



# ALAGAPPA UNIVERSITY

A State University Accredited with A+ Grade by NAAC (CGPA: 3.64) in the Third Cycle & Graded as Category-I University & Granted Autonomy by MHRD-UGC,



KARAIKUDI - 630 003, TAMIL NADU, INDIA

# **DEPARTMENT OF PHYSICAL EDUCATION &**

# **HEALTH SCIENCES**

M.Phil (Physical Education) (Choice Based Credit System(CBCS) )

REGULATIONS AND SYLLABUS for the Candidates admitted from the academic year 2019-20 and onwards

#### MASTER OF PHILOSOPHY IN PHYSICAL EDUCATION

(Under Choice-Based Credit System)

#### **REGULATIONS, SCHEME OF EXAMINATIONS AND SYLLABUS**

#### (With effect from the academic year 2022-23)

#### 1. Duration of the Course

The M. Phil (Physical Education) Programme is of one year duration, offered under semester pattern, with two semesters in the year. The Syllabus is for one year M. Phil degree programme under CBCS system (regular). This will be implemented from the academic year 2022-23 onwards.

#### 2. Medium of Instruction: English only

#### 3. Eligibility:

A candidate shall be admitted to the M. Phil degree in Physical education if he/she produces satisfactory evidence to the effect that he/she has successfully completed master's degree in physical education, **M.P.Ed**., or its equivalent degree approved by the syndicate of the Alagappa University, Karaikudi

For securing admission to the M. Phil programme, candidates must have secured 55% of marks in the physical education PG degree programme or any equivalent programme in the case of inter-disciplinary subjects. However, the minimum marks for the SC/ST candidates would be 50%. For all the candidates, who have completed their PG degree on or before 1991, the minimum eligible marks for admission to M. Phil would be 50 percent.

#### 4. Mode of Selection:

An eligible candidate must take up the entrance examination and interview conducted commonly for all candidates by the university.

The question paper patterned on multiple choice objective types has both common part comprising test of language skills and test of quantitative aptitude each carrying 25% weight, the subject knowledge carrying 50% weight and interview 25% weight.

Ranking of candidates is based on the marks obtained in the entrance examination and interview, and the qualifying Post Graduates degree marks with 50:50 weights. Provisional selection is done adopting community quota as per the guidelines of the state government.

#### 5. Course of study:

The Master of Philosophy (M. Phil in Physical Education) program comprises of two parts. Part-I comprises courses I,II & III that are common for all candidates doing M. Phil. Part-II comprises Course IVof the dissertation and viva-voce. The dissertation shall relate to Indian/global perspectives/issues in various functional areas of physical education.

# 6. Scheme of examinations:

Course Code	Course	Credit	Mai	rks	Total
			Internal	Extern	
	al				
	I SEMESTER				
821111	Course -I Research Methodology &	4	25	75	100
	Advance Statistics in Physical				
	Education				
	Course - II (Optional any one				
	Course)				
821112A	1.Sports Physiotherapy				
821112B	2.Sports Physiology				
821112C	3.Sports Bio-Mechanics				
821112D	4.Sports Psychology	4	25	75	100
821112E	5.Sports Training Methods				
821112F	6.Yoga Education				
821112G	7.Measurement and Evaluation in				
	Physical Education				
821113	Course – III	4	25	75	100
	Professional Competencies				
	Total	12	-	-	300
	II SEMESTER	2			
821121	Course - IV	4	25	75	100
	Area of Dissertation				
			-	200	
821999	Dissertation	8	(Thesis 15	50+ Viva	200
			Voce	50)	
	Total	12	-		300
	Grand Total	24	-		600

# M. Phil (Physical Education)

#### 7. Credits :

Each student should earn 24 credits to complete the program.

#### 8. Attendance:

- I. Normally a student must secure a minimum of 80% attendance to become eligible to take the end-semester-examination (ESE) in a course. However, condoning of shortage of attendance may be granted on genuine medical grounds up to a maximum of 10% of the contact days. For this purpose, the student must, immediately upon returning to class after the period of illness, apply for condoning of shortage, submitting valid medical certificate (s) from registered medical practitioner(s) through his/her advisor to the head of the department (HOD), who will decide upon the application for condoning of shortage of attendance. Medical certificates submitted on the eve of the ESE will not be accepted.
- II. If a student who has no genuine medical grounds and has earned 70% or more but less than 80% of attendance in a course in a semester that student will be debarred from the ESE in that course in that semester. However the student may take the ESE when offered in a latest semester.
- III. If a student has earned less than 70% attendance, that student will be debarred from the ESE in that course and the statement of grades will read IA (Inadequate Attendance) Against that course. Such a student must repeat that course when offered in a latest semester. Attendance in a course will always be reckoned from the day of joining the course to the last day of the course.

#### 9. Redoing of a course or courses:

A student who has been debarred from the ESE for lack of attendance must repeat the course at a later semester, paying the prescribed fees for the course. No student will be permitted to repeat a course or reappear for a CIA Test or an ESE for improvement of grade points. A student, who has fulfilled all the course requirements but has not been able to take the ESE alone, can take the same at a later semester. A student who has failed in an ESE need take only the ESE in that course when it is next offered. Such students need pay only the fee for ESE of the course.

Students interested in recording of course(s) have to get prior official permission for the same by applying to the register through the HOD on or before 5<sup>th</sup>july (for recording of old semester courses) or 5<sup>th</sup> December (for even semester courses) every year.

A student may be permitted to break his/her study on valid grounds. Such break of study shall be entertained only if the student has completed at least the first semester of the study. For availing break of study, the student has to apply to the register along with the recommendations of the class advisor and the HOD in the format prescribed enclosing documentary evidence(s) as a proof for his/her claim for break of study and after paying prescribed fee. Un-authorized break of study will not be permitted under any circumstance. Break of study will be permitted subject to the formalities of readmission as well as the availability of courses to be completed and the examination norms.

#### **10.** Assessment:

Assessment of the students is two-fold, as presented earlier, consisting of continuous internal assessment (CIA) and end semester examination (ESE). The ratio between CIA and ESE will normally be 25:75

#### 10.A. Continuous internal assessment (CIA):

The CIA marks shall be awarded based on the following:

Assessment components	Courses(paper)I,II & IV
Scores test	10 marks
Model test	10marks
Seminar/assignment/quiz/class works	5 marks
Total	25 marks

#### 11. B. End semester Examination(ESE):

The ESE will consist of a written examination of three hours duration reckoned for courses, I,II,III and IV for a maximum 60 marks. The answer papaers shall be evaluated by two examiners-internal and external.

#### Pattern of question paper:

Theory papers: Duration Three Hours – External

Answer All the Questions

All questions carry equal marks

5x15=75 marks

1(a) or 1(b), 2(a) or 2(b), 3(a) or 3(b), 4(a) or 4(b), 5(a) or 5(b)

Total Maximum marks - 75 marks

For Research Methodology and Advanced Statistics question paper shall include problem-solving questions.

#### **10.C. Research Guide:**

Each candidate will be allotted a research guide from among the faculty members of the department by the department concerned.

#### **10.D. Submission of Dissertation:**

A candidate has to prepare and submit a scholarly dissertation by the end of the second semester on a socially and economically relevant research problem, pertaining to his discipline and specialization, under the guidance of a research guide. The research work must be a declaration, in the format prescribed by the university, by the candidate and duty certified by the research guide. There should not be any plagiarism. Three copies of the dissertation must be submitted by a candidate to the head of the department, duly signed by the research guide.

#### **10.E. Evaluation of Dissertation:**

The dissertation shall be evaluated by two examiners, of whom one will be the research guide and the other appointed by the university from a panel submitted by the head of the department. The dissertation carries 150 works.

#### 10.F. Viva-voce:

Candidates whose dissertations are approved by the examiners securing, at least the minimum pass marks, will be called for the viva-voce. The board of viva-voce shall comprise the research guide, the head of the department/ a senior faculty member of the department. The viva-voce carries 50 marks.

#### 12. Time extension for submission of Dissertation:

Extension for submission of dissertation shall be granted as per the university norms and conditions.

#### 13. Passing minimum marks:

The minimum marks for pass in the CIA and ESE shall be 40%, in each, but an aggregate minimum of 50% marks putting together the continuous internal assessment marks and university end semester examination marks is needed for a pass. A candidate should have secured 50% in dissertation and 50% in the viva-voce to get a pass.

#### **14. Grading of the Courses**

The following table gives the marks, Grade points, Letter Grades and classifications meant to indicate the overall academic performance of the candidate.

RANGE OF MARKS	GRADE POINTS	LETTER GRADE	DESCRIPTION
90 - 100	9.0 - 10.0	0	Outstanding
80 - 89	8.0 - 8.9	D+	Excellent
75 - 79	7.5 - 7.9	D	Distinction
70 - 74	7.0 - 7.4	A+	Very Good
60 - 69	6.0 - 6.9	Α	Good
50 - 59	5.0 - 5.9	В	Average
00 - 49	0.0	U	Re-appear
ABSENT	0.0	AAA	ABSENT

Conversion of Marks to Grade Points and Letter Grade (Performance in Paper / Course)

- a) Successful candidates passing the examinations and earning GPA between 9.0 and 10.0 and marks from 90 100 shall be declared to have Outstanding (O).
- b) Successful candidates passing the examinations and earning GPA between 8.0 and 8.9 and marks from 80 89 shall be declared to have Excellent (D+).
- c) Successful candidates passing the examinations and earning GPA between 7.5 7.9 and marks from 75 79 shall be declared to have Distinction (D).
- d) Successful candidates passing the examinations and earning GPA between 7.0 7.4 and marks from 70 74 shall be declared to have Very Good (A+).
- e) Successful candidates passing the examinations and earning GPA between 6.0 6.9 and marks from 60 69 shall be declared to have Good (A).
- f) Successful candidates passing the examinations and earning GPA between 5.0 5.9 and marks from 50 59 shall be declared to have Average (B).
- g) Candidates earning GPA between 0.0 and marks from 00 49 shall be declared to have Reappear (U).
- h) Absence from an examination shall not be taken as an attempt.

From the second semester onwards the total performance within a semester and continuous performance starting from the first semester are indicated respectively by Grade Point Average (GPA) and Cumulative Grade Point Average (CGPA). These two are calculated by the following formulate

GRADE POINT AVERAGE (GPA) =  $\Sigma_i C_i G_i / \Sigma_i C_i$ 

GPA = <u>Sum of the multiplication of Grade Points by the credits of the courses</u> Sum of the credits of the courses in a Semester

CGPA	Grade	Classification of Final
		Result
9.5 - 10.0	0+	First Class – Exemplary*
9.0 and above but below 9.5	0	
8.5 and above but below 9.0	D++	First Class with Distinction*
8.0 and above but below 8.5	D+	
7.5 and above but below 8.0	D	
7.0 and above but below 7.5	A++	First Class
6.5 and above but below 7.0	A+	
6.0 and above but below 6.5	Α	
5.5 and above but below 6.0	B+	Second Class
5.0 and above but below 5.5	В	
0.0 and above but below 5.0	U	Re-appear

### 15. Classification of the final result

The final result of the candidate shall be based only on the CGPA earned by the candidate.

- a) Successful candidates passing the examinations and earning CGPA between 9.5 and 10.0 shall be given Letter Grade (O+), those who earned CGPA between 9.0 and 9.4 shall be given Letter Grade (O) and declared to have First Class –Exemplary\*.
- b) Successful candidates passing the examinations and earning CGPA between 7.5 and 7.9 shall be given Letter Grade (D), those who earned CGPA between 8.0 and 8.4 shall be given Letter Grade (D+), those who earned CGPA between 8.5 and 8.9 shall be given Letter Grade (D++) and declared to have First Class with Distinction\*.
- c) Successful candidates passing the examinations and earning CGPA between 6.0 and 6.4 shall be given Letter Grade (A), those who earned CGPA between 6.5 and 6.9 shall be given Letter Grade (A+), those who earned CGPA between 7.0 and 7.4 shall be given Letter Grade (A++) and declared to have First Class.
- d) Successful candidates passing the examinations and earning CGPA between 5.0 and 5.4 shall be given Letter Grade (B), those who earned CGPA between 5.5 and 5.9 shall be given Letter Grade (B+) and declared to have passed in Second Class.
- i) Candidates those who earned CGPA between 0.0 and 4.9 shall be given Letter Grade (U) and declared to have Re-appear.
- e) Absence from an examination shall not be taken as an attempt.

#### CUMULATIVE GRADE POINT AVERAGE (CGPA) = $\Sigma_n \Sigma_i C_{ni}$ G<sub>ni</sub> / $\Sigma_n \Sigma_i C_{ni}$

CGPA = <u>Sum of the multiplication of Grade Points by the credits of the entire Programme</u> Sum of the credits of the courses for the entire Programme

Where '**Ci**' is the Credit earned for Course i in any semester; '**Gi**' is the Grade Point obtained by the student for Course i and 'n' refers to the semester in which such courses were credited.

**CGPA** (Cumulative Grade Point Average) = Average Grade Point of all the Courses passed starting from the first semester to the current semester.

Note: \* The candidates who have passed in the first appearance and within the prescribed Semesters of the PG Programme are alone eligible for this classification.

#### **16. Reappearance by failed candidates:**

A candidate who fails in any course/courses may appear for the examination again in those course/courses as per university rules.

**17.** A candidate has to complete the program within 3years from the completion of the duration of program, failing which the candidate's registration will stand automatically cancelled and the candidate has to register afresh, if the candidate wants to pursue the program.

#### 18. Award of the M. Phil. Degree:

A student will be declared to be eligible for the award of a degree if he/she has:

- Registered for and undergone all the courses under the different parts of the curriculum of his/her program.
- There are no dues to the university, hostel, NSS, library clubs, associations etc from the candidate and
- No disciplinary action is pending against him/her.

		SEMESTER – I			
Course code:	e: Research Methodology and Advance Credits:4 Hours:4				
821111	Statistics in Physical Education				
Objectives	$\triangleright$	To improve the Research Report Writing.			
	$\succ$	To enrich the Statistical application.			
Unit – I	Found	lations			
	T	ypes of questions: Descriptive, Rational	and Causal-V	Variables –	
	Hypot	Iypotheses – Types of Data – Unit of analysis – Structure of Research –			
	Deduc	Deductive and Inductive Thinking – Internal Validity – Problem Formulation –			
	Literature Review.				
Unit – II	Samp	ling			
	S	ampling: External Validity, Threats to extern	al validity, tl	ne sampling	
	Distril	oution, Sampling Error			
	P	robability Sampling: Simple Random Sampl	ing – Stratifi	ed Random	
	Sampl	ing – Systematic Random Sampling – Cluster (A	Area) Random	Sampling –	
	Multi	stage Sampling			
	N	Non-Probability Sampling: Convenience Sampli	ng – Purposiv	e Sampling.	
Unit – III	Types	& Research			
	Pl	nilosophical and Historical Research			
	Survey Research: Types of Surveys, Selecting the survey method,				
	constructing the survey, Interviews.				
	Experimental Research: Design-Internal Validity-Types of Designs: True				
	Experimental Designs-Quasi-Experimental Designs.				
Unit – IV	Statis	tical Analysis-I			
	D	ata – Normality of Data – Normal Curve, Mear	ning, Purpose,	Calculation	
	Туре	I,II,III & IV Errors and Advantages of "T" r	atio – simple	analysis of	
	varian	variance (one way ANOVA)- factorial design – two way and three way factorial			
	design – repeated measures ANOVA – two way ANOVA – two way ANOVA				
	with one factor repeated ANOVA-post hoc tests. Application of Ms Excel and				
	SPSS	for Statistical Calculations.			
Unit – V	Statis	tics Analysis-II			
	Pe	rson product moment correlation – Rank or	ler correlation	n – biserial	
	correla	ation – partial and multiple correlation – predi	ction and wh	erry dolittle	
	metho	d – phi correlation – chi square – contingency co	efficient.		
	Concept and calculation of mann whitney u Test, kruskal wallis H test -				
	concepts of multivariate ANOVA and ANCOVA (MANOVA, MANCOVA)-				
	conce	ot of factor analysis.			
Unit – VI	Resea	rch writing			
	V	Vriting a proposal – preparation of research	report – Arra	ingement of	
	chapte	ers Stylistic elements – formatting.			
Suggested Rea	adings:	-			
Best, John W	& Kah	n, James V. (1992) research in education, New	w Delhi: Pren	tice Hall of	

India
Clarke, David.H and Clarke, H.Harrison(1984) <i>Research Processes in physical education</i> : New Jersey, Prentice Hall Inc.
Clarke, David H. and Clarke, David H.(1972) Advanced Statistics. New jursey. Prentice Hall Inc
Fred.A.Kerlinger (2007) Foundation of education research: Sage Publication.
Thomson AL, (1986) The art of using computers, Boston: Boyd & Frasher Publishing
William M.k.Trochim, <i>research methods knowledge</i> base: <u>www.social</u> research methods.net/1kb
<b>Outcomes</b> > To choose right statistical technique to be used with the research method.
<ul> <li>Interpret statistical literature, research articles and the claims made on the basis of statistics.</li> </ul>

Course code:		Sports Physiotherapy	Credits:4	Hours:4
821112A				
Objectives	To improv	e the knowledge about Rehabilitation		
	To improv	Preventive and curative aspects.		
Unit – I	Introduction			
	Definition -	meaning of sports physiotherapy -	need and im	portance of
	sports physiother	physiotherapy - need and importance of sports rehabilitation - need and		
	importance of spo	portance of sports medicine (preventive curative and rehabilitative aspects).		
Unit – II	Massage			
	Athletic Inju	ries – causes – preventive measures	s – passive t	reatments –
	massage – histo	rical developments - effects of m	assage – bas	sic massage
	technique – (Swe	dish system) – special massage techn	iques – yoga	therapy and
	sports injuries.			
Unit – III	Therapy Modali	ties		
	Hydrotherapy	and Balaneotherapy – physiological	effects – prev	entive use –
	methods of appl	ication – contrast bath, whirlpool, c	cryotherapy, c	ryokineties,
	electrotherapy – u	Iltrasonic therapy – indication and con	tra indications	3.
Unit – IV	Rehabilitation I			
	Active treatr	nent-strengthening exercises-Isometric	e exercise, sta	tic muscular
	work-Isotonic ex	kercise, dynamic muscular work-ec	centric exerc	cise, Isolate
	exercise-preparati	ercise-preparation for competition.		
	Spinal colur	nn and torso: Lordosis, kyphosis, sco	bliosis and sp	ondylolysis-
<b>X X X X X X X X X X</b>	diagnosis- diagno	stic procedure – initial situation – phy	sical examina	tion.
Unit – V	Propriocept	ic neuromuscular facilitation (PNF) –	- complex mo	tions. Basic
	principles and te	chnique-complex motions as prevents	ion and renat	hillitation for
	Atmetes-minitatio	in rehabilitation positioning of the ath		by injuries-
IImit VI	Eurotional Band	In renabilitation-positioning of the ath	lieles.	
Omt - vi	Lise of funct	lages	application of	f functional
	bandages materi	als classification according to	time of an	
	classification acc	ais - classification according to cording to the type of bandages $cl$	approximited of a provide the second se	cording to
	bandaging techn	iques-classification according to the	assilication a	materials_
	indication-contrai	ndication	ie ounduging	, materials
Suggested Re	dings:-	hulouton		
AAHPER pub	ication (1974): <i>p</i>	rofession preparation in safety educ	cation and so	hool health
education.	Vashington.			
Armstrong and	Tucket (1964) "In	juries and Sports" London sample pre-	ess	
Borozne Josep	h & Pechar Stan	ley(1977) administration & supervis	sion for safe	ty in sports
Washington	Washington, AAPHER			
Borozne,Josep	h & Pechar Stanley	(1977) safety in team sports, Washir	ngton, AAPHI	ER
Clarke Kennet	S.(1977) drugs &	the coach Washington AAPHER		
Domron,C.F.	& Wisconsin, M	Modison (1977) accident surveilla	nce system	for sports,
Washington	AAPHER		-	÷ ′

Outcomes	> Decognize the role of Dhysiotherapy in the contast of the health peads of
Outcomes	Recognize the fole of Physiotherapy in the context of the health needs of
	the community and National priorities in the health sector.
	> Ability to acquire knowledge on Basic Medical sciences, Human
	Movement Sciences, Various Medical Conditions and Surgical
	Treatments to identify Psychological, Social, Economical, Cultural
	aspects of diseases and its impact on community.

Sports Physiology	Credits:4	Hours:4	
To enrich the knowledge of Body mechanism.			
To enrich the knowledge of Physiological function	on.		
Introduction			
Energy – definition – the biological energy cycle	– ATP, the	aerobic and	
anaerobic systems during rest and work - recovery fro	om exercise; 1	the recovery	
oxygen replenishment of energy stores during recovery	y – removal o	of lactic acid	
from blood and muscle – restoration oxygen stores.			
Bioenergetics			
Measurement of energy work and power: Direct	measuremen	t of energy,	
indirect measurement of energy-the caloric equivalent	t of oxygen-n	neasurement	
of energy-cost of exercise-other methods of reflecting	energy cost (	bicycle ergo	
meter, treadmill, run test)			
Skeletal muscle			
Structure, function and force: connective tissues	s, tendons, bl	ood supply,	
nerve supply-structure of the muscle cell-the sliding fil	ament theory	of muscular	
contraction-function: the motor unit-the motor unit	tion-function: the motor unit-the motor unit and strength gradation,		
different kinds of motor units-fast twitch (FT) and	t kinds of motor units-fast twitch (FT) and slow twitch (ST) fibers-		
muscular force-velocity and power-velocity relationship	ar force-velocity and power-velocity relationship, local muscular fatigue.		
Nervous control of muscular movement: Structur	yous control of muscular movement: Structure of the nerve-the basic		
functions of the nerve: The nerve impulse, nerve	to nerve sy	mapses, the	
neuromuscular junction, muscle sense organs, pro	prioceptors,	the muscle	
spindle, golgi tendon organs, joint receptors-the nervou	s system and 1	notor skills.	
Cardio respiratory considerations	.1 1 '	.1 1 1 1	
Pulmonary ventilation: At rest, during exercise	the anaerobi	c threshold,	
alveolar ventilation and dead space, lung volume and	capacities, d	ynamic lung	
CAS Evolution and Transport. Blood flow and an	es, second wind, such in the slue, ventilation incentations.		
GAS Exchange and Transport: Blood flow and gas	output during everyise distribution of blood flow the ovugan transport		
cardiac output during exercise – distribution of blood	airculatory machanica (Hama dynamic) at rest and dyning avaraica		
System circulatory mechanics (Heno-dynamic) at lest a	na aanng exe	icise.	
Nutrition food requirements: Selecting food num	her of meals	diet before	
during after activity-diet on performance-carbohydrate	s boosting	ulet before,	
Environment aspects and drugs and ergo	enic aids	scuba and	
performances at high altitude-exercise in the heat a	nances at high altitude-exercise in the heat and cold nutritional aids		
pharmacological aids physiological agents	acological aids physiological agents		
Neuroendocrine – Immune System Unit			
Introduction – Exercise as a stressor that	activates the	neural and	
hormonal systems – The Nervous System – The endoc	rine system –	- Role of the	
endocrine system in exercise – Hormonal responses	to exercise -	- Hormonal	
adaptations to training – Training adaptation and	naladaptation	– selected	
interactions of exercise and immune function.	T		
	<ul> <li>➢ To enrich the knowledge of Body mechanism.</li> <li>➢ To enrich the knowledge of Physiological functi</li> <li>Introduction</li> <li>Energy – definition – the biological energy cycle anaerobic systems during rest and work – recovery from oxygen replenishment of energy stores during recovery from blood and muscle – restoration oxygen stores.</li> <li>Bioenergetics</li> <li>Measurement of energy work and power: Direct indirect measurement of energy-the caloric equivalent of energy-cost of exercise-other methods of reflecting meter, treadmill, run test)</li> <li>Skeletal muscle</li> <li>Structure, function and force: connective tissues nerve supply-structure of the muscle cell-the sliding fil contraction-function: the motor unit-the motor unit different kinds of motor units-fast twitch (FT) and muscular force-velocity and power-velocity relationship Nervous control of muscular movement: Structur functions of the nerve: The nerve impulse, nerve neuromuscular junction, muscle sense organs, prospindle, golgi tendon organs, joint receptors-the nervous:</li> <li>Cardio respiratory considerations</li> <li>Pulmonary ventilation: At rest, during exercise alveolar ventilation and dead space, lung volume and measures, second wind, stitch in the side, ventilation metage output during exercise – distribution of blood asystem circulatory mechanics (Hemo-dynamic) at rest and pharmacological aids, physiological agents.</li> <li>Nutrition food requirements: Selecting food, num during, after activity-diet on performance-carbohydrates</li> <li>Environment aspects and drugs and ergoge performances at high altitude-exercise in the heat and pharmacological aids, physiological agents.</li> <li>Neuroendocrine – Immune System Unit</li> <li>Introduction – Exercise as a stressor that a hormonal systems – The Nervous System – The endoc endocrine system in exercise – Hormonal responses adaptations to training – Training adaptation and interactions.</li> </ul>	Sports Physiology         Credits:4           ▶ To enrich the knowledge of Body mechanism.         ▶ To enrich the knowledge of Physiological function.           Introduction         Energy – definition – the biological energy cycle – ATP, the anaerobic systems during rest and work – recovery from exercise; to oxygen replenishment of energy stores during recovery – removal of from blood and muscle – restoration oxygen stores.           Bioenergetics         Measurement of energy work and power: Direct measurement indirect measurement of energy-the caloric equivalent of oxygen-no of energy-cost of exercise-other methods of reflecting energy cost (meter, treadmill, run test)           Skeletal muscle         Structure, function and force: connective tissues, tendons, bl nerve supply-structure of the muscle cell-the sliding filament theory contraction-function: the motor unit-the motor unit and strength different kinds of motor units-fast twitch (FT) and slow twitch muscular force-velocity and power-velocity relationship, local muscu Nervous control of muscular movement: Structure of the nerve syneuromuscular junction, muscle sense organs, proprioceptors, spindle, golgi tendon organs, joint receptors-the nervous system and a laveolar ventilation and dead space, lung volume and capacities, dy measures, second wind, stitch in the side, ventilation mechanics.           GAS Exchange and Transport: Blood flow and gas transport: th cardiac output during exercise – distribution of blood flow-the oxyg system circulatory mechanics (Hemo-dynamic) at rest and during exercise – distribution of blood flow-the oxyg system circulatory mechanics (Hemo-dynamic) at rest and during exercise – distribution for meals: during, after activity-diet on performance           Nutrition and Exercise performance	

### Suggested Readings:-

Astrand, P.U. and K.Rodhal (1986) Text book of work physiology, new York McGraw Hill

Berger (1982) applied exercise physiology: lea and febiger: Philadelphia

David H Clarke, "Exercise Physiology" prentice hall inc., Englewood cliffs, new jersey.

Fox, Bowers and Foss, (1989) physiological basis of physical education and athletics web: Dubuque, Iowa.

Kapandji (1986) "The physiology of the joints. Edinburgh London Melbourne and new York.

Larry G. shaver (1982) Essential of exercise physiology surjest publications.

Outcomes	Understand the basis of normal human physiology with special emphasis
	on the functioning of the cardiovascular, musculo-skeletal and nervous
	systems.
	> Demonstrate an understanding of elementary human physiology and Bio-
	Chemistry.

Course code:		Sports Bio Mechanics	Credits:4	Hours:4
821112C				
Objectives	$\succ$	To gain an in depth understanding of sports Bio	mechanics.	
	$\succ$	To provide some capacity to comprehend,	, increasing	amount of
		biomechanical research being reputed in Journals and applied towards the		
		improvement of sports performance.		
Unit – I	Introdu	oduction in Bio mechanics		
		Nature and scope of Bio mechanics in Physical Education basic		
	princip	ples of Bio mechanics, Fundamental Bio mechanical concepts.		
Unit – II	Moven	nent		
	Mo	wement patterns-the essence of sports biom	echanics-defin	ning human
	movem	ents-some fundamental movements-movement	t patterns-cor	nparison of
	qualitat	ive movement analysis.		
Unit – III	Motion			
	Cor	cept of application of mechanics in sports-sta	tic and dynamic	mic balance
	(Equilit	orium)-force-moment of force-centripetal and c	entrifugal for	ces-force of
	gravity	spin and friction-impact-elasticity-levers-New	vton's laws	of motion-
	velocity	ity and acceleration-types of motion-rotary and linear motion-angular		
	kinetics	s-linear kinematism-centre of gravity-falling bodies-path of projection-		
	work-p	ower and energy, guiding principles derived fror	n the application	ion of above
	mechan	ical concepts.		
Unit – IV	Hydro	lynamic constructs		
	Co	ncepts and application of mechanics in spo	rts in the A	qua media-
	flotatio	otation-buoyant force-specific gravity-centre of buoyancy-rotational motion-		
	fluid r	uid resistance-gyro scoping action-guiding principles derived from the		
	applicat	cation of the above mechanical concepts in the Aqua media.		
Unit – V	Aero d	ynamic constructs		
	Co	ncepts and application of mechanics in the air m	edia-wind res	sistance-spin
	and gy	ration-surface drag-from drag-life-the magnus	effect-guidin	g principles
	derived	from the application of the above mechanical co	oncepts in the	air media.
Unit – VI	Motion	Analysis	-	
	Analysi	s of sports techniques: Principles of cinematogr	aphic analysis	-application
	of cine	matographic and video analysis-motor ideograr	ns-avoidance	of errors of
	measur	easurements. Biomechanical analysis of following activities: Running-		
	jumping	g-throwing-basket ball-foot ball-hockey-volleyb	all.	_
Suggested Rea	adings:-	· · · · · ·		
Broer.M.R. "E	fficiency	of human movement Philadelphia": W.S.Saund	ers company	
Bunn, John W	. "Scien	tific principles of coaching" Englewood cliffs	new jersev 1	prentice hall
inc.	, 20000			

Brendan, Beng, MEng, Ph.D, "Sports Bio mechanics for Coaches" Third Education. School of health and Sports Sciences, University of Sunshine Coast, Australia.

Charles Simonian, Fundamentals of sports Bio mechanics Ohio State University, Prentice hall INS, Engle wood cliffs, New Jersey 07632

Dyson, GH.G. "The mechanics of athletics" London, hodder and storughton.

Hay, james.G. "bio-mechanics of sports techniques", Englewood cliffs, new jersey, prentice hall inc.

Logan-"Kinesiology and bio-mechanics"

Outcomes	Apply the analytic methods to specific example of normal human motor performance.
	<ul> <li>Analyze normal human movement from a global perspective, integrating biomechanics, muscle mechanics and motor control theory.</li> </ul>

Course code:	ourse code: Sports Psychology Credits:4 Hours:4			
821112D				
Objectives	$\succ$	To enrich the Behavioral Intervention.		
		To develop Personality character.		
Unit – I	Introdu	iction		
	Psycl	nology – sports psychology-sports learning an	d high perfor	rmance-high
	sports p	erformance & sports psychology-theory and pra	ctice together	•
Unit – II	Person	ality		
	Natu	re or personality-early experiences in personalit	y developmer	t - learning
	process	process in personality development-social context of personality acquisition-		
	underly	riging dimensions of personality traits-assessment of personality traits-Epps,		
	WINF I,	EFI-The camornia psychological invent	ory-life call	le IV FF
	emotion	and stability the psychological conflict of personal stability that the psychological conflict of personal stability the psychological conflict of personal stability that the psychological conflict of personal stability the psychological stability the psycholog	pi-mentar ioi mality_person	ality as self
	actualiz	e	manty-person	anty as sen
Unit – III	Learni	ng. Anxiety and Social interaction in sport		
	Lea	rning by connections associations – implication	s of learning	principles –
	learning	g process and its factors – characteristics of	sport learning	ng – motor
	learning	g and co-ordination-anxiety and sports perfo	ormance-press	sure of the
	coach-n	neasures to control anxiety of the players.		
	Imp	roving the quality of coach - parent relation	onship in Yo	uth sport –
	commu	nication in sport.		
Unit – IV	Attenti	on and perception		
	Att	ention in sport – factor influencing attention –	phenomena -	- shifting of
	attentio	n – distraction of attention – filtering to attention	1.	
	Per	ception – perception movement & sport perce	ption and sen	ses – factor
	related	to perception – measurement of perception	– perception	and mental
	practice			
Unit – V	Cogniti	ve-Behavioural intervention in sport	•,•	
	Co	gnitive strategies in sport – imagery in sport	- cognitive	behavioural
	imagar	and relevation goal setting psychological al	rvention prog	ram s using
Linit VI	F	vargise Psychology Psychological benefit of	Anis utaning I	Or sport.
	and bur	nout in Athletics – Treating anxiety and depress	ion – Exercise	and mental
	health -	- Definition of aggression – Types of Aggressio	on Theories of	<sup>2</sup> Aggression
	– Aggre	ession in athetic competition sex difference in ag	gressor.	1.6610001011
Suggested Rea	adings:-		6	
Clifford T.Mo	organ, R	ichard A.king, John R. Wish and John Sc	hopler, "Intr	oduction to
psychology	" TATA	McGraw hill-new delhi, university of north caro	plina.	
Jean M.Willia	ams. "A	pplied sports psychology"-mayfield publishing	ng company	California-
university o	of Arizora	l.	8 1 1	
Kakkar-"adva	nced edu	cational psychology"-oxford & IBH publishing	co.Pvt.Ltd-nev	w delhi.
Parameswaran	and R	pena "An invitation to nsychology"-nealkon	al publication	s nyt Itd
Hyderabad	rarameswaran, and Beena, An invitation to psychology -nealkamal publications pvt. Ltd- Hyderabad			
Tryactabad.				

Richard H.S. C	Cox-"Sports psychological" WCB McGraw hill, of Missouri, new York
Outcomes	Understand the concept of stress and its relationship to health, sickness and one's profession.
	Recognize and help with the psychological factors involved in disability, pain, disfigurement, unconscious patients, chronic illness, death, bereavement and medical surgical patients/conditions.

Course code:		Sports Training Methods	Credits:4	Hours:4	
821112E					
Objectives	$\succ$	To develop the Sports training Principles.	·		
	To enrich the sports strategies.				
Unit – I	Introduction				
	A) Trai	ning: Definition, meaning, aim, characteristics a	and principles		
	B) Fitn	B) Fitness: Introduction, health related fitness, needs, benefits, basic			
	components				
	C) Ath	C) Athletic related fitness, needs, benefits, basic components.			
Unit – II	Types of	of training			
	A) Bas	sic level: own body exercise, circuit training, s	and training, 1	hill training,	
	stai	r case training, jump rope training, fartlek	training, weig	ght training,	
	ply	ometric training			
	B) Ad	vanced level: Saq training(speed, agility, q	uickness) cro	oss training	
	con	nplex training, contrast training, tetanus training	, maxex traini	ng	
	C) Tra	ining components: Density, load, set, recovery.			
Unit – III	Streng	th:			
	A)	Definition, types, maximum strength, expl	osive strengt	th, strength	
		endurance			
	B)	Muscle response strength training: Isometric, Iso	otonic, Isokine	etic.	
	C) Components of strength training: principles of 1RM. Speed: Definition,				
	types of speed training: Assisted sprint, resisted sprint, interval sprint,				
		repetition sprint, acceleration sprint, componen	ts of speed(re	eaction time,	
		block clearance time, acceleration, maxin	num speed	and speed	
		endurance). Speed barrier-over some procedure.			
Unit – IV	Endura	ance:			
	A) Co	ontinuous run(slow, fast) aerobic enduranc	e, anaerobic	endurance,	
	ae	robic threshold, anaerobic threshold, thresh	hold training	g, physical,	
	ph	hysiological and psychological benefits			
	B) Fl	exibility: definition, types (active passive) Pn	f stretching, p	orinciples of	
	fle	exibility,			
	C) A	gility : Definition, types, different agility drills.			
Unit – V	Periodi	sation			
	A)	Types single periodisation, double periodisation	, multiple per	iodisation	
	B)	Cycles-micro cycle, meso cycle, macro cycle.			
<b></b>	<b>C</b> )	Phases-preparatory phase, competition phase, tra	ansition phase	, detraining.	
Unit – VI	0.1	Warm-up and stretching warm-up – Flexibility	v - Types of	Stretching –	
	Stalicst	retching techniques – Dynamic Stretching techn	iques.		
Suggested Rea	adings:-				
Dick, frank W	.(1980) s	ports training principles, London : Lepus books			
Fox, Edward L	Fox, Edward L(1984) sports physiology Halt: CBS college publishing				
International fi	itness ass	ociation web at <a href="http://www.ifafitness.com">http://www.ifafitness.com</a>			
Klerner, susan	and robi	bson.M.G.(1998) power eating. Champaigh IL:	human kinetic	s	
Nieman, David	d C (1998	3) The exercise health connection.			

Shaver, larry C	G (1982). Essential of exercise physiology delhi: Surjeet publications
Outcomes	<ul> <li>Demonstrate knowledge and understanding of the principles and practices of sports coaching;</li> </ul>
	Demonstrate sports coaching skills which are responsive to the characteristics of individuals;

Course code:	Yoga Education	Credits:4	Hours:4		
821112F					
Objectives	To enrich the knowledge of Yoga practices.				
	To improve the body function.				
Unit – I	Introduction to yoga				
	A) Meaning of yoga – concept of yoga – aim and o	bjectives of y	oga – brief		
	history of yoga – systems of yoga: Bhakthi yoga – jna	ory of yoga – systems of yoga: Bhakthi yoga – jnana yoga – karma yoga –			
	hatha yoga – laya yoga – mantra yoga – kundalini yog	ga – raja yoga	a – patanjali		
	yoga; eight limbs of yoga: yama – niyama – asana – <b>pr</b> a	eight limbs of yoga: yama – niyama – asana – <b>pranayama – pratyahara –</b>			
Unit II	A sonos	irana – unayana – samatni			
0mt – 11	Asallas Definition classification of asanas differences k	atwaan nhysi	col avarcica		
	and yogic asanas - guidelines for practicing asanas - v	prious types of	f asanas and		
	their benefits	inous types o	i asanas and		
Unit – III	Pranavama				
	Concept of pranavama – nadis – ida nadi – pingala	nadi – sushu	mma nadi –		
	controlling of breath; puraka – kumbhaka – rechaka. I	Benefits of pr	anayama on		
	various systems of the body. Types of pranayama – nad	i suddhi – nac	li shodhanas		
	– surya bhedana – kapalabhati – bhastrika – sitakari – sitali – bhramari – ujjayi.				
Unit – IV	Bandhas and Mudras				
	Meaning – types ; jallandra – mula – uddiyana	. Kriyas – te	chniques of		
	kriyas - neyi (jala neti, sutra neti) - dhauti; vamana	dhauti – vas	tra dhauti –		
	bhasti – nauli – trataka – kapalabhati				
Unit – V	Kiriyas				
	Kriyas:Kapalaonati, Irataka, Nati, Dhouti, Nauli, & Basthi. Mudras : Chin				
	Mudra, Chinmaya Mudra, Adi Mudra, Brahma Mudra, Maha Mudra, Aswini				
	wuudra, & Yoga Wuudra. <b>Bandnas</b> : Jalandnara Bandha, Uddiyana Bandha&Mula				
The 4 MI	Bandna.				
Omt - vi	Concept of meditation types of meditation	hysiological	hanafita of		
	meditation – effects of yoga on various systems of	f the body.	voga and		
	competition – integration of yoga with modern educat	ion – voga in	stitutions in		
	India and abroad.	ion jogu m			
Suggested Rea	adings:-				
Chandrasekara	n, K. Sound health through yoga. Madurai; Prem kalyan	publications.			
Gharofe, M.L;	applied yoga. Lonavala				
Gharota, scient	ce of yoga, kaivalayadhama, lonavla, India.				
Moorthy A.M	and Alagesan, S Yoga therapy; TPH Coimbatore				
Swami digamb	erji yoga and physical education, kavivalyadhama konav	la, India			
Swami kuvaly	ananda, Asanas. Lonavala; Kaivalyadhama				
Outcomes	To practice mental hygiene.				
	> To attain higher of consciousness				

Course code:		Measuren	nent and Evaluation in Physical	Credits:4	Hours:4
821112G	Education				
Objectives	> To develop concepts related to Test, Measurement & Evaluation.				
	$\succ$ To construct a strong basis in the evaluation techniques through the				
	various test and measurements method used in physical education				
Unit – I	Introduction				
	Meaning of the terms 'Test' Measurement and Evaluation – Function of				
	Measurement and Evaluation - Process of Measurement and Evaluation -				
	Classification of test – Criteria for selection for test.				
Unit – II	Test Ev	valuation			
		Constructing	g Sports Knowledge test - Constru	acting Sports	Skill test -
	Admini	istration of te	est – Anthropometry – Techniques	of tasking Ma	anagement –
	Body C	Composition.			
Unit – III	Physica	al Fitness an	d Motor Components Test		
		New York State Physical Fitness Test - Roger's Physical Fitness Test -			
	Oregon	Oregon Motor Fitness Test – AAHPERD Health Related Physical Fitness Test –			
	YMCA Physical Fitness Test – Kraus Weber Muscular Strength Test.				
Unit – IV	Motor Educability and Flexibility Test				
		Barrow Mot	or Ability Test – Johnson's Educat	oility – Test o	of Flexibility
	(Cureto	on Flexibility	Test ) – Test of Agility – Woodruft	f body Alignr	nent Posture
	Test – I	Foot Print Ar	ngle.		
Unit – V	Tests o	of Specific Sp	oorts Skill Test		
	Badmir	nton	- a) French Short Serve Test		
			- b) Lockhart, McPherson Test		
	Basketh	ball	- a) AAHPRD Test		
			- b) Johnson Test		
	Hockey	ý	- a) Henry Friedal Hockey	/ Test	
			- b) Chapman Ball	Control Test	
	Soccer		- a) Mor – Christian Test		
			- b) Yeagley Soccer Battery		
	Tennis		- a) Dyer Tennis Test		
			- b) Hewitt's Test		
	Volley	ball	- a) Brady Test		
			- b) Russell – Lange Test		<u> </u>
Suggested Rea	adings:-	<i>(1</i> 77)		» <b>0</b> 005	
Sharad Chandi	a Mishra	a, "Test and I	Measurement in Physical Education	~ – 2005	
Baumgartner / Jackson - "Measurement for Evaluation in Physical Education and Exercise					

*Science*" 1987.

Charles Harold Mc Cloy "Tests and Measurement in Health and Physical Education" 2004

H.Harrisinclarke, "Application of Measurement to Physical Education" 1987

Norman E.Gronlund "Measurement and Evaluation in Teaching" 1981.

Outcomes	Describe the meaning Assessment and different evaluations.
	<ul><li>Classify the assessment based on purpose, scope, attribute measured,</li></ul>
	nature of information gathered, nature of interpretation and context

Course code: 821113		<b>Professional Competencies</b>	Credits:4	Hours:4
Objectives		To build and broaden the general awareness lev	el of learners	in the fields
		of physical education.		
	$\succ$	To facilitate the use of electro gadgets and	internet in im	proving the
		teaching-learning and research process.		
Unit – I	Genera	General Awareness:		
	Individu	al and group presentation of present day fitness	s and health iss	sues
	•	Issues concerned with young people: 1. with	teaching and	learning 2.
		With the curriculum-gender equality in spo	orts fitness a	nd physical
		education.		
	•	• The activity and leisure industry		
	•	Inclusive sport culture		
	•	Wellness as the centre of lifestyle education		
	•	Presentation of recent research problem i	n the chose	n areas of
		specialization.		
Unit – II	Internet and computers in teaching learning and research:			
	Pub	lications-Medline-csa physical education inde	ex-sport discu	ss-academic
	search	complete-psycinfo-science direct-soc index-a	abi/inform co	mplete lexi
	nexis a	academic-Eric-web science-dissertation and	these-academi	c one file-
	academ	ic search priming-directory of open access	journals-gener	al one file-
	wilgonv	veb omni file full text mega-international index	to the perform	ning arts full
	text(pro	quest) etc.		
	Con	nputer lab sessions to demonstrate use of or	iline journals-	-sourcing of
	online r	esearch articles from databases like-subscribing	; to online rese	arch forums
<b>XX •/ XXX</b>	like-pre	paring professional power point presentations		
Unit – 111	Classro	oom communication:		4
	to hole	alow loomer nuones of written communic	ntoring and tu	toring skills
	notes c	slow learners-induces of written communications	ation in prepa	ing lecture
Linit IV	Podogo	gical skills		
	I cuago	e of case study method situational analysi	s method and	d in basket
	exercise	es in teaching-use of multimedia tools like LCD	projectors and	d laptops for
	presenta	ations and interactive instructions-games and	simulation rel	evant to the
	area of	specialization-student performance measurem	ent methods 1	ike grading.
	relative	grading, percentile method and measureme	ent indicators	like mean.
	median	and standard deviation of students scores in exa	aminations.	,
Unit – V	Resear	ch article writing skills		
	Pre	sentations of review of research articles in chos	en areas.	
	An	alyzing and understanding styles and forma	ts of articles	in referred
	national	and international journals.		
	Ab	stract, keywords, foot note and citation styles i	n articles-cros	s reference-
	prepara	tion of articles for magazines.		

<b></b>				
Unit – VI	Project proposals and research proposals			
	Components of project proposals-identifying funding agencies (like DAAD,			
	UKIERI, DST, UGC, AICTE, ICSSR, ICMR-social research order planning			
	commission, etc.,) analyzing the requirement-research proposals: exercises on			
	research questions, research gaps and outcome of research identification in			
	chosen research areas-presentation of proposals.			
Suggested Rea	adings:-			
Barbara Mae. I	Raymond W.Preiss Gayle class room communication and instructional processes.			
Cooper, Pamel	a J, Simonds, Cheri communication for the classroom teacher.			
Deborah Diadi	um Leu, Donald, J.Leu, Katherine R.Leu teaching with the internet: lessons from			
the class				
Outcomes	Describe the general principles of mass balances in steady state systems.			
	To develop the classroom communication and presentation skills.			
	> Design and solve mass balances for complex process flow systems,			
	including batch mixing problems, multiple stage flow problems,			
	problems with multiple inflows and outflows, recycle streams and			
	multiple components, and processes where chemical reactions take place			

SEMESTER – II				
Course code:	Course code: 821121Area of DissertationCredits:4Hou			Hours:4
Objectives	To develop the mechanism of Research Report.			<u> </u>
	$\blacktriangleright$	To develop the knowledge above statistical feature	ures	
Unit – I	Fundamental concepts:			
	Meaning, need, nature, aim, objectives and scope of the topic - purpose,			
	justification and usefulness of the topic, statement of the problem. Hypothesis,			
-	delimitations and limitations, front materials of the dissertation – reviews.			
Unit – II	Methodology:			
	Sele	ction of subjects – variables – justification – so	cheduling – ap	pparatus and
	materia	ls – tests – method of testing and training	procedures	– statistical
	techniq	ues.		
Unit – III	Experi	mental Design		
	Res	earch design – meaning, need, importance – fea	atures – types	- principles
	of sam	pling – population – steps of sampling design	- criteria ior	selecting. A
	sampling design – characteristics – types – size – random sample – complex			
Unit IV	random sampling design.			
	Data collection – method of data collection – processing and analysis of data -			
	statistical technique – testing hypothesis – interpretation – technique of			
	interpre	etation – computer analysis of data	retution a	Jennique of
Unit – V	Results and Findings			
	Significance of research writing – steps in research writing – lay out – types			
	of reports, mechanics of writing a research report – precautions for writing			
	research reports – cauterization – tabulation – grapes/figures, conclusion –			
	recommendation – bibliography – appendices.			
Unit – VI	Formu	lation and Development of Research Problem	l	
		Location of research problem - Criteria in selec	ting the resea	rch problem
	– Rese	arch proposal - Survey of related literature - I	Need to surve	ey of related
	literatu	re – Major sources of literature – Library sources	s – Library rea	ading.
Suggested Rea	adings:-			
Best, John W.	and Kalr	n james, V.(1980) research in education, new de	lhi: Prentice h	all of India.
Clarke David.	H and C	larke H, Harrison (1984) research processes in	n physical edu	acation, new
jersey: Pren	tice hall	inc.,		
Clarke, H. Har	rison and	d Clarke david H.(1972) advanced statistics, new	v jerky: Prenti	ce hall inc.
Thomson AI(1	986) The	e art of using computers, boyd & frasher boston:	Publishing co	).,
Outcomes	$\checkmark$	Develop an ability to effectively communicate k manner.	mowledge in a	a scientific
	$\triangleright$	Recognize the importance of planning and prepa	aration require	ed to
		undertake a research project.		

Name : Dr.K.Balasubramanian Designation : Professor & Head Address : Department of Physical Education & Health Sciences. Phone : 9942505522 Email : baluk20@rocketmail.com



Educational Qualification:

• Ph.D

Professional experience:

• 19 years

Honours and Awards:

-	

Recent publications:

• International – 5

Cumulative impact factor: \_\_\_\_\_

Total citation :

h-index :\_\_\_\_\_

i10-index :\_\_\_\_\_

Name : Dr.K.Usha Rani Designation : Professor Address : Department of Physical Education & Health Sciences. Phone : 8220778095 Email : dr.k.usharani@gmail.com



Educational Qualification:

• Ph.D

Professional experience:

• 20 years

Honours and Awards:

• 6

Recent publications:

• International – 2

Cumulative impact factor: 5.36

- Total citation :
- h-index :\_\_\_\_\_
- i10-index :\_\_\_\_\_

Name : Dr.D.Maniazhagu Designation : Assistant Professor Address : Department of Physical Education & Health Sciences. Phone : 9865204005 Email : drmaniazhagu@gmail.com



**Educational Qualification:** 

• Ph.D

Professional experience:

• 13 yrs

Honours and Awards:

• 1

Recent publications:

• International – 12

Cumulative impact factor: 5.87

Total citation :

h-index :\_\_\_\_\_

i10-index : \_\_\_\_\_

Name	: Dr.V.A.Manickam
Designation	: Assistant Professor
Address	: Department of Physical Education & Health Sciences.
Phone	: 9443619912
Email	: manickammdks@gmail.com



Educational Qualification:

• Ph.D

Professional experience:

• 9 yrs

Honours and Awards:

• -

Recent publications:

• International – 7

Cumulative impact factor: -

Total citation : \_\_\_\_\_

h-index :\_\_\_\_\_

i10-index : \_\_\_\_\_



Name : Dr.M.KalaiselviDesignation: Assistant ProfessorAddress: Department of Physical Education & Health Sciences.Phone: 9489890672Email: skda.akshu@gmail.com

# Educational Qualification:

• Ph.D

Professional experience:

• 3 years

Honours and Awards:

-

Recent publications:

• International – 1

Cumulative impact factor: -

Total citation :

- h-index :\_\_\_\_\_
- i10-index : \_\_\_\_\_



# **EDUCATION CAMPUS**