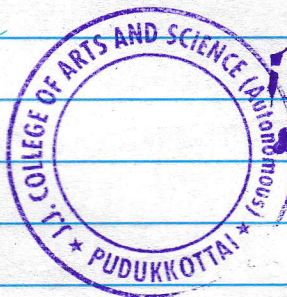


Day	<u>I</u>	<u>II</u>	<u>III</u>	<u>IV</u>	<u>V</u>
1				sports Biomechanics	
2			Sports Biomechanics		
3			Sports Biomechanics		
4		sports Biomechanics			
5					
6					

G. Day

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Biomechanical Principles of ~~Running~~ Jumping.

⇒ Four phases

⇒ Preparatory phase

⇒ Propulsive "

⇒ Flight "

⇒ Landing "

Preparatory phase

⇒ Hip knee joint flex the ankles dorsiflex & arms swing back to hyper extension.

Propulsive phase

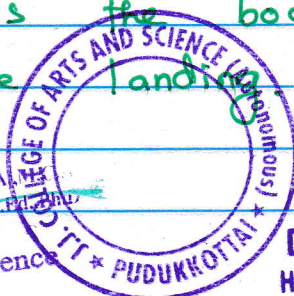
⇒ The hips knee extent, ankle planter flex & arms swing forward in flexion.

Flight phase:

⇒ Begin with take off when toes leave the ground

Landing phase

⇒ The hips & knees flex with ankle dorsiflexion & extension of the arm as the body absorbs the force as the landing.



SEMESTER: IV

WEEK: 3 Hrs

TOTAL HOURS: 36 Hrs

SUB CODE: U4R1PESBE1

CREDITS: 2

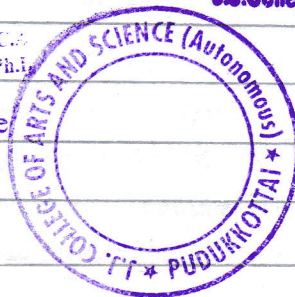
SKILL BASED ELECTIVE -I

FITNESS AND SPORTS INNOVATIONS

G.D. [Signature]

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Dr. K. Jagathisbabu [Signature]
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Date: 11.05.22. Day order: 5 Hour: 2

Fitness & sports Innovation - II year

Modern playing Surfaces:-

- ⇒ It is man made surfaces
- ⇒ made up of synthetic materials
- ⇒ used in Arenas

Types of courts

- ⇒ Grass court
- ⇒ clay court
- ⇒ Mud court
- ⇒ wooden court
- ⇒ Concrete court
- ⇒ Cinder track
- ⇒ Synthetic track
- ⇒ Astro turf.
- ⇒ Artificial grass.
- ⇒ Unfilled pitch

Dr. K. Jagathisbabu
Head, Department of Physical Education

RE: / /

Research & Statistics for Physical Education and Sports.

DATE: / /

Syllabus

Unit - I

Research - Meaning and Definition,
General types of research - Basic, Action
and Applied.


Specific classification of research -
Comparative, Relationship, Predictive,
Experimental, Historical and Case Study
Need and importance of research in
Physical Education and Sports.

UNIT - II

- Criteria for Selection of Research
Problem

- Research Proposal - Hypothesis
Formulation of hypothesis. Research Report.

G.P. ✓


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Chapter - IV

Analysis of Data (or) Presentation and Interpretation of Data.

(a) Data

(b) Tables.

(c) Figures (Photographs & graphs)

Chapter V

* Summary of the Procedure followed in the Study

* Main Findings and Conclusions.

* Recommendations for further Study.

Back Material (or) Supplementary Material.

(i) Bibliography.

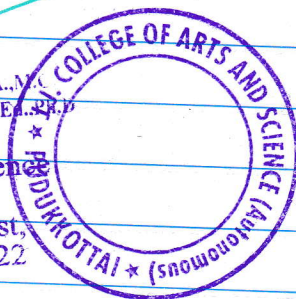
(ii) Appendix.

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SEMESTER:

WEEK: 3 Hrs.

TOTAL HOURS: 36 Hrs

SUB CODE: U6RPECC12

CREDIT: 5 MARKS: 100

**SKILL BASED ELECTIVE -IV
ATHLETIC CARE AND REHABILITATION**

Objectives

- To provide the basic knowledge about care of Athlete and prevention of injuries.
- To educate on rehabilitation, massage and therapeutic exercise.

UNIT I – CORRECTIVE PHYSICAL EDUCATION (8 Hrs)

Definition and objectives of corrective physical Education. Posture and body Mechanics, Standards of Standing Posture. Value of good posture, Drawbacks and causes of bad posture. Posture test – Examination of the spine.

UNIT II – POSTURE (6 Hrs)

Normal curve of the spine and its utility, Deviations in posture: Hypnosis, lordosis, flat back, Scoliosis, round shoulders, Knock Knee, Bow leg, Flat foot. Causes for deviations and treatment including exercises.

UNIT III – REHABILITATION EXERCISES (4 Hrs)

Passive, Active, Assisted, Resisted exercise for Rehabilitation, Stretching, PNF Techniques and principles.

UNIT IV – MASSAGE (10 Hrs)

Brief history of massage – Massage as an aid for relaxation – Points to be considered in giving massage – Physiological, effects of massage – Indication / Contra indication of Massage – Classification of the manipulation used in massage and their specific uses in the human body – Stroking manipulation: Effleurage – Pressure manipulation: Petri sage Kneading (Finger, Kneading, Circular) ironing Skin Rolling – Percussion manipulation: Tapotement, Hacking, Clapping, Beating, Pounding, Slapping, Cupping, Poking, Shaking Manipulation, Deep massage.

UNIT V – SPORTS INJURIES CARE, TREATMENT AND SUPPORT (8 Hrs)

Principles pertaining to the prevention of Sports injuries – care and treatment of exposed and unexposed injuries in sports – Principles of applying cold and heat, infrared rays – Ultrasonic, Therapy – Short wave diathermy therapy. Principles and techniques of Strapping and Bandages.

Date: 11.04.22 Day order: 6

Hour: 3

Intra Red Radiation therapy

- ⇒ electromagnetic waves.
- ⇒ have focal heating.
- ⇒ Induce relaxation.
- ⇒ reduce muscle spasm.

Two types.

⇒ Luminous.

- ⇒ wavelength = 4000 nm.
- ⇒ Carbon filaments of tungsten wire radiate heat.

⇒ non luminous

- ⇒ Ray produced by incandescent lamps
- ⇒ wave length of spectrum 350 nm to 4000

Therapeutic & physiological use

- ⇒ Relief pain
- ⇒ Relaxes muscle.
- ⇒ Increase blood supply.

- Method.
- ⇒ lamp placed ⇒ 75 to 50 cm.
 - ⇒ Avoid patient face.
 - ⇒ Acute condition 10 to 15 min.
 - ⇒ chronic " 20 to 30 min.
 - ⇒ wet towel used to avoid overheating.

Dangers

- ⇒ Burns ⇒ sun
- ⇒ Electric shock
- ⇒ Head ache
- ⇒ Injury eye
- ⇒ Gangrene.

III. B.A Tamil

IDC paper
Health and First Aid

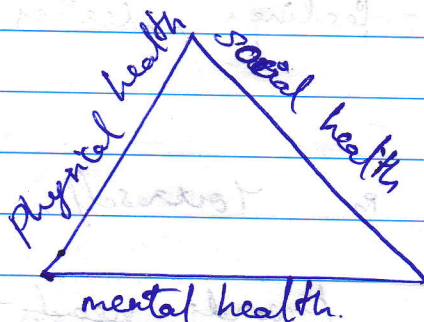
Unit - I

What is health and hygiene?

You must be familiar with the famous saying "health is wealth". When we are healthy, we enjoy our work and live our life to the fullest. To attain good health we need to develop certain habits. Hygiene is an integral part of healthy living and deals with cleanliness.

Definition of health:

State of complete physical, mental and social well being and not merely the absence of disease.



Health Education and First Aid.

First aid of sprain

- 1) Remove clothing, shoes etc froms injured area
- 2) Rest the joint in the most comfortable position
- 3) Apply Ice Packs to reduce the pain & swelling.
- 4) Apply a compression bandage that extends well beyond the sight and elevate the affected part.
- 5) seek medical aid.
- 6) The injured part should not be pressed without doctor's advice.

Strain:

A strain results from a muscles or tendons being over stretched during vigorous movement. This may be happened during the sports participation without proper warm-up.

Sign & symptoms:

- 1) sharp and sudden pain
- 2) pain increases with movement
- 3) Tenderness around the area
- 4) loss of power & movement.

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Sports Training

IV YEAR - VI SEM
TIME TABLE

	I	II	III	IV	V
1	S.T				
2		S.T			
3	S.T				
4		S.T			
5			S.T		
6	S.T				

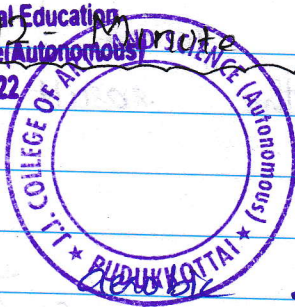
* How far we reach, bend, then hold the position

Factors determining Flexibility:-

- * Age, gender, growth of a person
- * Elasticity of muscle tendon, ligament supporting the joint involved.
- * Internal and External environment
- * Effect of injury on the joint or muscle
- * Kind and quality of clothing.

6.7.7c
31/03/2022

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Run Test (1968)

Purpose:

* To test of the body to use it while running

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Fitness (the ability to use oxygen to power)

Equipment Used:

- * Running Track
- * Marker Cones
- * Recording sheets
- * Stop watch.

24.09.2021

I Year

Foundation and History
of physical Education.

Day order : 3

Hour : III

Unit-I

Meaning of Education

In Latin - Drawing out from within

is a Doing phenomenon

Takes place in classroom, library, home, playground
and Gymnasium

Provides opportunity of acquire knowledge.

* Definition of Education

* Aims and objectives of Education.

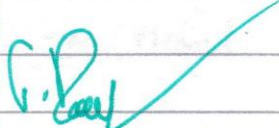
→ Mental health

→ worthy use of leisure time

→ Good citizenship

→ Ethical character

→ vocation.


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(d) Euro Cup:

European championship is one of the premier and popular International tournament in football. The European championship were first held. In this championship only the countries of European continent are eligible to play.

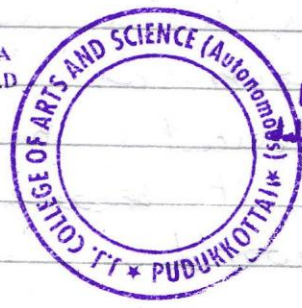
(e) Tight for the Ashes:

It is common for the game of cricket for one country make a visit to another country to play matches at various places as per the programme approved by the International cricket council.

N.B: The body will be cremated and the Ashes taken to Australia.

To take revenge when the English team went to Australia next year (1883), the captain Hon. W. B. Bligh was asked to bring back the Ashes.

G. D.
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Co. J. m. e.
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SEM-I

Theories of Yoga & Gymnastics

TIME TABLE I - Year

	1	2	3	4	5
1			YOGA & GYM		
2				YOGA & GYM	
3	YOGA & GYM				
4			YOGA & GYM		
5			YOGA & GYM		
6			YOGA & GYM		

Handwritten signature
28/1/22

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A dismount.

* The horizontal bar is often considered one of the most exciting gymnastics event due to the power exhibited by gymnasts during the giant swing



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Unit - III Continuation

- ⇒ Respiratory System - Structure of lungs & Mechanism of Respiration - Tidal Volume, Residual Volume & Minute Volume
- ⇒ Blood - Constitution of Blood - Main functions of blood - Blood groups - Blood clotting Mechanism.

Unit IV Functions of Liver & Nervous System - (10 hrs)

- ⇒ Digestive System - Structure and functions of various parts - Functions of liver
- ⇒ Nervous System - Structure & function of brain and spinal chord - Functions of Neuron - Reflex Action and Reflex arc
- ⇒ Excretory System - Structure and functions of kidney - Structure and functions of skin

Unit - V Structures of Various Glands (10 hrs)

- ⇒ Endocrine System - Structure of various Glands Types & their role in growth, development and regulation of body function
- ⇒ Pituitary, Thyroid, & pancreas glands. Difference between hormones and enzymes.

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Parathyroid glands

- ⇒ Four in number.
- ⇒ composed of epithelial cells
- ⇒ chief cells
- ⇒ oxyphil cells.

Functions

- ⇒ PTH increases calcium level
- ⇒ Mobilisation of calcium of bone into Extra cellular fluid
- ⇒ Increased reabsorption of calcium in renal tubules
- ⇒ Increased absorption of calcium in gastro intestinal tract.

Disorders of parathyroid function:-

- ⇒ Hyper parathyroidism
- ⇒ Hypo parathyroidism

Adrenal or suprarenal Glands

- ⇒ two in number.
- ⇒ situated in top of kidney

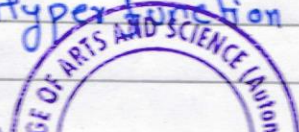
Adrenal Cortex

The adrenal cortex secretes three groups of hormones.

Disorder of adrenocortical function

- ⇒ Hypofunction of adrenal cortex produces Addison disease
- ⇒ Hyperfunction produces Cushing Syndrome.

f.p.
06/19/21



10-10-2021