicable.
- (xiii) Copy of pay in slip in support of payment of fee.
- (xiv) If a candidate claims to possess qualification, equivalent to the prescribed qualification, the rule/authority (With number and date) under which it is so treated, must be furnished with the printout/hard copy of the online Application Form.
- (xv) The candidate must take utmost care in filling up marks secured and maximum marks for each year. Any mistake in filling up the marks will be at the risk of candidates.

NOTE-1 : (i) Candidates to be belonging to S.C./S.T. category by birth are required to submit copy of the relevant Caste Certificate as mentioned in their online application form and issued by the competent authority in the prescribed form.

(ii) Women candidates belonging to S.C./S.T. categories are required to submit Caste Certificates by Birth showing "daughter of". Caste Certificate by virtue of marriage (i.e. showing "wife of") are not acceptable and liable for rejection.

(iii) Community (Caste status) once mentioned by the candidates shall not be changed under any circumstances.

The competent authorities to issue caste certificates are: District Magistrate/Collector or Additional District Magistrate or Sub-divisional Magistrate/Sub-Collectors or Executive Magistrates or Revenue Officers, not below the rank of Tahasildar/Additional Tahasildar of Government of Odisha.

NOTE-2 Master's Degree Certificate, Caste Certificate, Odia Test Pass Certificate and Discharge Certificate of Ex-servicemen must have been issued by the competent authority within the last date fixed for submission of online applications form as indicated above.

11. GROUNDS OF REJECTION OF APPLICATION:-

Applications of candidates will be rejected by the Commission on any of the following grounds:-

- (a) In-complete online application form.
- (b) Non-submission of hard copy of online application form at the time of verification of original documents.
- (c) Declaration not signed (full signature) by the candidate in the hard copy of online application form.
- (d) Age limit of candidate not coming under Para - 3 of Advertisement
- (e) No required educational qualification as provided under Para - 4 of Advertisement.
- (f) Not furnished copies of certificates/documents/Mark sheet/ Conversion formula/Equivalent Certificate as provided under Para - 10 of Advertisement.
- (g) Odia Test (M.E. standard) not passed / Odia Test pass evidence not furnished as required under Para 8 (ii) of the Advertisement.
- (h) Non-payment of examination fee, (wherever applicable), as provided under Para - 6 of Advertisement.
- (i) The candidates rejected on the ground of non-payment of fees, may inform to the Office of the Commission within 07 days from date of rejection, failing which his/her case will not be entertained.
- (j) Submission of wrong information / false information about qualification / Age / O.T. Pass evidence / Category Status (S.T/ S.C/Women/Ex-servicemen etc.).
- (k) Suppression of facts / information about eligibility, if any.
- (l) Any other ground as per the decision of the Commission.

NB:- APPLICATION/CANDIDATURE OF A CANDIDATE SHALL BE REJECTED AT ANY STAGE OF RECRUITMENT PROCESS WHEN DISCREPANCY IS NOTICED/DETECTED.

12. HOW TO APPLY:

- (a) Candidates must go through the details of this Advertisement available in the Website of OPSC before filling up online application form.
- (b) Candidates must apply online through the concerned Website of the OPSC <http://www.opsc.gov.in>. Applications received through any other mode would not be accepted and summarily rejected.
- (c) **Before filling up the online application form, the candidates must go through the following documents available at OPSC portal.**
 - (i) **Instructions to fill up online application.**

- (d) Candidates are requested to upload the scanned image of latest passport size photograph along with scanned image of his/her full signature and scanned image of Left hand Thumb Impression (LTI) in the online application form. Uploaded photograph, Specimen (full) signature and LTI must be clearly identifiable / visible, otherwise the application of the candidate is liable to be rejected by the Commission and no representation from the candidate will be entertained.
- (e) Candidates should keep at least two copies of latest passport size photograph which is uploaded to the online application form for future use.
- (f) On successful submission of the online Registration, an unique "Permanent Public Service Account Number (PPSAN)" will be assigned to the applicant. Applicants are required to take printout of the finally submitted online Registration/Re-registration and Application forms for submission to OPSC with ink signed signature and along with copies of requisite certificate & documents.
- (g) The candidates are advised to submit the Online Application Form well in advance without waiting for the closing date to avoid last hour rush.
- (h) Admission Letter for the eligible candidates to appear in the Examination shall be uploaded in the Website of the OPSC prior to the date of examination which will be published in the Website and Newspapers. The candidates are required to download their Admission Letter from the Website of the Commission and produce the same at the Examination centre for admission to the examination. No separate correspondence will be made on this score.
- (i) Any complaint on the conduct of examination must be sent to the Grievance Wing of the Commission by e-Mail (opsc@nic.in) within 05 (Five) days of completion of the examination.

13. FACILITATION COUNTER:

To resolve any Technical problem faced in filling up of online Registration/Re-registration and Application forms, candidate may contact OPSC Technical Support **over Telephone No. 0671-2304707** between 10.30 A.M. to 1.30 P.M. & 2.00 P.M. to 5.00 P.M. on any Odisha Government working days.

In case of any guidance/information on this advertisement & recruitment, candidates may go through the **FAQ** available in the website of the Commission or contact the O.P.S.C. Facilitation Counter over Telephone No. 0671-2304141/2305611 & Extn.- 218 on any working day between 10.30 A.M. to 1.30 P.M. & 2.00 P.M. to 5.00 P.M.

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The candidates are required to visit the website of the Commission at <http://opsc.gov.in> for detailed information about important notice, rejection of application, the date & time of Interview and also keep track of publication of various notices to the effect in the leading local daily newspapers for information.

CLOSING DATES

(A) ONLINE REGISTRATION/RE-REGISTRATION AND ONLINE PAYMENT OF EXAMINATION FEES SHALL BE AVAILABLE IN THE WEBSITE FROM 09.10.2020 TO TILL 09.11.2020 (11:59 P.M).

(B) SUBMISSION OF ONLINE REGISTERED APPLICATIONS CAN BE DONE IN THE WEBSITE FROM 09.10.2020 TO TILL 16.11.2020 (11.59 P.M).

NB: - THE ONLINE APPLICATION FORMS IF FOUND DEFECTIVE IN ANY RESPECT IS LIABLE TO BE SUMMARILY REJECTED.

CUTTACK

DATE - 06/10/2020


SECRETARY

ODISHA PUBLIC SERVICE COMMISSION
CUTTACK

ANNEXURE – A

Plan of Examination, Standard and Syllabi

SYLLABUS OF EXAMINATION FOR THE POST OF LECTURER IN GOVT. COLLEGE OF PHYSICAL EDUCATION

PLAN OF EXAMINATION

Paper	Subject	Full Marks		Duration
1	Part-A General English	50	100	3 hours
	Part-B General Knowledge	50		
2	Physical Education, Paper-I	200		3 hours
3	Physical Education, Paper-II	200		3 hours

PATTERN OF QUESTIONS

Paper-1

- All questions shall be compulsory. However, candidates shall have the option of selecting one out of three topics given for essay writing.
- The standard of questions in General English shall be that of High School (Class-X) Certificate Examination.
- Question requiring very short answer shall be asked in General Knowledge Paper.

Paper- 2 & 3

- Conventional questions requiring short and long answers.
- Each paper shall have eight questions out of which the candidates shall answer five questions.

A. PART – I :GENERAL ENGLISH & GENERAL KNOWLEDGE-100 MARKS.

GENERAL ENGLISH

The Question Paper in General English will be designed to test the candidate's understanding of English and workmanlike use of words. The pattern of questions would be as follows:

1. Precise writing of a passage of around 300 words : 10 Marks
2. Translation from Oriya to English : 10 Marks
3. Grammar, uses of Vocabulary : 15 Marks
4. Short Essay within 400 words. : 15 Marks

Total – 50 Marks

The standard of question of General English may be equal to Secondary Level (Class-X level).

GENERAL KNOWLEDGE

The paper in General Knowledge will include knowledge of current events and matters as of everyday observation and experience in the scientific aspects of life as may be expected of an educated person. The paper will also include question on History of India and Geography of such standard which the candidates should be able to answer without special study. Total 50 marks.

1.	Current Events	:	10 Marks
2.	Science in Everyday life	:	10 Marks
3.	History of India and Odisha	:	10 Marks
4.	Geography of India & Odisha	:	10 Marks
5.	Constitution of India	:	10 Marks

Total – 50 Marks

B. **PART - II : CONCERNED SUBJECTS -400 MARKS.** The Standard of these two subject papers shall be that of P.G Examination.

Paper-I - 200 Marks

Module - I

Research process and Applied Statistics in Physical Education and Sports Sciences

- * Meaning & definition of Research
- * Need, nature and scope of research in phy.edn.
- * Location of Research Problem
- * Criteria for selection of Research Problem.
- * Various Methods of research in Physical Education.
- * Population & Sampling – Meaning, definition and Types.
- * Details of Research proposal and report.
- * Statistics – Meaning, definition, function, need and importance in phy.edn.
- * Data classification, Tabulation and measures of central tendency – Mean, Median& Mode,
- * Measures of Dispersion& Scales – Quartile deviation, Mean Deviation, Standard deviation, Sigma Scale, Z Scale,
- * Probability of Distribution of graphs – Skewners & Kurtosis Frequency Polygon, Histogram & bar diagram,
- * Concept of ANOVA and ANCOVA,
- * Meaning of Correlation - Co-efficient correlation,
- * Product movement and Rank difference method.

Module - II

Physiology of exercise, Athletic care and rehabilitation in Physical Education & Sports

- * Skeletal Muscles and exercise – Macro and Micro structure of Skeletal muscle and Chemical Composition, Types of Muscle fibres, Muscle Tone, Effect of exercises on Muscular System,
- * Cardiovascular System – Cardiac Cycle, Heart rate, Blood pressure, Structure & function of heart, Effect of exercises on cardiovascular System,
- * Respiratory System and exercise – Mechanics of breathing Ventilation at rest and during exercise, Diffusion of gases in lungs and tissues, lung volume and capacities, Oxygen Debt, Effect of exercises on respiratory system.
- * Phosphagen System, Aerobic and Anaerobic Metabolism, Aerobic and anaerobic Systems during rest & exercise,
- * Sports performance in hot, & cool climates and at high altitudes Influences of Anabolic Steroids, Beta blocker, Creative, Choline on Sports performances,
- * Objectives of corrective physical education, Posture – Values, Causes of deviation in postures and remedial measures through exercises,
- * Rehabilitation exercise – PNF techniques & principle,
- * Massage – Classification of the Manipulation used Massage and their Specific uses in human body,
- * Principles pertaining to the prevention of Sports injuries,
- * Principles and techniques of Strapping & bandages.

Module - III

Test Measurement & Evaluation in Physical Education.

- * Meaning, need and definition of Test Measurement and evaluation.
- * Criteria of selection of test.
- * Motor Fitness Tests – Meaning & definition – Indiana Motor Fitness test, Oregon Motor fitness test, JCR test.
- * Physical Fitness Test – AAHPERD health related fitness Battery, Havard's step test, Cooper run and walk Test.
- * Anthropometric measurements, Aerobic and Anaerobic Test – The Bruce Treadmill test protocol, 1.5 mile run test, Margaria Kalamen test, Wingate anaerobic test,
- * Specific Sports Skill Tests-
 - Badminton(Millar Wall Volley test)
 - Basket ball (Johnson basket ball test)
 - Cricket (Sutcliff cricket test)
 - Hockey (Friendal Field hockey test)
 - Volleyball (Russel Lange Volley ball test)
 - Foot ball (Mc Donald Volley Soccer test)
 - Tennis (Dyer Tennis Test).

Module - IV

Sports Biomechanics and Kinesiology

- * Meaning, nature and scope of Sports bio-mechanics and applied Kinesiology.
- * Centre of gravity in human body and its importance in sports performances
- * Origin & Insertion and action of the muscles Biceps, Triceps, Trapezeus Sematus, Sartorius
- * Meaning and definition of Motion – Types of Motion, Linear, angular, circular and Uniform Motion.
- * Principles related to Newton's laws of motion in Sports.
- * Force – Sources of force in human body, Components of force in Sports performances.
- * Laws of freely falling bodies – Projectiles, Guiding Principles of equilibrium and Factors influencing equilibrium.
- * Importance of Principles of work, energy and Power in Sports, Kinetic energy and potential energy.
- * Laws of leverage in Sports.

Module - V

Sports Management and Curriculum Design in Physical education.

- * Definition, importance and principles of Sports Management.
- * Personal Management - Objectives and Policies.
- * Programme development and role of management.
- * Competitive Sports programmes – Benefits, management guidelines for school and college sports programmes.
- * Community based physical education and sports programme.
- * Purchase and maintenance of sports equipments.
- * Public relation in sports – principles of public relation.
- * Meaning definition and principles of curriculum construction in physical education.
- * Factors affecting curriculum and source of curriculum materials.
- * Integration of physical education with other sports sciences.
- * Curriculum research – Importance and objectives.
- * Methods of evaluation.

Module - VI

Yogic Sciences

- * Meaning and definition of Yoga.
- * Concept of Yogic practices.
- * Principles of breathing.
- * Asanas and pranayams.
- * Kriyas ; Mudras.
- * Yoga and sports.
- * Roll of yoga in psychological preparation of athlete.

Module - VII

Sports Technology

- * Purpose; advantage and applications of sports technology.
- * Technological impacts of sports.
- * Science of sports materials – Adhesives, Foams, smart materials.
- * Modern surfaces of playfields – construction and installation of sports surfaces.
- * Modern equipments – Playing equipments, wearing material in different sports, measuring equipments, protective equipments, sports equipments.
- * Training gadgets – Ball feeder in basketball, bowling machine in cricket, serving machine in Tennis.
- * Lighting facilities in indoor and outdoor stadiums.
- * Video coverage procedures for different sports.

Module - VIII

Sports Journalism and Mass media

- * Meaning, definition and ethics of journalism.
- * Sports ethics and sportsmanship, National and International sports news agencies.
- * Concept of sports Bulletin.
- * Role of journalism in the field of physical education and sports.
- * General news reporting and sports reporting by a journalist.
- * Different mass media in journalism.
- * Role of Advertisement in journalism, sports photography.
- * Brief review of Olympic Games, Asian Games, National Games of India and different World cup Tournaments.
- * Preparing report of an annual sports meet for publication.
- * Sports organization & sports journalism-Methods of editing sports report.
- * Interview with an elite player or coach and presenting report.

Paper-II - 200 Marks

Module - I

Scientific Principles of Sports Training

- * Aim, characteristics and principles of sports training.
- * Components of physical fitness- Various methods to improve strength, speed, Endurance, Co-ordinative abilities, flexibilities.
- * Training plan- Macro cycle, Meso cycle, short and long term plans, Periodisation, Competition period and transition period.
- * Definition & meaning of Doping. Side effects of drugs, Dietary supplements. IOC list of doping Classes and Methods.
- * Blood testing in doping control.

Module - II

Sports Medicine

- * Meaning & importance of Sports medicine.
- * Definition and principle of therapeutic exercises.- Coordination, balance training, Strengthening, Mobilising
- * PRICE and PRINCE therapy.
- * Basic rehabilitation- Strapping/ Tapping.
- * Proprioceptive neuro- muscular facilitations.
- * Various spinal injuries and its management through different stretching & strengthening exercises.
- * Remedial measures by exercises for Upper extremity injuries (Sprain, Strain, Strapping in shoulder, elbow, wrist & fingers).
- * Remedial measures by exercises for lower extremity injuries (Sprain, Strain, Strapping in hip, knee, ankle & foot).

Module - III

Health education & sports nutrition.

- * Concept, Aim, objectives and principles of Health Education.
- * Health Service and guidance instruction in personal hygiene.
- * Health problems in India- Communicable & non communicable diseases, obesity, malnutrition, adulteration in food sanitation.
- * Role of health education in schools.
- * Health services- Care of skin, nails, eye and other body parts.
- * First aid and emergency care.
- * Role of nutrition in sports.
- * Role of carbohydrate, fat and protein during exercises.
- * Concept of BMI (Body mass index)
- * Obesity and its hazard in today's society
- * Role of diet and exercise in Weight

Module - IV

Sports Engineering

- * Meaning of sports engineering.
- * Equipment and facility designing and sports related instrumentation and measurement.
- * Concept of internal force, axial force, shear force, bending movement, torsion, energy methods to find displacement of structure, strain energy.
- * Introduction to Dynamics, Kinematics to particles.
- * Building and maintainance- Sports Infrastructure Gymnasium, Pavillion, Swimming pool, Indoor stadium, Outdoor stadium, Play park, Various requirement for air, light and other facilities.
- * Building process and maintainance policy of infrastructures.
- * Basics of theoretical analysis of cost, total life cost concepts, maintainance costs, energy cost, capital cost and taxation.

Module - V

Physical fitness and wellness

- * Concepts and techniques of physical fitness.
- * Physiological principles involved in human movement.
- * Relationship between physical activity and lifelong wellness.
- * Nutrients- Food choices, food guide pyramid.
- * Weight management through nutrition.
- * Cardio respiration endurance training through aerobic training.
- * Assessment of Cardio respiration fitness and set goals to maintain or improve fitness levels.
- * Weight training principles and concepts- basic resistance exercises.
- * Advanced techniques of weight training.
- * Flexibility training- Relaxation training & core training.
- * Development of basic competency in relaxation and breathing techniques.

Module - VI

Information and Communication technology (ICT) in Physical Education.

- * Communication and classroom Interaction- Concept elements process and types of communication.
- * Scope of ICT- Teaching learning process, publication evaluation, research, Administration.
- * Fundamentals of computers- Characteristics types and Applications of computers, hardware of computers and other computer managements.
- * Concepts, Types and functions of computer networks. Internet and its applications.
- * Ms-Office application- Ms-Word, Ms-Excel, Ms-Access, Ms-Powerpoint, Ms-Publisher.
- * ICT integration in teaching learning process- Project based learning, Co-operative learning, Collaborate.
- * E-Learning & web Based Learning.

Module - VII

Sports psychology

- * Meaning, definition, history, need and importance of sports psychology.
- * Motor learning- Motor perception, factors affecting perception.
- * Personality- effects of personality on sports performance.
- * Motivation- Types, measurement and importance in sports.
- * Anxiety- Types, nature, causes and measurement, importance in sports.
- * Stress- Meaning, stress and sports performances.
- * Aggression and sports performances.
- * Self Concept- Meaning and definition method of measurement.
- * Goal setting- Process of goal setting in physical education and sports.
- * Relaxation- Meaning, types of psychological relaxation.
- * National Integration through sports.
- * Leadership- meaning, definition, types and leadership in sports.
- * Women in sports.
- * Group psychology in sports arena.

Module - VIII

Educational Technology in Physical education & sports

- * Concept, nature and scope of Educational technology.
 - * Forms of educational technology- teaching technology, instructional technology and behaviour technology.
 - * System approach to education and its components- Goal setting, tax analysis, context analysis , and evaluation strategies.
 - * Concept, views, process and steps of development of instructional design.
 - * Models for development of self learning materials.
 - * Audio- visual media- Meaning importance and various forms Audio/Radio.
 - * Use of television and CCTV in instruction and training and video conferencing.
 - * Recent innovations in the area of ET interactive. Video- Hypertext, Video texts, optional technology- Laser disk, computer conferencing.
 - * Recent trends of research in Educational Technology and its future with reference to physical education.
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