

**MAHATMA GANDHI UNIVERSITY  
KOTTAYAM**



**B.VOC. DEGREE PROGRAMME IN  
ADVANCED COURSE IN MULTI SPORTS AND  
FITNESS TRAINING**

**SCHEME & SYLLABUS - 2020**

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## **REGULATION AND SCHEME FOR B.VOC. PROGRAMME UNDER MAHATMA GANDHI UNIVERSITY**

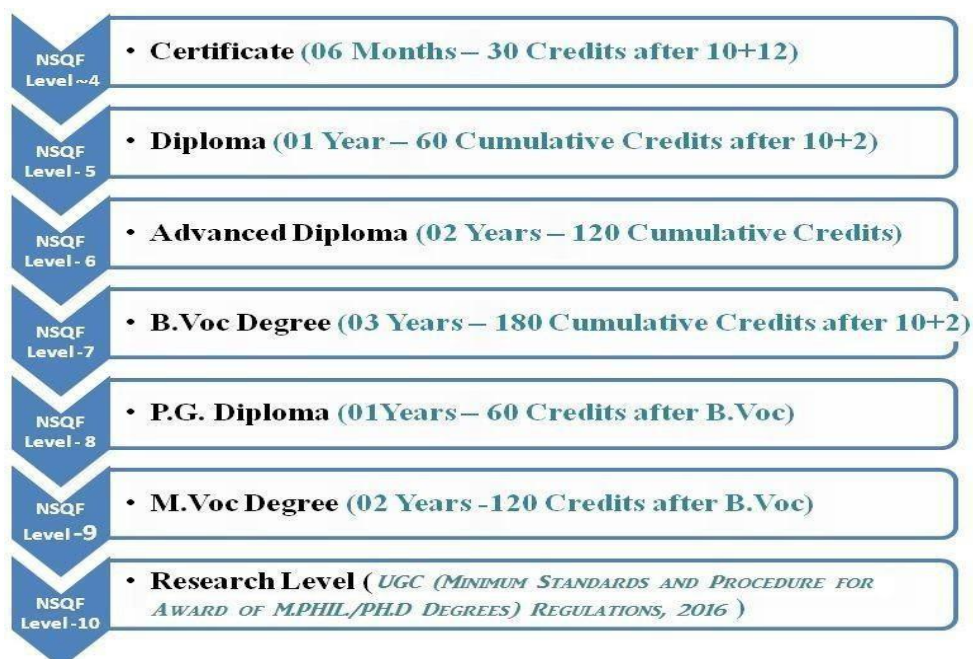
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We are facing unprecedented challenges Skill and knowledge, the driving forces of economic growth and social development for any country. Presently, the country faces a demand – supply mismatch, as the economy needs more ‘skilled’ workforce than that is available. In the higher education sphere, knowledge and skills are required for diverse forms of employment in the sector of education, health care manufacturing and other services. Potentially, the target group for skill development comprises all those in the labour force, including those entering the labour market for the first time, those employed in the organized sector and also those working in the unorganized sector. Government of India, taking note of the requirement for skill development among students launched National Vocational Education Qualification Framework (NVEQF) which was later on assimilated into National Skills Qualifications Framework (NSQF). Various Sector Skill Councils (SSCs) are developing Qualification Packs (QPs), National Occupational Standards (NOSs) and assessment mechanisms in their respective domains, in alignment with the needs of the industry.

The University Grants Commission (UGC) has launched a scheme on skills development based higher education as a part of college/university education, leading to Bachelor of Vocation (B.Voc.) Degree with multiple exits such as Diploma/Advanced Diploma under the NSQF (National skill Qualifications framework). The B.Voc. Programme is focused on universities and colleges providing undergraduate studies which would also incorporate specific job roles along with broad based general education. This would enable the graduates completing B.Voc. to make a meaningful participation in accelerating India’s economy by gaining appropriate employment, becoming entrepreneurs and creating appropriate knowledge. The proposed vocational programme will be a judicious mix of skills, professional education related to concerned vocation and also appropriate content of general education.

The Mahatma Gandhi University gave a strong momentum to the initiatives of UGC-NSQF in the very beginning itself. This University provides opportunities to its affiliating colleges since Academic Year 2014-15 to start skill based vocational Graduate programmes strictly under the guidelines of UGC and NSQF.

## 1. TITLE



These regulations shall be called “MAHATMA GANDHI UNIVERSITY REGULATIONS FOR B.VOC PROGRAMME 2018”.

## 2. SCOPE

Applicable to all regular B.Voc Programme conducted by the University with effect from 2018 admissions onwards, except for B.Voc. Programmes, having scheme and syllabus already approved by MGU under 2014 regulation and scheme.

During the academic year 2019-20 admission onwards, all regular B.Voc Programme in affiliating colleges under MG University should strictly follow Mahatma Gandhi University Regulations for B.Voc Programme 2018.

## 3. ELIGIBILITY FOR ADMISSION AND RESERVATION OF SEATS

Eligibility for admissions and reservation of seats for various Undergraduate Programmes shall be according to the rules framed by the University and UGC in this regard, from time to time.

## 4. TYPE OF COURSES AND AWARDS:

There will be full time credit-based modular programmes, wherein banking of credits for skill and general education components shall be permitted so as to enable multiple exit and entry.

The multiple entry and exit enables the learner to seek employment after any level of Award and join back as and when feasible to upgrade qualifications / skill competencies either to move higher in the job profile or in the higher educational system. This will also provide the learner an opportunity for vertical mobility to second year of B.Voc degree programme after one year diploma and to third year of B.Voc degree programme after a two year advanced diploma. The students may further move to Masters and Research degree programmes mapped at NSQF Level 8 – 10.

## 5. CURRICULA AND CREDIT SYSTEM FOR SKILL BASED COURSES

In order to make education more relevant and to create 'industry fit' skilled workforce, the institutions recognized under B.Voc Degree programme offering skill based courses will have to be in constant dialogue with the industry and respective Sector Skill Councils (SSC's) so that they remain updated on the requirements of the workforce for the local economy. These institutions should also preserve and promote the cultural heritage of the region, be it art, craft, handicraft, music, architecture or any such thing, through appropriately designed curriculum leading to gainful employment including self-employment and entrepreneurship development. The curriculum in each of the semester/years of the programme(s) will be a suitable mix of general education and skill development components. The General Education Component shall have 40% of the total credits and balance 60% credits shall be of Skill Component.

The institution(s) shall prepare draft curriculum as per the UGC guidelines for Curricular Aspects Assessment Criteria and Credit System for Skill based Vocational Courses and place it for vetting by the UGC Advisory Committee constituted under these guidelines. The Curriculum shall be finally approved by the Board of Studies (BoS) and Academic Council of the University / Autonomous College. The Universities where BoS for Vocational subjects has not yet been constituted, the curriculum may be considered by the BoS in allied subject area or an ad-hoc BoS may be constituted till the time regular BoS is notified in the university. The BoS should consider the programme wise curriculum based QP for skill component and relevant general education subjects i.e. the curricula for programmes in one broad subject area may vary from institution to institution in case the different progressive QPs are mapped with the programmes being offered. The choice of different progressive Job roles for a course may also be enabled under CBCS.

## 6. STRUCTURE OF THE PROGRAMME

6.1 Skill Development Components - 60% Weightage

6.2 General Education Component - 40% Weightage

The B.Voc Programme should comprise 60% Skill Development Components (60 % of total Credit) and 40% General Education Component (40% total Credit) as per guidelines of UGC and NSQF.

As an illustration, awards shall be given at each stage as per Table 1 below for cumulative credits awarded to the learners in skill based vocational courses

NSQF Level				Normal Duration	Exit Points/ Awards
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	<b>Skill Component Credits</b>	<b>General Education Credits</b>	<b>Total Credits for Award</b>		
7	108	72	180	Six Semesters	B.Voc Degree
6	72	48	120	Four semesters	Advanced Diploma
5	36	24	60	Two semesters	Diploma
4	18	12	30	One semester	Certificate

## **7. SCHEME AND SYLLABUS**

7.1. B.Voc Programme should include (a) General Education Component, (b) Skill Education Component.

7.2. The B.Voc Programme should followed Credit and Semester System of MGU.

7.3. A separate minimum of 30% marks each for internal and external (for both theory and AOC) and aggregate minimum of 40% are required for a pass for a course.

For a pass in a programme, Grade P is required for all the individual courses. If a candidate secures F Grade for any one of the courses offered in a Semester/Programme, only F grade will be awarded for that Semester/Programme until he/she improves this to P Grade or above within the permitted period.

## **8. ASSESSMENT AND EVALUATION BY MG UNIVERSITY**

General Education Components and Skill Development Components shall be assessed and evaluated by MG University as per University Norms and UGC-NSQF guidelines.

## **9. ASSESSMENT AND CERTIFICATION BY SECTOR SKILL COUNCIL (SSC)**

The affiliated colleges should make necessary arrangements for the simultaneous assessments and certification of Skill Development Component by aligned SSC having the approval of National Skill Development Corporation of India (NSDC).

## **10. EXAMINATIONS**

10.1. The evaluation of each paper shall contain two parts:

- i. Internal or In-Semester Assessment (ISA)
- ii. External or End-Semester Assessment (ESA)

10.2. The internal to external assessment ratio shall be 1:4.

Both internal and external marks are to be rounded to the next integer.

All the courses (theory & AOC), grades are given on a 7-point scale based on the total percentage of marks, (ISA+ESA) as given below:-

Percentage of Marks	Grade	Grade Point
95 and above	O (Outstanding)	10
90 to below 95	A+ (Excellent)	9
80 to below 90	A (Very Good)	8
70 to below 80	B+ (Good)	7
60 to below 70	B (Above Average)	6
50 to below 60	C (Average)	5
40 to below 50	P (Pass)	4
Below 40	F(Fail)	0
	Ab (Absent)	0

## 11. CREDIT POINT AND CREDIT POINT AVERAGE

Credit Point (CP) of a paper is calculated using the formula: -

$$CP = C \times GP, \text{ where } C \text{ is the Credit and } GP \text{ is the Grade point}$$

Semester Grade Point Average (SGPA) of a Semester is calculated using the formula: -

$$SGPA = TCP/TC, \text{ where } TCP \text{ is the Total Credit Point of that semester.}$$

Cumulative Grade Point Average (CGPA) is calculated using the formula: -

$$CGPA = TCP/TC, \text{ where } TCP \text{ is the Total Credit Point of that programme.}$$

Grade Point Average (GPA) of different category of courses viz. Common Course I, Common Course II, Complementary Course I, Complementary Course II, Vocational course, Core Course is calculated using the formula: -

$GPA = TCP/TC$ , where TCP is the Total Credit Point of a category of course. TC is the total credit of that category of course

Grades for the different courses, semesters and overall programme are given based on the corresponding CPA as shown below:

GPA	Grade	
9.5 and above	O	Outstanding
9 to below 9.5	A+	Excellent
8 to below 9	A	Very Good
7 to below 8	B+	Good
6 to below 7	B	Above Average
5 to below 6	C	Average
4 to below 5	P	Pass
Below 4	F	Failure

## 12. MARKS DISTRIBUTION FOR EXTERNAL AND INTERNAL EVALUATIONS

The external theory examination of all semesters shall be conducted by the University at the end of each semester. Internal evaluation is to be done by continuous assessment. For all courses total marks of external examination is 80 and total marks of internal evaluation is 20. Marks distribution for external and internal assessments and the components for internal evaluation with their marks are shown below:

For all Theory Courses

- a) Marks of external Examination : 80  
 b) Marks of internal evaluation : 20

<b>Components of Internal Evaluation –</b>	
<b>Theory</b>	<b>Marks</b>
Attendance	5
Assignment /Seminar/Viva	5
Test paper(s) (1 or 2)	10
(1×10 =10; 2×5 =10)	
<b>Total</b>	<b>20</b>

For all AOC Courses total marks for external evaluation is 80 and total marks for internal evaluation is 20.

For all AOC Courses

- a) Marks of external Examination : 80  
 b) Marks of internal evaluation : 20

<b>Components of Internal Evaluation</b>	
<b>– AOC</b>	<b>Marks</b>
Attendance	5
Record	5
Skill Test	5
Lab Performance / Punctuality	5
<b>Total</b>	<b>20</b>

\*Marks awarded for Record should be related to number of experiments recorded and duly signed by the teacher concerned in charge. All three components of internal assessments are mandatory.

### **12.1. PROJECT EVALUATION**

- a) Marks of external Examination : 80  
 b) Marks of internal evaluation : 20

<b>Components of Internal Evaluation</b>	
	<b>Marks</b>
Punctuality	5
Experimentation/Data Collection	5



Skill Acquired	5
Report	5
<b>Total</b>	<b>20</b>

\*Marks for dissertation may include study tour report if proposed in the syllabus.

<b>Components of External Evaluation</b>	<b>Marks</b>
Dissertation (External)	50
Viva-Voce (External)	30
<b>Total</b>	<b>80</b>

(Decimals are to be rounded to the next higher whole number)

## **12.2. INTERNSHIP**

After the completion of every even semester, the student will undergo a minimum of two weeks Internship Programme in an Industry, having a good exposure in the concerned skill (Established at least two years prior), capable of delivering the skill sets to the students.

At the end of the Internship, the students should prepare a comprehensive report.

## **12.3. ATTENDANCE EVALUATION FOR ALL PAPERS**

<b>Attendance Percentage</b>	<b>Marks</b>
Less than 75 %	1 Mark
75 % & less than 80%	2 Marks
80% & less than 85%	3 Marks
85% & less than 90%	4 Marks
90% & above	5 Marks

(Decimals are to be rounded to the next higher whole number)

## **12.4. ASSIGNMENTS**

Assignments are to be done from 1st to 4th Semesters. At least one assignment per course per semester should be submitted for evaluation.

## **12.5. INTERNAL ASSESSMENT TEST PAPERS**

Two test papers are to be conducted in each semester for each course. The evaluations of all components are to be published and are to be acknowledged by the candidates. All documents of internal assessments are to be kept in the college for one year and shall be made available for verification by the University. The responsibility of evaluating the internal assessment is vested on the teacher(s), who teach the course.

## **12.6. GRIEVANCE REDRESSAL MECHANISM**

Internal assessment shall not be used as a tool for personal or other type of vengeance. A student has all rights to know, how the teacher arrived at the marks. In order to address the grievance of students, a three-level Grievance Redressal mechanism is envisaged. A student can approach the upper level only if grievance is not addressed at the lower level.

Level 1: Department Level:

The Department cell chaired by the HOD, Department Coordinator, Faculty Advisor and Teacher in-charge as members.

Level 2: College Level

A committee with the Principal as Chairman, College Coordinator, HOD of concerned Department and Department Coordinator as members.

Level 3: University Level

A Committee constituted by the Vice-Chancellor as Chairman, Pro-Vice-Chancellor, Convener - Syndicate Standing Committee on Students Discipline and Welfare, Chairman- Board of Examinations as members and the Controller of Examination as member-secretary.

The College Council shall nominate a Senior Teacher as coordinator of internal evaluations. This coordinator shall make arrangements for giving awareness of the internal evaluation components to students immediately after commencement of first semester

The internal evaluation marks/grades in the prescribed format should reach the University before the 4th week of October and March in every academic year.

## **12.7. EXTERNAL EXAMINATION**

The external examination of all semesters shall be conducted by the University at the end of each semester.

Students having a minimum of 75% average attendance for all the courses only can register for the examination. Condonation of shortage of attendance to a maximum of 10 days in a semester subject to a maximum of 2 times during the whole period of the programme may be granted by the University on valid grounds. This condonation shall not be counted for internal assessment. Benefit of attendance may be granted to students attending University/College union/Co-curricular activities by treating them as present for the days of absence, on production of participation/attendance certificates, within one week, from competent authorities and endorsed by the Head of the institution. This is limited to a maximum of 10 days per semester

and this benefit shall be considered for internal assessment also. Those students who are not eligible even with condonation of shortage of attendance shall repeat the semester along with the next batch after obtaining readmission.

- Benefit of attendance may be granted to students attending University/College union/Co- curricular activities by treating them as present for the days of absence, on production of participation/attendance certificates, within one week, from competent authorities and endorsed by the Head of the institution. This is limited to a maximum of 10 days per semester and this benefit shall be considered for internal assessment also.
- Those students who are not eligible even with condonation of shortage of attendance shall repeat the course along with the next batch.
- There will be no supplementary exams. For reappearance/ improvement, the students can appear along with the next batch.
- Student who registers his/her name for the external exam for a semester will be eligible for promotion to the next semester.
- A student who has completed the entire curriculum requirement, but could not register for the Semester examination can register notionally, for getting eligibility for promotion to the next semester.
- A candidate who has not secured minimum marks/credits in internal examinations can re- do the same registering along with the University examination for the same semester, subsequently.

### **13. PATTERN OF QUESTIONS**

Questions shall be set to assess knowledge acquired, standard and application of knowledge, application of knowledge in new situations, critical evaluation of knowledge and the ability to synthesize knowledge. The question setter shall ensure that questions covering all skills are set. She/he shall also submit a detailed scheme of evaluation along with the question paper. A question paper shall be a judicious mix of short answer type, short essay type /problem solving type and long essay type questions.

#### **13.1. Pattern of questions for External examination – Theory paper**

<b>Question Type</b>	<b>Total no. of questions</b>	<b>Number of questions to be answered</b>	<b>Marks of each question</b>	<b>Total marks</b>
Very short answer type	12	10	2	20

Short answer (Not to exceed 60 words)	9	6	5	30
Long essay	4	2	15	30
<b>TOTAL</b>	<b>25</b>	<b>18</b>		<b>80</b>

### 13.2. Pattern of questions for external examination – AOC

Question Type	Total no. of questions	Number of questions to be answered	Marks of each question	Total marks
Theory Assessment- Short Answer Type	8	5	4	20
Skill Assessment- Practical	1	1	60	60
<b>TOTAL</b>	<b>9</b>	<b>6</b>		<b>80</b>

### 13.3. Mark division for external AOC/ LAB examination

Record	Theory/Procedure/ Design	Activity/ Neatness	Result	Viva	Total
10	10	20	10	10	60

## 14. RANK CERTIFICATE

The University publishes rank list of top 10 candidates for each programme after the publication of 6th semester results. Rank certificate shall be issued to candidates who secure positions from 1st to 3rd in the rank list. Candidates who secure positions from fourth to tenth in the rank list shall be issued position certificate indicating their position in the rank list.

Candidates shall be ranked in the order of merit based on the CGPA scored by them. Grace marks awarded to the students should not be counted fixing the rank/position. Rank certificate and position certificate shall be signed by the Controller of Examinations.

## 15. MARK CUM GRADE CARD

The University shall issue to the students grade/marks card (by online) on completion of each semester, which shall contain the following information:

- Name of University
- Name of the College
- Title & Model of the B. Voc. Programme
- Semester concerned
- Name and Register Number of student

- Code, Title, Credits and Max. Marks (Int, Ext & Total) of each course opted in the semester
- Internal marks, External marks, total marks, Grade, Grade point (G) and Credit point in each course in the semester
- Institutional average of the Internal Exam and University Average of the External Exam in each course.
- The total credits, total marks (Max & Awarded) and total credit points in the semester (corrected to two decimal places)
- Semester Credit Point Average (SCPA) and corresponding Grade
- Cumulative Credit Point Average (CCPA)

The final Grade/mark Card issued at the end of the final semester shall contain the details of all courses taken during the entire programme and shall include the final grade/marks scored by the candidate from 1st to 5th semester, and overall grade/marks for the total programme.

## **16. READMISSION**

Readmission will be allowed as per the prevailing rules and regulations of the university. There shall be 3 level monitoring committees for the successful conduct of the scheme.

They are:

1. Department Level Monitoring Committee (DLMC), comprising HOD and two senior-most teachers as members.
2. College Level Monitoring Committee (CLMC), comprising Principal, Dept. – Co-Ordinator and A.O/Superintendent as members.
3. University Level Monitoring Committee (ULMC), headed by the Vice – Chancellor and Pro–Vice – Chancellor, Convenors of Syndicate subcommittees on Examination, Academic Affairs and Staff and Registrar as members and the Controller of Examinations as member-secretary.

## **17. TRANSITORY PROVISION**

Notwithstanding anything contained in these regulations, the Vice Chancellor shall, for a period of one year from the date of coming into force of these regulations shall be applied to any programme with such modifications as may be necessary.

## **SCHEME AND SYLLABUS FOR B.VOC ADVANCED COURSE IN MULTI SPORTS AND FITNESS TRAINING**

The University Grants Commission (UGC) has launched a scheme on skills development based higher education as part of college/university education, leading to Bachelor of Vocation (B.Voc.) Degree with multiple exits such as Certificate/Diploma/Advanced Diploma under the NSQF (National skill Qualifications framework). The B.Voc programme is focused on universities and colleges providing undergraduate studies which would also incorporate specific job roles along with broad based general education. This would enable the graduates completing B.Voc to make a meaningful participation in accelerating India's economy by gaining appropriate employment, becoming entrepreneurs and creating appropriate knowledge.

The proposed vocational programme in B.Voc Advanced Course in Multi Sports and Fitness Training will be a judicious mix of skills, professional education related to Physical Fitness and also appropriate content of general education. It is designed with the objective of equipping the students to cope with the emerging trends and challenges in the field of Fitness Industry.

### **1. OBJECTIVE**

- To provide judicious mix of skills relating to a profession and appropriate content of general education.
  - To ensure that the students have adequate knowledge and skills, so that they are work ready at each exit point of the programme.
  - To provide flexibility to students by means of pre-defined entry and multiple exit points.
  - To integrate NSQF within the undergraduate level of higher education in order to enhance employability of the graduates and meet industry requirements. Such graduates apart from meeting the needs of local and national industry are also expected to be equipped to become part of the global workforce.
- To provide vertical mobility to students coming out of:
- 10+2 with vocational subjects
  - Community Colleges.

### **2. ELIGIBILITY FOR ADMISSION AND RESERVATION OF SEATS**

The eligibility condition for admission to B.Voc programme shall be 10+2 or its equivalent. Eligibility of admission, Norms for admission, reservation of seats for various B.Voc Programmes shall be according to the rules framed by the University from time to time.

### **3. CURRICULUM**

The curriculum in each of the years of the programme would be a suitable mix of general education and skill development components.

## **1 PROGRAMME STRUCTURE**

The B.Voc Advanced Course in Multi Sports and Fitness Training shall include:

- General Education Components
- Skill Components
- Project
- Internship
- Industrial Training
- Familiarisation Trips
- Soft Skills and Personality Development Programmes

### **4. CREDIT CALCULATION**

The following formula is used for conversion of time into credit hours.

- One Credit would mean equivalent of 15 periods of 60 minutes each, for theory, workshops/labs and tutorials;
- For internship/field work, the credit weightage for equivalent hours shall be 50% of that for lectures/workshops;

### **5. COURSE STRUCTURE**

<b>NSQF Level</b>	<b>Skill Component Credits</b>	<b>General Education Credits</b>	<b>Normal Calendar Duration</b>	<b>Exit Points / Awards</b>
Level 7	36	24	Six semesters	B.Voc
Level 6	36	24	Four semesters	Advanced Diploma
Level 5	18	12	Two semesters	Diploma
Level 4	18	12	One semester	Certificate
<b>TOTAL</b>	<b>108</b>	<b>72</b>		

As per the UGC guidelines, there are multiple exit points for a candidate admitted in this course. If he/she is completing all the six semesters successfully, he/she will get B. Voc degree in Advanced Course in Multi Sports and Fitness Training. If he/she is completing the first four semesters successfully, he/she will get an Advanced Diploma in Advanced Course in Multi Sports and Fitness Training. If he/she is completing the first two semesters he/she will get a Diploma in Advanced Course in Multi Sports and Fitness Training. If he/she is completing the

first semester successfully, he/she will get a Certificate in Advanced Course in Multi Sports and Fitness Training. B.Voc Degree holder is expected to acquire the skills needed for a Multi Sports and Fitness Trainer



## PROGRAMME STRUCTURE

<b>Semester – I</b>					
Sl.No	Course Code	Title	GC/SC	Hrs./Week	Credits
1	BOCG101	Listening and Speaking Skills in English (T)	GC	4	4
2	BOCG102	IT For Business (AOC)	GC	3	4
3	MFTG103	Foundation of Health & Fitness (T)	GC	3	4
4	MFTS104	Basic Anatomy & Kinesiology (AOC)	SC	5	6
5	MFTS105	Introduction to Gym Training (AOC)	SC	5	6
6	MFTS106	Project I (Training Plan)	SC	5	6

<b>Semester – II</b>					
Sl.No	Course Code	Title	GC/SC	Hrs./Week	Credits
1	BOCG201	Writing and Presentation Skills in English (T)	GC	4	4
2	MFTG202	Exercise Physiology and Bioenergetics (AOC)	GC	4	4
3	MFTG203	Introduction to Recreation and Wellness (AOC)	GC	5	4
4	MFTS204	Practical Approach to Yoga (AOC)	SC	6	6
5	MFTS205	Self Defence I - Fitness Approach Taekwondo - (AOC)	SC	6	6
6	MFTS206	Internship I (professional experience in any fitness centres)	SC		6

<b>Semester – III</b>					
Sl.No	Course Code	Title	GC/SC	Hrs./Week	Credits
1	BOCG301	Principles of Management (T)	GC	4	4
2	MFTG302	Fitness Nutrition (AOC)	GC	3	4

3	MFTG303	Introduction to Personal Training (T)	GC	3	4
4	MFTS304	Fitness Assessment & Evaluation (AOC)	SC	5	6
5	MFTS305	Introduction to Aerobics & Zumba (AOC)	SC	5	6
6	MFTS306	Project II (Specific Training Plan)	SC	5	6

#### Semester – IV

Sl.No	Course Code	Title	GC/SC	Hrs./Week	Credits
1	BOCG401	Soft Skills and Personality Development (T)	GC	4	4
2	MFTG402	Programme Design & Exercise Prescription (AOC)	GC	4	4
3	MFTG403	Injury Assessment and Risk Management (AOC)	GC	5	4
4	MFTS404	Core Strengthening & Pilates (AOC)	SC	6	6
5	MFTS405	Self Defense II-Fitness Approach Judo and Kurash (AOC)	SC	6	6
6	MFTS406	Internship II (Exercise prescription for individuals)	SC		6

#### Semester – V

Sl.No	Course Code	Title	GC/SC	Hrs./Week	Credits
1	BOCG501	Environmental Studies (T)	GC	4	4
2	MFTG502	Health & Fitness Psychology (T)	GC	3	4
3	MFTG503	Introduction to Research Methodology (T)	GC	3	4
4	MFTS504	Self Defense III- Fitness Approach - Krav Maga (AOC)	SC	5	6
5	MFTS505	Advance Programming and Periodization (AOC)	SC	5	6
6	MFTS506	Project III (Business Proto type)	SC	5	6

#### Semester – VI

Sl.No	Course Code	Title	GC/SC	Hrs./Week	Credits
1	BOCG601	Entrepreneurship Development (T)	GC	4	4
2	MFTG602	Fitness Centre Management (T)	GC	4	4
3	MFTG603	Recovery and Wellness (AOC)	GC	5	4
4	MFTS604	Yoga Therapy (AOC)	SC	6	6
5	MFTS605	Self Defense IV-Fitness Approach (AOC) - Kalaripayattu	SC	6	6
6	MFTS606	Internship III (Professional experience in any fitness centers)	SC		6

\*GC – General Component

\*SC – Skill Component

### **Job Role Details**

#### **Year I (NSQF Level: 5)**

After completion of first year students can work as Gym Trainer.

#### **Year II (NSQF Level: 6)**

After completion of second year, students will acquire skills needed for an Advanced Fitness Trainer and they can work as Personal Fitness Trainer

#### **Year III (NSQF Level: 7)**

After completion of third year, the students will become Multi Sports & Fitness Expert. They can start their own business or work as Multi Sports and Fitness Expert

**B.VOC. ADVANCED COURSE IN  
MULTI SPORTS AND FITNESS TRAINING**

**DETAILED SYLLABUS**

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**SEMESTER - I**

## SEMESTER - I

### BOCG101: LISTENING AND SPEAKING SKILLS IN ENGLISH (T)

Total Credits : 4

Hours / Week : 4

#### Objectives

To introduce the students to the speech sounds of English in order to enable them to listen to English and speak with global intelligibility. To enable the students to speak English confidently and effectively in a wide variety of situations. To help the students to improve their reading efficiency by refining their reading strategies.

#### Module I

Speech Sounds: Phonemic symbols – Vowels – Consonants – Syllables – Word stress – Stress in polysyllabic words – Stress in words used as different parts of speech – Sentence stress – Weak forms and strong forms – Intonation

Sample activities:

1. Practice reading aloud. Use a variety of texts including short stories, advertisement matter, brochures, etc
2. Read out a passage and ask the students to identify the stressed and unstressed syllables.

#### Module II

Basic Grammar: Articles - Nouns and prepositions - Subject-verb agreement - Phrasal verbs - Modals - Tenses - Conditionals – Prefixes and suffixes – Prepositions -Adverbs – Relative pronouns - Passives - Conjunctions - Embedded questions - Punctuation –Abbreviations-concord- collocations-phrasal verbs- idiomatic phrases

Sample activities:

1. Ask students to write a story/report/brochure, paying attention to the grammar.

#### Module III

Listening: Active listening – Barriers to listening – Listening and note taking – Listening to announcements – Listening to news on the radio and television.

Sample activities:

1. Information gap activities (e.g. listen to a song and fill in the blanks in the lyrics given on a sheet)
2. Listen to BBC news/ a play (without visuals) and ask the students to report what they heard.

#### Module IV

Speaking- Fluency and pace of delivery – Art of small talk – Participating in conversations – Making a short formal speech – Describing people, place, events and things – Group discussion skills, interview skills and telephone skills.

Sample activities:

1. Conduct group discussion on issues on contemporary relevance.
2. Ask students to go around the campus and talk to people in the canteen, labs, other departments etc. and make new acquaintances.
3. Conduct mock interviews in class.
4. Record real telephone conversations between students and ask them to listen to the recordings and make the corrections, if any are required.

### **Module V**

Reading: Theory and Practice – Scanning – Surveying a textbook using an index – reading with a purpose – Making predictions – Understanding text structure – Locating main points – Making inferences – Reading graphics – Reading critically – Reading for research.

### **Reference**

1. V.Sasikumar, P Kiranmai Dutt and GeethaRajeevan, Communication Skills in English, Cambridge University Press and Mahatma Gandhi University.
2. Marilyn Anderson, Pramod K Nayar and Madhucchandra Sen, Critical Thinking, Academic Writing and Presentation Skills, Pearson Education and Mahatma Gandhi University.

### **For Further Activities**

1. A Course in Listening and Speaking I & II, Sasikumar, V., Kiranmai Dutt and Geetha Rajeevan, New Delhi: CUP, 2007
2. Study Listening: A Course in Listening to Lectures and Note-taking Tony Lynch New Delhi: CUP, 2007
3. Study Speaking: A Course in Spoken English for Academic Purposes. Anderson, Kenneth, Joan New Delhi: OUP, 2008

## **SEMESTER - I**

## **BOCG102: IT FOR BUSINESS (AOC)**

**Total Credits : 4**

**Hours / Week : 3**

### **Objectives**

The objective of the course is to help the student understand and appreciate the critical role of Information Systems in today's organizations

### **Module I**

Introduction to Information Technology: Information and Communication Technology (ICT), Information systems E-World - Computer Architecture: Input Hardware - Processing & Memory Hardware, Storage Hardware, Output Hardware, Communication Hardware - Concept of operating system - Understanding your computer customization configuring screen, mouse, printer.

### **Module II**

Word Processing Package: Introduction - Features - Word User Interface Elements; Creating new Documents; Basic Editing, Saving a Document; Printing a Document; Print Preview, Page Orientation - Viewing Documents; Setting tabs - Page Margins; Indents; Ruler, Formatting Techniques; Font Formatting, Paragraph Formatting; Page Setup; Headers & Footers; Bullets and Numbered List; Borders and Shading; Find and Replace; Page Break & Page Numbers; Mail Merging-Spelling and Grammar Checking; Tables; Formatting Tables;

### **Module III**

Spreadsheet Package: Introduction, Excel User Interface, working with cell and cell addresses, selecting a Range, Moving, Cutting, Copying with Paste, Inserting and Deleting cells, freezing cells, Adding, Deleting and Copying Worksheet within a workbook, Renaming a Worksheet. Cell Formatting Options, formatting fonts, Aligning, Wrapping and Rotating text, Using Borders, Boxes and Colours, Centering a heading, Changing row/column height/width, Formatting a Worksheet Automatically, Insert Comments, Clear contents in a cell. Using print Preview, Margin and Orientation, Centering a Worksheet, Using header and footer.

### **Module IV**

Advanced Features of Spreadsheet Package: All Functions in Excel, Using Logical Functions, Statistical functions, Mathematical etc. Elements of Excel Charts, Categories, Create a Chart, Choosing chart type, Edit chart axis - Titles, Labels, Data series and legend, Adding a text box, Rotate text in a chart, Saving a chart.

### **Module V**

Presentation Package: Ms-PowerPoint: Advantages of Presentation Screen layout creating presentation inserting slides adding sounds & videos-formatting slides -slide layout views

in presentation -slide transition Custom animation Managing slide shows - using pen Setting slide intervals

**Reference**

1. Antony Thomas, Information Technology for Office, Pratibha Publications
2. Gini Courter & Annette Marquis. MS Office 2007 : BPBP Publication.



## SEMESTER - I

### MFTG103: FOUNDATION OF HEALTH & PHYSICAL FITNESS (T)

Total Credits : 4

Hours/week: 3

#### Objectives

1. To make the student aware about good health and personal hygiene
2. Introduces physical activities and its benefits
3. To learn the components of physical fitness
4. To understand the different stages of growth and development
5. To know the different factors affecting physical activities

#### Module I : Introduction to Health:

- Unit 1 : Definition and meaning of Health,  
Unit 2 : Dimensions of Health  
Unit 3 : Factors affecting Good Health  
Unit 4 : Importance of good Health & Personal Hygiene

#### Module II : Introduction to Physical Activity:

- Unit 1 : Meaning and Concept of Physical Activity, recommended guidelines for physical activity  
Unit 2 : Type of Physical Activity, benefits of Physical activity  
Unit 3 : Principles of Physical Activity, the FITT and FIT formula  
Unit 4 : Vigorous and Moderate Physical activities and its benefits

#### Module III : Physical Fitness Components

- Unit 1 : General Physical Fitness Components - Endurance, Strength, Speed, Flexibility, Coordination, Agility, Balance  
Unit 2 : Health related physical fitness – Cardio vascular Endurance, Muscular Endurance, Body Composition, Benefits of Health related fitness.  
Unit 3 : Skill/Performance related physical – Speed, Power, Reaction time, Coordination, Agility, Balance  
Unit 4 : Activities for developing physical fitness components, safety guideline for aerobic fitness and muscular strength and endurance

#### Module IV : Biological Foundation

- Unit 1 : Biological Growth and Development  
Unit 2 : Age and gender characteristics of body type  
Unit 3 : Anthropometric differences  
Unit 4 : Stages of Human growth and development

#### Module V : Preparing for Physical activity

- Unit 1 : Factors to Consider Prior to Physical Activity  
Unit 2 : Factors to Consider during Daily Physical Activity

Unit 3 : Physical Activity in the Heat and Cold & Other Environments

Unit 4 : Physical Activity for different age groups

**Reference**

1. Physical Education for Life long Fitness, National Association for Sports and Physical Education, Human Kinetics, 2011
2. Thomas D Fahey, Paul M Insel, Wlton T Roth, Clarie E A Insel, Fit & Well, Core concepts and labs in Physical Fitness and Wellness, 12<sup>th</sup> Edition, Mc Graw Hill Education
3. The Exercise Professional guide to Personal Training, ACE, 2020
4. Concept of Physical Fitness-Active lifestyle for wellness Seventh Edition, McGraw-Hill, 2013

## SEMESTER - I

### MFTS104: BASIC ANATOMY AND KINESIOLOGY (AOC)

Total Credits : 6

Hours/week : 5

#### Objectives

1. To introduce cells, tissue and blood and its function
2. Introducing skeletal and muscular system of human body
3. To understand the major systems and their structure
4. To know the importance of kinesiology
5. To introduce the various movements of the body

#### Module I : Introduction to Anatomy

- Unit 1 : The Cell: structure & functions
- Unit 2 : Plasma membranes, cell membrane, cytoplasm,
- Unit 3 : Cell organelles- nucleus, mitochondria, ribosome, Golgi apparatus, lysosomes,
- Unit 4 : Tissues of the body – epithelial tissue, connective tissue, muscle tissue & nervous tissue.
- Unit V : The blood - Plasma, Cellular contents of blood- Erythrocytes, platelets, leukocytes.

#### Module II : Structure of skeletal system & muscular system

- Unit 1 : Bone: Types, structure & functions of bone, Axial skeleton: Skull, Vertebral column, Thoracic cage, cartilage, Appendicular skeleton: shoulder girdle & upper limb, pelvic girdle and lower limb.
- Unit 2 : Joints of body: fibrous joints, cartilaginous joints, Synovial joints. Main synovial joints of the limbs: shoulder joint, elbow joint, radio ulnar joints, wrist joint, joints of hands & fingers, hip joint, knee joint, ankle joint, joints of feet & toes.
- Unit 3 : Muscle tissue - smooth muscle, cardiac muscle & skeletal muscle,
- Unit 4 : Structure of Skeletal muscle – actin and myosin, slide filament theory, skeletal muscles of face, neck, trunk, pelvic region, shoulder, upper & lower limbs.
- Unit 5 : Properties of Muscle – Excitability, Contractility, extensibility, Elasticity, Tendon & Ligaments – muscle tension relationship

#### Module III : Cardiovascular system and Respiratory system

- Unit 1 : Components of cardiovascular system - heart, blood vessels, arteries, capillaries, vein
- Unit 2 : Structure of Heart
- Unit 3 : Blood flow to the Heart – arterial system and venous system, Conduction system of Heart – SA Node, AV Node
- Unit 4 : Structure of Respiratory system, Mechanism of Respiration,
- Unit 5 : Introduction to sensory organs (Eyes, Nose, Ears, Tongue and Skin).

**Module IV : Introduction to Nervous system other structure of human body**

Unit 1 : Structure of Nervous system – CNS, PNS,

Unit 2 : Structure of Digestive system

Unit 3 : Parts of Digestive system

Unit 4 : Endocrine system – glands hormones

Unit 5 : Excretory Systems

**Module V : Introduction to Kinesiology**

Unit 1 : Define Kinesiology, Plane of movement – sagittal, frontal, transverse plane,  
Axes of movement- frontal, sagittal and vertical axis

Unit 2 : Anatomical movements – flexion, extension, abduction, adduction,  
supination,  
pronation, inversion, eversion, circumduction, rotation

Unit 3 : Centre of Gravity, Line of gravity and postural alignment

Unit 4 : Definition of anatomical location and position

Unit 5 : Kinetic Chain movements – open kinetic chain, close kinetic chain, Joint  
mobility and stability

**Reference**

1. The Exercise Professional Guide to Personal Training, American council on exercise  
6th Edition 2020
2. Basic Anatomy of Physiology of exercise - Piyush Jain
3. Introduction to anatomy & Physiology – Ross & Wilson

## SEMESTER - I

### MFTS105: INTRODUCTION TO GYM TRAINING (AOC)

Total Credits : 6

Hours/week : 5

#### Objectives

1. To educate students about the role of Gym trainer.
2. To familiarize the various health club equipments, accessories and its function
3. To introduce the knowledge of fundamentals weight training and cardio respiratory training
4. To understand the importance weight training principles and programme design
5. To familiarize the basic assessments of clients, gym etiquette, fitness tracking software

#### **Module I : Role and Scope of a Gym trainer**

- Unit 1 : Role and scope of a Gym trainer
- Unit 2 : Need of a quality trainers – fitness trainers – gym instructor etc...
- Unit 3 : Client-Trainer Partnership for Growth, Stages of Client Trainer Relationship, Goal Setting, smart goal
- Unit 4 : Qualities of gym trainer - Personality, communication skill, professionalism, education and trained, patience and honest, Stages of Behavioural changes
- Unit 5 : Factors Influence Exercise Participation, Personal Attributes, Environmental factors, Physical Activity Factors

#### **Module II : Introducing Gym Equipment and Techniques**

- Unit 1 : Cardio stations – Treadmill, Spinning bike, Elliptical Machine, Rowing machine, Trampoline
- Unit 2 : Resistance training equipment's, fitness accessories- free weights and rack, dumbbell, barbell, medicine ball, Swiss ball, Kettle bell, Sand bag, Resistance band & agility Accessories.
- Unit 3 : Flexibility equipment's and recovery accessories - foam roller, massage vibrator, Massage Gun, portable massage accessories.
- Unit 4 : Hand grip types and width – pronation, supination, hammer grip, hook grip, considerations – Valsalva Maneuver – inhale & exhale, Spotting and Spotting Guidelines
- Unit 5 : Methods of warm up and cool down, and its benefits.

#### **Module III : Fundamentals of weight training and cardiorespiratory training**

- Unit 1 : Functional training – mobility and stability
- Unit 2 : Movement training- bend and lift movements, Single leg movement, push, pull & rotation movements
- Unit 3 : Load and speed training movements
- Unit 4 : Benefits of Cardio Respiratory Exercise FITTVP
- Unit 5 : Types of Cardio respiratory Exercise .Group exercises circuit training outdoor  
Exercises, water based exercises

**Module IV : Weight Training Principles and program design**

Unit 1 : Benefits of Muscular Training and different age groups.

Unit 2 : Muscle Fiber Type, Type of Muscular Action, Factors influence Muscular Strength and Hypertrophy

Unit 3 : Muscle Training Principles, Progression, Specificity, Overload, Reversibility, Diminishing Returns

Unit 4 : Muscle Training Program Design, Training Frequency, Exercise Selection and Order

Unit 5 : Training Volume, Training Intensity, Training Tempo, Rest Intervals

**Module V : Basic Assessments & Gym etiquette**

Unit 1 : Measurement of lean and fat tissues, body mass index, Heart rate – resting heart rate, Maximum heart rate, heart rate reserve, target heart rate

Unit 2 : Skin fold measurements, Circumference measurements, hip and waist circumference, Waist, hip ratio, Bio electrical analysis- dual energy x ray (DXA), Hydrostatic weighing

Unit 3 : Introduction to different Fitness Tracking equipment's, Software and fitness apps, need and importance of fitness tracking equipments.

Unit 4 : Understanding the use and application of Heart Rate monitor, Fitness Metrics, Activity Tracker, Modern Accessories and software, Oximeter- SpO2, Use of GPS.

Unit 5 : Gym Etiquette - Resistance Training Room and Guidelines, Aerobic Exercise Area, Special Considerations for a Home Facility

**Reference**

1. Personal training The Exercise professional guide to personal training 6th edition American council on exercise 2021
2. Thomas D Fahey, Paul M Insel, Wlton T Roth, Clarie E A Insel, Fit & Well, Core concepts and labs in Physical Fitness and Wellness, 12<sup>th</sup> Edition, Mc Graw Hill Education
3. Wolters Kluwer, Guidelines for exercise testing and prescription 10th edition, ACSM 2018 Philadelphia,
4. Health coach manual American council on exercise 2013 ACE

## **SEMESTER - I**

### **MFTS106: PROJECT I (TRAINING PLAN)**

Total Credits : 6

Hours / week : 5

The objective is to analyse the outcome of learning process of students by completing the project. Students have to submit 15 lesson plans of Gym training. Each lesson plan should include the following

1. Objectives.
2. Instructions.
3. Explanation.
4. Equipment used.
5. Benefits.
6. Procedure of doing activity.
7. Do's and don't.

**B.VOC. ADVANCED COURSE IN  
MULTI SPORTS AND FITNESS TRAINING**

**DETAILED SYLLABUS**

**SEMESTER - II**



## **SEMESTER - II**

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### **BOCG201: WRITING AND PRESENTATION SKILLS IN ENGLISH (T)**

Total Credits : 4

Hours/week : 4

#### **Objectives**

1. To make the students aware of the fundamental concepts of critical reasoning and to enable them to read and respond critically, drawing conclusions, generalizing, differentiating fact from opinion and creating their own arguments.
2. To assist the students in developing appropriate and impressive writing styles for various contexts. To help students rectify structural imperfections and to edit what they have written.
3. To equip students for making academic presentations effectively and impressively.

#### **Module I**

Letter Writing: Letters - letters to the editor - resume and covering letters -parts and layout of business letters-business enquiry letters offers, quotation-orders and execution-grievances and redressal-sales letters-follow-up letters-status enquiry-collection letters-preparation of power of attorney for partnership- job application letters-resume-CV-reference and recommendation letters- employment letters.

#### **Module II**

Other types of Academic and business Communication (written): Seminar papers- project reports - notices - filling application forms - minutes, agenda-reports-essays.

#### **Module III**

Presentation Skills: Soft skills for academic presentations - effective communication skills – structuring the presentation - choosing appropriate medium – flip charts – OHP – Power Point presentation – clarity and brevity - interaction and persuasion.

\*Compulsory activity: Power Point presentations to be conducted by each student in class

#### **Module IV**

Non-verbal communication-Body language-Kinesics, Proxemics-Para language Channels- Barriers-Principles of effective communication

#### **Module V**

Online writing and Netiquette- Writing e-mails- use of language – writing for blogs – social media etiquette- professional networking online (LinkedIn, E-factor etc.)

Compulsory activity: Each student should create a blog and/or profile in LinkedIn.

## Reference

1. Marilyn Anderson, Pramod K Nayar and Madhucchandra Sen. Critical Thinking, Academic Writing and Presentation Skills. Pearson Education and Mahatma Gandhi University.
2. Antony Thomas, Business Communication and MIS, Pratibha Publications. Bhatia R.C. Business Communication
3. Salini Agarwal Essential communication skill. Reddy P.N, and Apopannia, Essentials of Business communication.
4. Sharma R.C, KRISHNA Mohan, Business Communication and Report writing Leod, M.C., Management Information system

## SEMESTER - II

### MFTG202: EXERCISE PHYSIOLOGY AND BIOENERGETICS (AOC)

Total Credits: 4

Hours/week : 4

#### Objectives

1. To impart basic knowledge on Physiology
2. Acquires knowledge on different measurements and calculations in exercise physiology.
3. Imparts knowledge on Bioenergetics.
4. Get to know about metabolic and fuel utilization estimations.
5. Get to know about training in various environments.

#### Module I : Introduction to exercise physiology

- Unit 1 : Definition, Meaning and objective of Physiology.
- Unit 2 : Physiology of the cardiovascular system – Heart rate, Stroke volume, cardiac output, systolic and diastolic pressure
- Unit 3 : Physiology of Respiratory system – lung capacity, VO<sub>2</sub> max, tidal volume, second wind, oxygen debt
- Unit 4 : Physiology of Digestive system, Physiology of Nervous system
- Unit 5 : Introduction to Endocrine and Urinary system

#### Module II : Common measurement in exercise physiology

- Unit I : Work and Power Defined, Measurement of Work and Power, Bench Step, Cycle Ergometer, Treadmill
- Unit II : Measurement of Energy Expenditure, Direct Calorimetry, Indirect Calorimetry,
- Unit III : Common Expressions of Energy Expenditure, Estimation of Energy Expenditure, Calculation of Exercise Efficiency
- Unit IV : Factors That Influence Exercise Efficiency, Running Economy,
- Unit V : Effect of Exercise on Homeostatic Control via Cellular Adaptation

#### Module III : Bioenergetics

- Unit 1 : Introduction to Energy systems – Immediate energy, Short term energy, long term systems
- Unit 2 : Energy spectrum, Energy and food
- Unit 3 : Immediate Energy: ATP- CP system. Short term energy system: Lactic Acid Or Glycolytic system
- Unit 4 : Lactic Acid and Aerobic and Anaerobic Energy production. Lactic acid accumulation threshold
- Unit 5 : Long term Energy: Aerobic or oxidative system

**Module IV : Exercise Metabolism and Skeletal Muscle**

- Unit 1 : Energy Requirements at Rest, Rest-to-Exercise Transitions, Recovery from Exercise: Metabolic Responses Metabolic Responses to Exercise: Influence of Duration and Intensity
- Unit 2 : Estimation of Fuel Utilization during Exercise
- Unit 3 : Structure of Skeletal Muscle, Neuromuscular Junction, Muscular Contraction
- Unit 4 : Exercise and Muscle Fatigue, Exercise-Associated Muscle Cramps, Dehydration or Electrolyte Imbalance
- Unit 5 : Muscle Fibre Types, Functional Characteristics of Muscle Fiber Types, Fiber Types and Performance

**Module V : Temperature Regulation & the Physiology of Training**

- Unit 1 : Heat Balance during Exercise, Overview of Heat Production/Heat Loss
- Unit 2 : Exercise in a Hot Environment, Exercise in a Cold Environment, Gender and Age Differences in Thermoregulation, Heat Acclimatization
- Unit 3 : Effect on VO<sub>2</sub> Max, Performance, Strength and Endurance Training
- Unit 4 : Detraining Following Endurance training
- Unit 5 : Detraining Following Strength training

**Reference**

1. Scott K. Powers, Edward T. Howley Exercise Physiology: Theory and Application to Fitness and Performance, Tenth Edition, Published by Mcgraw-Hill Education, 2019.
2. Anatomy & Physiology In health & Illness – Ross & Wilson
3. Basic Anatomy of Physiology of exercise-Piyush Jain

## SEMESTER - II

### MFTG203: INTRODUCTION TO RECREATION AND WELLNESS (AOC)

Total Credits : 4

Hours/week : 5

#### Objectives

1. To impart the knowledge about recreational activities
2. Enables the student to learn the art of prescribing group recreational programme.
3. Learns about various indoor and outdoor games
4. Learns to organize games for different age groups

#### Module I : Introduction to Recreational activities

- Unit 1 : Introduction to Recreational activities: Meaning, Concept of recreation activity
- Unit 2 : Benefits of recreation, Health and Recreation, Recreation for warm up and recovery
- Unit 3 : Type of recreation activity – Physical, Social, Camping, Arts and craft
- Unit 4 : Recreation Planning, Types of recreation planning, Need for recreation planning
- Unit 5 : Trends in outdoor and indoor recreation

#### Module II : Team building games and strategies improving team performance

- Unit 1 : Base of team building game: Benefits of team building games, team Cohesion, team building games and sports performance.
- Unit 2 : Designing of Team Building games, Games with aims.
- Unit 3 : Games for different age groups, strategies for improving team performance
- Unit 4 : Solving specific problems through team building, managing conflict in a team, Leading innovative teams.
- Unit 5 : The issues and challenges of team building for the future, Challenges of building effective teams.

#### Module III : Design concepts for outdoor recreation

- Unit 1 : Designing of Outdoor activities, Landscape as a setting for recreation -Land base, Landscape variety, Zoning.
- Unit 2 : Recreation opportunity spectrum-primitive, semi primitive, natural, rural etc.
- Unit 3 : Design concepts for outdoor recreation- the design of the visit, anticipation, wayfinding, Threshold signs etc. competitive structuring.
- Unit 4 : Outdoor activities- Hiking and camping, Hunting and fishing, Canoeing, kayaking and rafting, Sailing and motor boating,

Unit 5 : Biking, Rock Climbing, Horseback riding, Skiing, Football, Cricket, Swimming.

**Module IV : Recreational program for martial arts and introduction to indoor games**

Unit 1 : Indoor recreational program design

Unit 2 : Integrating recreational activities with martial arts- Kravmaga, Kalaripayattu, Taekwondo, Kurash and Judo etc.

Unit 3 : Indoor activities- Table tennis, Badminton, Basketball, Skating,

Unit 4 : Board skating, Foosball, Chess, Carrom, Dart board.

Unit 5 : Safety Concerns- Emergency medicine, Equipment care etc

**Module V : Recreation and fitness industry & Recreation for Mental health**

Unit 1 : Recreation and aging- Games for children, games for Adults, Games for persons with special needs, Games for elderly population.

Unit 2 : Psychology of recreation- Mindfulness, wellness, self-concept etc

Unit 3 : Games and culture- Traditional indigenous games

Unit 4 : Impact and importance of recreational activities in the fitness industry.

Unit 5 : Planning & Organizing, Requirements for Planning & Organizing an Activity, Backpacking list.

**Reference**

1. Loewenthal, K. An introduction to psychological tests and scales, Taylor & Francis 2001
2. Mallen, C., & Adams, L. J. Event management in sport, recreation and tourism: Theoretical and practical dimensions. In Event Management in Sport, Recreation and Tourism: Theoretical and Practical Dimensions, Elsevier 2012
3. Simon, B. Design for outdoor recreation, Taylor & Francis, 2008

## SEMESTER - II

### MFTS204: PRACTICAL APPROACH TO YOGA (AOC)

Total Credits : 6

Hours/week : 6

#### Objectives

1. Aims to the benefits of practicing Yoga in our day to day life
2. Students will be explored through various Asanas & Pranayamas
3. Acquire knowledge on the mental and physical benefits of Yoga
4. Understand the physiological benefits of Yoga
5. Learns to instruct others on practicing Yoga

#### Module I : Introduction to Yoga

- Unit 1 : Meaning, definition, Benefits of yoga, Types of Yoga, Limbs of Yoga,  
Unit 2 : Salient features of Yoga Education, Guru- Shishya- Parampara and its importance in Yoga Education.  
Unit 3 : Contribution of Yoga towards Development of Values, Spiritual Growth.  
Unit 4 : Salient features of Ideal Yoga Teacher, Role of Yoga Teacher in Value-oriented Education, Role of Yoga in development of healthy society.

#### Module II : Yoga for Health and Wellness.

- Unit 1 : Yogic concept of health, wellness and illness.  
Unit 2 : Importance of psycho-social environment for health and wellness.  
Unit 3 : Role of Yoga in various dimensions (physical, mental, social and spiritual) of health  
Unit 4 : Importance of following Dinacharya and Ritucharya for wellbeing, Role of Ahara, Nidra and Brahmacharya

#### Module III : Yogic Asanas

- Unit 1 : Asana, meaning of asana, types of asana, asana and health benefits, types of asanas for beginners, Yogic Surya Namaskara,  
Unit 2 : Yogasana- Tadasana, Hastottanasana, Vrikshasana - Ardha Chakrasana, Padahastanasana, Trikonasana, Parshva Konasana, Katichakrasana - Dandasana, Bhadrasana,  
Unit 3 : Padmasana, Vajarasana,- Yogamudrasana, Parvatasana - Mandukasana, Ushtrasana, Shashankasana, Utthana Mandukasana, Paschimottanasana, Purvottanasana  
Unit 4 : Vakrasana, Ardha Matsyendrasana, Gomukhasana - Makarasana, Bhujangasana, Salabhasana, Dhanurasana - Pavanamuktasana and its variations, Uttanapadasana, Ardha Halasana, Setubandhasana, Saral-matsyasana - Halasana, Chakrasana – Sirshasana – Shavasana.

#### Module IV : Pranayam and Kriya

- Unit 1 : Pranayama, Benefits of Prayanayama, Concept of Puraka, Rechaka and Kumbhaka
- Unit 2 : Yogic Deep Breathing - Anuloma Viloma/ Nadi Shodhan, Preparatory Breathing Practices - Sectional Breathing (Abdominal, Thoracic and Clavicular Breathing) Ujjayee Pranayama, Without Kumbhaka
- Unit 3 : Sheetal Pranayama (Without Kumbhaka), Sitkari Pranayama, (Without Kumbhaka), Bhramari Pranayama (Without Kumbhaka)
- Unit 4 : Kriyas – Sutra Neti, Jal neti, Kapalabhati, Trataka, Nauli.

**Module V : Methods of Teaching**

- Unit 1 : Teaching methods with special reference to Yoga, Factors influencing Yoga teaching, Need of teaching practice and its use in Yogic practice. Teaching Aids - Meaning and Need, Role of Language, Voice, Fluency, Clarity and Body, language in an ideal presentation
- Unit 2 : Methods of teaching Yoga to an individual, small group and large group, Use of audio-visual aids, ICT, multimedia and online resources, Lecture cum demonstration in Yoga: Its meaning, importance and method of its Presentation
- Unit 3 : Lesson plan: Its meaning and need Preparation of lesson plan in Yoga, Preparation of lesson plan for an individual and for a group,
- Unit 4 : Presentation of lessons in specific Yogic practices: Asana and Pranayama Assessment of a Yoga class (detection and correction of mistakes).

**Reference**

1. Quality Council of India (QCI): Yoga professionals Official Guidebook for Level 2
2. Gore M. M. : Anatomy and Physiology of Yogic Practices, Kanchana Prakashana, Lonavala, 2004
3. Gharote, M.L. : Teaching Methods for Yogic practices, Kaivalyadhama Ashram, Lonavla
4. Tiwari O.P. : Asana Why & How ? Kaivalyadhama, SMYM Samiti, Lonavla



## SEMESTER – II

### MFTS205: SELF DEFENCE I - FITNESS APPROACH -TAEKWONDO (AOC)

Total Credits : 6

Hours /week : 6

#### Objectives

1. Students become familiar to the martial art Taekwondo
2. Gets practical knowledge on the movements
3. Learns about how this art can be used for fitness
4. Learns practically how Taekwondo can be used for self defense
5. Learns to become a trainer

#### Module I : Introduction to Taekwondo

- Unit 1 : Origin of Taekwondo– History, Meaning, Taekwondo day, The Taekwondo Oath, The Tenets of Taekwondo- principles of taekwondo
- Unit 2 : Basic Terminology– numbers, body, basic Taekwondo stances, Kicks, Blocks, Strikes
- Unit 3 : Basic movements – 18 movements of Taekwondo
- Unit 4 : Fighting Movements – Styles - Taekwondo - Kyorugi & Pumse
- Unit 5 : Equipments and facility – Taekwondo – Mat, Uniform, Gear, belt, Kicking, pads

#### Module II : Specific Movements

- Unit 1 : Taekwondo Warm up and Cooldown,
- Unit 2 : Taekwondo Stretching - Individual, Partners Stretching
- Unit 3 : Basic Rules of Taekwondo - Pumse - Kyorugi
- Unit 4 : Basic and advanced fighting kicks
- Unit 5 : Group movements, plyometric moves, Shadow Movements, Moving with partners, Partners training

#### Module III : Taekwondo a Fitness Approach

- Unit 1 : Taekwondo for General fitness - Speed, Strength, Flexibility, Endurance, Agility
- Unit 2 : Taekwondo practice for burning fats - weight loss-Intensity and Volume in each session
- Unit 3 : Taekwondo Specific exercise for Improving Hip joint mobility
- Unit 4 : Taekwondo and Core training
- Unit 5 : Taekwondo - Specific training for improving specific components speed & agility, Strength & power, Muscular Endurance

#### Module IV : Taekwondo for Self Defense

- Unit 1 : Attacking movements – Defensive movements
- Unit 2 : Type of Techniques – Liner (Hard), Circular (Soft) Techniques
- Unit 3 : Beginner Taekwondo Self Defense skills – situation based training- Hair Grab,

- Frontal Choke, Collar Grab, Belt Grab, Shoulder Grab, Rear Shoulder Grab
- Unit 4 : Self Defense Drills in Taekwondo, mental preparations towards attack
- Unit 5 : Benefits of Self Defense Taekwondo practice
- Module V : Benefits of Taekwondo**
- Unit 1 : Taekwondo as Aerobic activity, practice with music, Total body workout – an Intensive Training method
- Unit 2 : Dojang Etiquette, advance martial art etiquette
- Unit 3 : Rehabilitation from injuries
- Unit 4 : Taekwondo for Self Defense, Confidence, Discipline, Competition, Fitness, Fun
- Unit 5 : Taekwondo Instructor – role of an instructor, student instructor relationship, tips and Advice when teaching

### **Reference**

1. [www.taekwondo-training.com](http://www.taekwondo-training.com)
2. Anthony Turner, Routledge Handbook of Strength and Conditioning, Routledge Taylor and Francis Group
3. Korean Foundation, Taekwondo, The Unity of Body, Mind and Spirit

## **SEMESTER – II**

### **MFTS206: INTERNSHIP - I**

Total Credits: 6

After the completion of the second semester, Students should complete an Internship Programme of minimum two weeks by taking part in live fitness trainings in any Health club/ Gymnasium /Multi Fitness Centre / Martial Arts Centre etc. Students can choose the Health club/ Gymnasium /Multi Fitness Centre/ Martial Arts Centre etc.. within the State / Country or abroad for their internship (The training centre must have a minimum two years of exposure in field of Health club / Gymnasium /Multi Fitness Centre/ Martial Arts Centre etc...). College will provide a certificate to prove their identity. A faculty member will supervise the Internship activities, give necessary idea about preparing report and the purpose of internship.

During the internship period, the organisation is responsible to give the attendance of the students and they should keep a log book for this and also follow ups must be there in a proper track to ensure the skill development of the interns and the students should maintain a record of their daily activities and it should be submitted for verification.

At the end of the internship, the students should prepare a comprehensive report. The report and the specimens of the work done by the student should be attested by the organization. Student should also produce a completion certificate of internship from the organization. All the above details should be submitted to the Head of the Department for evaluation. The report will be evaluated by the external and internal examiners appointed by the University. Delayed, incomplete submissions will be considered as per the University rules.

**B.VOC. ADVANCED COURSE IN  
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**DETAILED SYLLABUS**

**SEMESTER - III**

## **SEMESTER – III**

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### **BOCG301: PRINCIPLES OF MANAGEMENT (T)**

Total Credits : 4

Hours /week : 4

#### **Objectives**

This course is a basic introductory and foundational management course. It is designed for students who desire to equip themselves with key knowledge, skills, and competencies in various aspects of management. The course encompasses the core components of management including planning, organizing, leading and controlling the organizations

#### **Module I**

Nature and Process of Management: Schools of Management Thought – Management Process School, Human Behavioural School, Decision Theory School, Systems Management School, Contingency School – Managerial Role – Basics of Global Management.

#### **Module II**

Planning: Objectives – Types of plans - single use plan and repeated plan – MBO, MBE– strategic planning and formulation. Decision making - types and process of decision making – forecasting.

#### **Module III**

Organising: Types of organisation - formal and informal, line and staff, functional – organisation structure and design – span of control, delegation and decentralisation of authority and responsibility - organisational culture and group dynamics.

#### **Module IV**

Staffing: Recruitment, Selection, Induction, Training, Maintenance and retrenchment Systems approach to HRM – Performance appraisal and career strategy – HRD - meaning and concept.

#### **Module V**

Directing: Motivation – meaning - need for motivation. Theories of motivation - Herzberg and McGregor. Leadership- importance – styles of leadership, Managerial Grid by Blake and Mouton, Leadership as a Continuum by Tannenbaum and Schmidt

Path Goal Approach by Robert House (in brief)

Controlling - Concept, Significance, Methods of establishing control.

#### **Reference**

1. Moshal.B.S .Principles of Management, Ane Books India, New Delhi.
2. Bhatia R.C. Business Organization and Management, Ane Books Pvt. Ltd., New Delhi.
3. Richard Pettinger. Introduction to Management, Palgrave Macmillan, New York.

4. Koontz and O'Donnel. Principles of Management, Tata McGraw-Hill Publishing Co.Ltd., New Delhi.
5. Terry G.R. Principles of Management, D.B.Taraporevala Sons &Co.Pvt.Ltd., Mumbai.
6. Govindarajan.M and Natarajan S. Principles of Management, PHI, New Delhi.
7. Meenakshi Gupta .Principles of Management, PHI, New Delhi.

## SEMESTER - III

### MFTG302: FITNESS NUTRITION (AOC)

Total Credits: 4

Hours/week: 3

#### Objectives

1. Familiarization of Nutritional factors
2. Introducing balancing nutrition
3. To prepare proper nutritional guidelines for clients
4. To make them awareness of nutritional supplements
5. To enhance the eating habits and to know the effective working methods

#### Module I : Introduction to Nutrition

Unit 1 : Understanding Nutrition, Sports nutrition, Role of Nutrition for Health promotion

Unit 2 : Macronutrients, Carbohydrates, Glycemic Index, Proteins, Fats. Optimal Macronutrient Ratios

Unit 3 : Micronutrients Vitamins and minerals, Fat-soluble Vitamin, Water-soluble Vitamins, Macro-Minerals, Fiber and Water

Unit 4 : Essential and non-essential nutrients

Unit 5 : Guidelines for healthy eating

#### Module II : Nutritional Balance

Unit 1 : Caloric values of food, calorie requirement, what diet to follow

Unit 2 : Energy Expenditure: Basal Metabolic Rate (BMR) & Thermic Effect of Food (TEF)

Unit 3 : Energy Expenditure: Thermic Effect of Activity (TEA) & Total Daily Energy Expenditure (TDEE)

Unit 4 : Nutrition deficiency diseases- Vitamins deficiency

Unit 5 : Reading Nutritional Label

#### Module III : Nutrition and Dietary Guideline for Clients

Unit 1 : Nutrition for Strength Training

Unit 2 : Nutrition for Endurance Training,

Unit 3 : Nutrition for Ball Sports and Martial Arts

Unit 4 : Sports Drink and Fluid and Hydration Before, During and After Exercises

Unit 5 : Fuelling Before During and After Exercises, monitoring, guiding eating habits of a client

#### Module IV : Nutritional Supplements

Unit 1 : Creatine, Whey Protein

Unit 2 : Caffeine, Sodium bicarbonate, B-alanine

Unit 3 : Drug Abuse in fitness and sports

Unit 4 : World Antidoping Agency, National Antidoping Agency.

Unit 5 : Prohibited categories of substance and methods.

**Module V : Healthy Eating Habits and working effectively with special population**

Unit 1 : Teaching the individual to eat healthfully, Playing the weight loss game

Unit 2 : Personal Reality Check- using the food pyramid

Unit 3 : Sharing the big picture of Health and well being

Unit 4 : Prevention plan for overall Health, Managing Cholesterol, HDL, LDL,

Unit 5 : Managing High Blood Pressure, and Heart Disease

**Reference**

1. Ahlborg, B., J. Bergstrom, J. Brohult, L. Ekelund, E. Hultman, and G. Maschio. 1967. Human muscle glycogen content and capacity for prolonged exercise after different diets. *Foersvarsmedicine* 3: 85-99.
2. Thomas D Fahey, Paul M Insel, Wlton T Roth, Clarie E A Insel, *Fit & Well, Core concepts and labs in Physical Fitness and Wellness*, 12<sup>th</sup> Edition, Mc Graw Hill Education
3. *The Complete book of Personal Training*, Douglas S Brooks
4. P.R., R. Mora-Rodriguez, J. Gonzalez-Alonso, and E.F. Coyle. 1995. Fluid and carbohydrate ingestion independently improve performance during 1 h of intense exercise. *Medicine and Science in Sports and Exercise* 27: 200-210.
5. Food and Agriculture Organization (FAO). 2004. *Human Energy Requirements. Report of a Joint FAO/WHO/UNU Expert Consultation. Food And Nutrition Technical Report Series 1*.Rome: Author.
6. Alton L Thygerson & Steven M Thygerson, 5<sup>th</sup> Edition, *Fit to be well, Essential concept*, Jones & Bartlett Learning books and products



## SEMESTER - III

### MFTG303: INTRODUCTION TO PERSONAL TRAINING (T)

Total Credits: 4

Hours/week: 3

#### Objectives

1. Introducing the benefits of personal training
2. To make the students able to start personal training in a business view
3. Understanding the effective marketing methods to retain clients
4. Introducing the methods of business expansion
5. To make the students able to maintain a business ethics

#### Module I : Personal Training

- Unit 1 : Meaning and definition of personal training
- Unit 2 : History of fitness Industry, History of personal training Industry, personal training today
- Unit 3 : Current issues facing the industry, the future of personal training
- Unit 4 : The making of a personal trainer, need of personal training, process of starting personal training
- Unit 5 : Establishing credibility, Personal training pitfalls

#### Module II : Refining the business

- Unit 1 : Developing training style, Making first impression
- Unit 2 : Client meeting, introductory packet
- Unit 3 : First workout, personal burnout
- Unit 4 : Deciding the training place, pricing the service
- Unit 5 : Billing and pricing options, payments plans

#### Module III : Getting and keeping clients.

- Unit 1 : Marketing yourself, Market research and marketing
- Unit 2 : Finding and keeping clients, cultivating existing core clients
- Unit 3 : Getting clients from personal references, stealing clients
- Unit 4 : Diversifying the business, Expanding client base
- Unit 5 : Selling your services, professionalism and image, Increasing the sales skills

#### Module IV : Expanding the business

- Unit 1 : Need to expand, Partnering with a retail business for client referrals
- Unit 2 : Hiring additional trainers and staff, Training the trainer

- Unit 3 : compensating the trainer, product sales
- Unit 4 : Virtual training, merits and demerits, methods of online training
- Unit 5 : Time management guidelines, use of technology for time management

**Module V : Maintaining a service focus.**

- Unit 1 : Guidelines for being a professional
- Unit 2 : Keeping the client motivated, keeping yourself motivated.
- Unit 3 : Feedback mechanism and its importance
- Unit 4 : Communication skills in personal training, verbal and non verbal communication skills
- Unit 5 : Getting the exercise done, helping and monitoring the client change, using motivation magic

**Reference**

1. The complete book of personal training, Douglas S Brook, Human Kinetics.

## SEMESTER - III

### MFTS304: FITNESS ASSESSMENT & EVALUATION (AOC)

Total Credits: 6

Hours/week: 5

#### Objectives

1. To know the importance of assessments
2. Understanding postural deformities correction method
3. To know static balance and flexibility
4. To understand movement assessments of fitness components
5. Understanding the assessment methods of cardiovascular system

#### **Module I : Assessments and its importance**

- Unit 1 : Meaning, need for and importance of assessments, Informed consent  
Unit 2 : Duties during and after assessments, physical activity readiness questionnaire  
Unit 3 : Advantages of fitness assessments, Assessment terminology  
Unit 4 : Health history questionnaire, need and importance  
Unit 5 : Lifestyle evaluation, coronary risk factor analysis and medical clearance

#### **Module II : Static Assessments and correction method**

- Unit 1 : Postural deviations, Kyphosis, Lordosis, Flat Back, Sway Back, Scoliosis.  
Unit 2 : Common postural deviations- deviation 1. Sutalar pronation/supination and effect of tibia and femoral rotation  
Unit 3 : Deviation 2. Hip adduction, Deviation 3. Pelvic tilting (anterior or posterior)  
Unit 4 : Deviation 4. Shoulder position and thoracic spine  
Unit 5 : Deviation 5. Head position

#### **Module III : Static balance Joint flexibility test**

- Unit 1 : Unipedal stance test, Dynamic balance test, Y balance test, stork stand test  
Unit 2 : MCGills Torso Muscle endurance test battery  
Unit 3 : Thomas test, passive straight leg raise, Shoulder flexion and extension assessments  
Unit 4 : V- Sit Test, Goniometer  
Unit 5 : Canadian sit and reach test.

#### **Module IV : Movement Assessments, BMR, Muscle endurance & Strength test**

- Unit 1 : Bent and Lift, squat – pattern  
Unit 2 : Push Assessments - Shoulder push stabilization, Pull Assessments - Standing row  
Unit 3 : BMR calculation, Total energy expenditure and resting metabolic rate.  
Unit 4 : Rotation Assessments-thoracic spine mobility, Muscular Strength Assessments 1RM Bench, 1RM Squat  
Unit 5 : Load and speed assessments - Muscular Endurance Assessments Push up, Pull Up.

#### **Module V : Cardio Respiratory & Skill related Assessments**

- Unit 1 : Karvonens formula, RPE, Talk Test

- Unit 2 : VT1, First and Second Ventilatory Threshold, Vo2 Max.  
Unit 3 : Harward step test, coopers 12 min. run/walk test.  
Unit 4 : Muscular Power-vertical jump, standing broad jump.  
Unit 5 : Speed, agility and quickness assessments-T-test.

**Reference**

1. Exercise Professional Guide to Personal Training, American Council on Exercise, 6th Edition
2. American College of Sports Medicine. ACSM's Guidelines for Exercise Testing and Prescription. 8th ed. Baltimore: Lippincott Williams & Wilkins; 2010.
3. American College of Sports Medicine. Position stand: appropriate intervention strategies for weight loss and prevention of weight regain for adults. Med Sci Sports Exerc. 2001;33:2145–56

## SEMESTER - III

### MFTS305: INTRODUCTION TO AEROBICS & ZUMBA (AOC)

Total Credits: 6

Hours/week: 5

#### Objectives

1. Introducing the aerobics techniques
2. To acquire practical knowledge of different aerobics moves
3. To introduce the Zumba dance
4. To understand the different type of zumba dance
5. Understanding the benefits of practicing Zumba and Aerobics and its promotion

#### Module I : Introduction to Aerobics

- Unit 1 : Aerobic exercise, Scope of Aerobic Exercises  
Unit 2 : Benefits, means and methods of aerobic exercise,  
Unit 3 : Basic moves and stand, Aerobic walking, aerobics for fitness  
Unit 4 : Type aerobics equipments  
Unit 5 : aerobics training, aerobics and losing calorie.

#### Module II : Types of Aerobic exercise and techniques with count and music

- Unit 1 : Wading in water aerobics, safe and fun exercise for variety of people, rehabilitating from Injury or Condition  
Unit 2 : Aerobic dance- music with count, part by part, sequence wise, step by step  
Unit 3 : Kids aerobics and aerobic during pregnancy – simple to complex moves  
Unit 4 : Aerobic Kickboxing, best way to lose weight, improve strength and flexibility  
Unit 5 : Step Aerobics, low impact, high impact fitness training

#### Module III : Introduction to Zumba

- Unit 1 : Meaning, Origin of Zumba, basic steps and move  
Unit 2 : Zumba Jammers, Strong by Zumba  
Unit 3 : Advantage of Zumba over other workout  
Unit 4 : Wear for Zumba, accessories  
Unit 5 : Zumba diet – Calorie intake, expenditure

#### Module IV : Type of Zumba

- Unit 1 : Zumba Gold- a low impact workout for older adults, Zumba Kids: a class designed for children ages seven to twelve, Zumba Kids Jr.: a class designed for children ages four to six  
Unit 2 : Zumba Toning - a workout using toning sticks—light hand weights that are used to help tone the body  
Unit 3 : Zumba Gold- Toning: a modified, slower-paced toning class for older adults,  
Unit 4 : Aqua Zumba in a swimming pool  
Unit 5 : Zumba Sentao: a chair workout that focuses on using body weight to strengthen and Tone the body, Zumba Step: combines step aerobics with Zumba's dance moves for a power workout for the lower body, Zumba in the Circuit: a high- energy dance/ fitness workout combined with strength training

**Module V : Benefits and Promotions**

- Unit 1 : Physical, physiological and psychological benefits, Similarities and difference  
between Aerobics and Zumba
- Unit 2 : offline and online classes – advantage and disadvantages
- Unit 3 : Instructor Network (ZIN and ZES), certificate, Licence for instructor, online programmes, DVD's, Choreography
- Unit 4 : Marketing tools, studio, advertisement, team work, finance
- Unit 5 : promotion – in general, school, colleges, corporates

**Reference**

1. Mary Cox, Aerobics for fitness, , ISBN -13-979-8589742824, 2021
2. Michelle Medlock Adams, Zumba Fitness, Mitchell Lane Publishers
3. Rob Thomason, Water Aerobics instructor training Manual for with specific exercise, Rosedog pr, 2017
4. <https://www.zumba.com>
5. Aerobics for total wellbeing ISBN-13 978-1463694524, 2011.

## **SEMESTER - III**

### **MFTS306 : PROJECT II (SPECIFIC TRAINING PLAN)**

Total Credits : 6

Hours/week : 5

The objective is to analyse the outcome of learning process of students by completing the project. Students have to submit 15 lesson plan which includes Fitness Assessment for personal training Aerobics and Zumba. Each lesson plan should include the following

1. Objectives
2. Instructions
3. Explanation
4. Equipments used
5. Benefits
6. Procedure of doing activity
7. Do's and don't.

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**SEMESTER - IV**



## **SEMESTER - IV**

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### **BOCG401: SOFT SKILL AND PERSONALITY DEVELOPMENT (T)**

Total Credits : 4

Hours/week : 4

#### **Objective**

The course aims to cause a basic awareness about the significance of soft skills in professional and inter-personal communications and facilitate an all-round development of personality.

#### **Module I**

Personal Skills: Knowing oneself- confidence building- defining strengths- thinking creatively- personal values-time and stress management.

#### **Module II**

Social Skills: Appropriate and contextual use of language - non-verbal communication- interpersonal skills- problem solving.

#### **Module III**

Personality Development: Personal grooming and business etiquettes, corporate etiquette, social etiquette and telephone etiquette, role play and body language.

#### **Module IV**

Presentation skills: Group discussion- mock Group Discussion using video recording - public speaking.

#### **Module V**

Professional skills: Organizational skills- team work- business and technical correspondence- job oriented skills-professional etiquettes.

#### **Reference**

1. Matila Treece: Successful communication: Allyun and Bacon Pubharkat
2. Jon Lisa, Interatid skills in Tourist Travel Industry, Longman Group Ltd
3. Robert T. Reilly, Effective communication in tourist travel Industry Dilnas Publication
4. Boves. Thill, Business Communication Today, Mcycans Hills Publication
5. Dark Studying International Communication Sage Publication
6. Murphy Hilderand Thomas, Effective Business Communication, McGraw Hill

## SEMESTER - IV

### MFTG402: PROGRAMME DESIGN & EXERCISE PRESCRIPTION (AOC)

Total Credits : 4

Hours/week : 4

#### Objectives

1. To design exercise programmes
2. Planning exercise programme for the growing phase from childhood to adolescence
3. Understanding the changes with aging and designing physical activity
4. Introducing Special exercise pattern for Women
5. Planning exercise programme for special population

#### **Module I : Program designing for cardio respiratory and weight Training**

- Unit 1 : Designing Base Training program  
Unit 2 : Fitness Training program  
Unit 3 : Performance Training program  
Unit 4 : Weight Training programme and Functional Training  
Unit 5 : Program design for movement training, Load, and Speed training

#### **Module II : Exercise - Children and Youth**

- Unit 1 : Response to exercise in children and youth  
Unit 2 : Special Considerations during training for children and youth  
Unit 3 : Recommendation for physical activity  
Unit 4 : Transition from childhood to adolescence  
Unit 5 : Designing exercise programme for Children and Youth

#### **Module III : Exercise for Older adults**

- Unit 1 : Structural changes with aging  
Unit 2 : Exercise guideline for older adults  
Unit 3 : Awareness and benefits of exercise  
Unit 4 : Exercise affects cognitive improvement and mental health  
Units 5 : Designing and programme for older adults, monitoring the workout progress, track the progress, visual monitoring

#### **Module IV : Womens Health**

- Unit 1 : Women health parameters, Unhealthy lifestyle of Women  
Unit 2 : Exercise in prevention and treatment of osteoporosis  
Unit 3 : Pregnancy- during and post exercise programme  
Unit 4 : Fetal response to exercise, General Exercise Safety Guidelines for Pregnant Women  
Unit 5 : Female athlete triad

#### **Module V : Exercise for special consideration**

- Unit 1 : Program design for prevention and treatment of obesity.  
Unit 2 : Program design for chronic diseases-diabetes, pulmonary disorder  
Coronary artery diseases

- Unit 3 : Exercise program for Osteoporosis & Arthritis  
Unit 4 : Exercise design for population in cardiac rehabilitation.  
Unit 5 : Exercise for Cancer & Asthmatic patient.

### **References**

1. Fitness Professional's Handbook 7th Edition, Edward Howley, Dixie Thompson, Human Kinetics
2. Thomas D Fahey, Paul M Insel, Wilton T Roth, Clarie E A Insel, Fit & Well, Core concepts and labs in Physical Fitness and Wellness, 12<sup>th</sup> Edition, Mc Graw Hill Education
3. American College of Sports Medicine. 2003. Exercise Management for Persons With Chronic Diseases and Disabilities, 3rd ed. Champaign, IL: Human Kinetics
4. American Heart Association. 2001. Exercise standards for testing and training: A statement for healthcare professionals from the American Heart Association. Circulation 104 (14): 1694-1740.

## SEMESTER - IV

### MFTG403: INJURY ASSESSMENT AND RISK MANAGEMENT (AOC)

Total Credits : 4

Hours/week : 5

#### Objectives

1. Understanding emergency situations and execution of first aid techniques
2. Fundamental treatment for general emergency
3. To prevent injuries and rehabilitation process
4. To learn sports injuries and first aid
5. Practically enrich emergency responds

#### **Module I : Red Flags and Emergency**

- Unit 1 : Aim of first aid, The first aider, principles of first aid, First aid kit.  
Unit 2 : Indian Good Samaritan Protection Guidelines,  
Unit 3 : Dealing with an emergency, Cervical spine, head and neck injury, Abs and Chest Injury  
Unit 4 : Sudden Cardiac Arrest, Concussion and Seizures  
Unit 5 : First aid for shock, Poisoning, Burns, choking, Drowning, first aid for baby fractures and dislocation

#### **Module II : General Emergency**

- Unit 1 : Cramps, Doms (Delayed onset Muscle Soreness)  
Unit 2 : Muscle pain and Muscle Stiffness  
Unit 3 : Bleeding, blisters,  
Unit 4 : Nose and Eye Injuries  
Unit 5 : Dressing, type of dressing, Bandages, roller bandages, crepe bandages

#### **Module III : Injury prevention and Rehabilitation**

- Unit 1 : Rehabilitation, meaning and need of rehabilitation for an athlete, Injury Classification and importance of periodization  
Unit 2 : Common musculoskeletal injuries, Muscle contusion, Muscle strain, Tendinitis, Joint Dislocation, Osteoarthritis, Bone stress fracture  
Unit 3 : Tissue Healing following Injury, Inflammation Phase, Repair Phase, Remodelling Phase  
Unit 4 : Personal Hygiene and care  
Unit 5 : Environmental related issues-heat, cold, altitude, lightning, travelling

#### **Module IV : Sports Injuries**

- Unit 1 : Shoulder Injury and Rehabilitation, Biceps Tendon Tear, Rotator Cuff Tear  
Unit 2 : Ankle Injury and Rehabilitation. Plantar Fasciitis Achilles Tendonitis or Tear  
Unit 3 : Knee Injury and Rehabilitation -Meniscus Tear, Anterior Cruciate Ligament (ACL) Injuries, Posterior Cruciate Ligament (PCL) Injuries, Collateral Ligament Injuries  
Unit 4 : Common postural imbalances and rehabilitation, Hip Injury, Hip Dislocation  
Unit 5 : Elbow Injury and Rehabilitation, Tennis elbow, Golf's elbow

**Module V : Practical approach to emergency care**

Unit 1 : CPR and AED

Unit 2 : Spine board transportation - fast evacuation techniques- shoulder pull, ankle pull

Unit 3 : Single helper transport, multiple helper transport, loading a Stretcher

Unit 4 : Sling and Splints

Unit 5 : Bandage techniques, first for stroke.

**Reference**

1. Indian Red Cross Society, Indian first aid manual, 7th Edition, St. John Ambulance Association
2. <http://www.fifamedicalnetwork.com>
3. Thomas D Fahey, Paul M Insel, Wlton T Roth, Clarie E A Insel, Fit & Well, Core concepts and labs in Physical Fitness and Wellness, 12<sup>th</sup> Edition, Mc Graw Hill Education

## SEMESTER - IV

### MFTS404: CORE STRENGTHENING & PILATES (AOC)

Total Credits : 6

Hours/week : 6

#### Objectives

1. To provide the foundation in Pilates
2. Understanding the methods of Pilates
3. To practicing exercise to improve core strengthening
4. To learn and practice upper body strengthening
5. Understanding various stretching exercises for joint mobilization

#### Module I : Foundation of Pilates

- Unit 1 : Introduction to Pilates
- Unit 2 : The History of Pilates
- Unit 3 : Benefits of Pilates, Injury prevention, and recovery
- Unit 4 : Principles of Pilates, Concentration, Control, Center, Breath, Fluidity, Precision, Routine, Isolation
- Unit 5 : Lateral Breathing, Proper Alignment

#### Module II : Standing Warm-Up Exercises and Pilates methods

- Unit 1 : Modified Pilates Stance, Shoulder Warming, Heel Raise with Squat, Arm Stretch, Leg Stretch, Pelvic Clock, Roll-Down, Shoulder Shrug
- Unit 2 : Mats, Kneeling Mat Exercises, Side-Lying Mat Exercises. Prone Mat Exercises, Supine Mat Exercises, Seated Mat Exercises
- Unit 3 : Stability Ball Exercises Bouncing With Arm Raised, Roll-Up Variations with the Ball, Bridging Variations on the Ball, Single-Leg Stretch with the Ball, Double-Leg Stretch with the Ball, Single Straight-Leg and Double Straight-Leg Stretch with the Ball, Push-Up on the Ball, Side-Lying Leg Lift on the Ball
- Unit 4 : Pilates Ring Exercises, Standing Single-Leg Series: Balance, Standing Single-Leg Series, Standing Arm Series, Roll-Up with the Ring, Rollover with the Ring, Single-Leg and Double-Leg Stretch With the Ring, Straight-Leg Stretch with the Ring, Crisscross With the Ring
- Unit 5 : Band Exercises .Standing Stretches with the Band, Side Arm Lunge Series, Double-Arm Lunge Series, Spine Twist With the, Single-Leg Stretch with the Band, Single Straight-Leg Stretch with the Band, Double-Leg Stretch With the Band, Diamond Leg Press , Rollover With the Band, Jack-knife With the Band, Control Balance with the Band, and Leg Press with the Band

#### Module III : Basic core strengthening exercises for the torso and lower limbs

- Unit 1 : Supine lower abdominal muscle strengthening, pelvic floor muscle toning, lower abdominal Muscle activation, Hip rolls, Leg slides, Thigh arcs

- Unit 2 : Prone posterior hip muscle strengthening, Gluteal squeezes, Gluteal strengthened with flexed Knee, Hamstring curls
- Unit 3 : Side lying posterior hip muscle strengthening and prone spine mobilization, the oyster, Upper Leg lifts, Lower leg lifts, Body lengthening. Cobra, Arrow Side lying spine mobilization, Chest Opener with spine twist, Knee strengthening, Quadriceps strengthening
- Unit 4 : Spine, hip and shoulder stabilization and mobilization – quadruped series, Head nodding, Head Turning, Rocking, Arm lifts, Leg lifts, Arm and leg lifts, Cat
- Unit 5 : Supine spine mobilization and Supine upper abdominal muscle strengthening Pelvic tilt, Pelvic Curls, Pelvic curls with arm lifts, Supine upper abdominal muscle strengthening (Progression From lower abdominal muscle strengthening) Sit ups series, Sit ups with twist

**Module IV : Basic upper body exercises**

- Unit 1 : Supine pectoral girdle mobilization, Shoulders forwards and back, Shoulder shrugs, bilateral arm Arcs, Chest opener, Arm arcs with arms in opposition, arm arcs with half circles, arm circles
- Unit 2 : Sitting pectoral girdle mobilization. , Shrugs, Chest opener
- Unit 3 : Sitting spine and pectoral girdle mobilization, Spine twist, Side bending, curls
- Unit 4 : Prone pectoral girdle mobilization and stabilization, Batman, Sphinx
- Unit 5 : Side lying pectoral girdle stabilization and strengthening, Side lifts.

**Module V : Stretching, joint mobilization, foot alignment, and Neck stretch**

- Unit 1 : Improving foot alignment, mobility and exercising the forefoot, exercising the forefoot Claspings with fingers and toes, instep lifts. Instep lifts with toe action
- Unit 2 : Ankle mobilization, Exercising the lower limb and foot heel lifts, heel lifts with flexed knees, heel Drops over step.
- Unit 3 : Back Stretch, Sitting back stretch, prone back stretch, Standing back stretch,
- Unit 4 : Spine curl, spine roll down and up (free standing or with back against a wall)
- Unit 5 : Stretching the posterior hip and lower limb, Hamstring muscle stretching, Tensor fasciae latae, Gluteal, Iliopsoas and Quadriceps stretch

**Reference**

1. Portia Page, Pilates Illustrated, Library of Congress Cataloging in Publication Data, Human Kinetics
2. Amy Lademann, Rick Lademann, Pilates and Conditioning for Athletes, Human Kinetics
3. Michael King, Yolande Green, Pilates Personal Trainer, Getting started with Stretching workout, Ulysses press, United States

## SEMESTER - IV

### MFTS405 : SELF DEFENCE II - FITNESS APPROACH JUDO & KURASH (AOC)

Total Credits : 6

Hours/week : 6

#### Objectives

1. Introducing basics moves of Judo
2. Understanding the fundamental techniques and classification
3. To introduce basic techniques of Kurash
4. Understanding the classification of Kurash techniques
5. To get the practical knowledge of Judo and Kurash and their approach towards fitness development.

#### Module I : Introduction to Judo

- Unit 1 : Meaning, Brief History, basic Rules
- Unit 2 : Basic Terminology, off balance techniques, Basic stands, Basic Moves
- Unit 3 : Break fall, its type, Rolling techniques, benefits of practicing break fall
- Unit 4 : practicing hall, mats, dimension, Judo wear, belt
- Unit 5 : Federations, Tournaments type, Associations, Referee's call

#### Module II : Fundamental Techniques in Judo

- Unit 1 : Natural stance, Defensive stance, advance defensive stands
- Unit 2 : Classification of Judo Techniques
1. Nagi waza (Throwing techniques), 2. Ni-waza (Ground techniques)
3. Ate-Waza (attacking techniques)
- Unit 3 : classification of throwing, Ground and attacking techniques
- Unit 4 : Judo techniques for self defense
- Unit 5 : Judo grading system, Uniform, Judo for Total fitness

#### Module III : Introduction to Kurash

- Unit 1 : history of Kurash, terminology used in Kurash
- Unit 2 : fundamental moves in Kurash, Rolling and falling techniques
- Unit 3 : gripping and off balancing techniques
- Unit 4 : General rules of Kurash, Refereeing, Gilam, Competition type
- Unit 5 : Commands and gestures used during bouts

#### Module IV : Classifications of Kurash Techniques

- Unit 1 : Basic principles of Kurash
- Unit 2 : Grip, sit position, stand position, Tazim
- Unit 3 : back and front break fall, rolling and
- Unit 4 : Movements-front, back, right, left, front rotation
- Unit 5 : Classification of Kurash Techniques - Yonbosh, Kutarib Tashlash, Cheel Group, Supurma, Yuklama, Yelka, Kushsha 1 & 2,



**Module V : Judo and Kurash – fitness approach**

- Unit 1 : Similarities and differences Judo & Kurash – in terms of techniques, fight, Competition
- Unit 2 : Fitness approach - Practice for Weight loss, Calorie burned in practice session, personality development,
- Unit 3 : Instructor Course and Referee test
- Unit 4 : Judo & Kurash - Self Defence for Women, Grass root techniques improve self-confidence for children
- Unit 5 : Physical, Psychological benefits, prohibited actions in Judo and Kurash, Moral code of Judo and Kurash

**References**

1. <https://kurash-ika.org/>
2. <https://www.ijf.org/>
3. Daigo, Toshiro (2005), Kodokan Judo Throwing Techniques, Tokyo, Japan: Kodansha International
4. "History of Kurash". International Kurash Association. Retrieved 2016

## **SEMESTER - IV**

### **MFTS406: INTERNSHIP II (EXERCISE PRESCRIPTION FOR INDIVIDUALS)**

Total Credits: 6

After the completion of the fourth semester, Students should complete an Internship Programme of minimum two weeks by taking part in live fitness trainings in any Health club/ Gymnasium /Multi Fitness/ Martial Arts Centre etc. Students can choose the Health club/ Gymnasium /Multi Fitness Centre/ Martial Arts Centre etc.. within the State / Country or abroad for their internship (The training centre must have a minimum two years of exposure in field of Health club / Gymnasium /Multi Fitness Centre/Martial Arts). College will provide a certificate to prove their identity. A faculty member will supervise the Internship activities, give necessary idea about preparing report and the purpose of internship.

During the internship period, the organisation is responsible to give the attendance of the students and they should keep a log book for this and also follow ups must be there in a proper track to ensure the skill development of the interns and the students should maintain a record of their daily activities and it should be submitted for verification.

At the end of the internship, the students should prepare a comprehensive report. The report and the specimens of the work done by the student should be attested by the organization. Student should also produce a certificate of internship from the Health club/ Gymnasium /Multi Fitness/ Martial Arts Centre etc. All the above details should be submitted to the Head of the Department for evaluation. The report will be evaluated by the external and internal examiners appointed by the University. Delayed, incomplete submissions will be considered as per the University rules.

**B.VOC. ADVANCED COURSE IN  
MULTI SPORTS AND FITNESS TRAINING**

**DETAILED SYLLABUS**

**SEMESTER – V**

## SEMESTER - V

### BOCG501: ENVIRONMENTAL STUDIES (T)

Total Credits : 4

Hours/week : 4

#### Aim

- To bring in proper awareness among the students on Environmental Issues

#### Objectives

1. To built a pro-environmental attitude and a behavioural pattern in society based on sustainable lifestyles
2. To impart basic knowledge on pollution and environmental degradation

#### Module I (15 hrs)

Introduction to Environment Science: Development and Environment, Human Population and the Environment: Population growth, variation among nations-Population explosion – Case Studies. Sustainable Development – Concept, Policies, Initiatives and Sustainability strategies, Human Development Index, Gandhian Principles on sustainability.

Natural systems -Earth –structure, soil formation- factors affecting, soil types, Atmosphere – structure and composition, Hydrosphere – Oceans, rivers, estuaries, Lakes etc., Physical environment of aquatic systems

Resource utilization and its impacts on environment -Renewable and non-renewable resources, Forest resources : Use and over-exploitation, Timber extraction, mining, dams and their effects on forest and associated biota., Water resources : Use and over-utilization of surface and ground water, conflicts over water, River valley projects and their environmental significance- Case studies – Sardar Sarovar, Mineral resources : Use and exploitation, environmental impacts of extraction and use of mineral resources, case studies – sand mining, metal mining, coal mining etc

Food resources : World food issues, changes caused by - overgrazing, effects of modern agriculture, fertilizer-pesticide problems, water logging, and salinity. Case studies Energy resources : Growing energy needs, renewable and non renewable energy sources, use of alternate energy sources. Case studies.

Land resources : Land as a resource, land degradation, soil erosion and desertification.

#### Module II (15 hrs) Ecosystems

Concept of an ecosystem-Structure and function of an ecosystem-Producers, consumers and decomposers-Energy flow in the ecosystem-Ecological succession-Food chains, food webs and ecological pyramids.

Ecological interactions Types, characteristic features, structure and function of the following ecosystem : Forest, Grassland, Desert, Aquatic ecosystems (ponds, streams, lakes, rivers,

oceans, estuaries). Significance of wetland ecosystem – Classification, Ecology and Biogeochemistry. Threats and Management

Biodiversity and its conservation

Introduction – Definition : genetic, species and ecosystem diversity, Biogeographical classification of India, Value of biodiversity : consumptive use, productive use, social, ethical, aesthetic and option values, Biodiversity at global, National and local levels, India as a mega-diversity nation Hot-spots of biodiversity, Threats to biodiversity : habitat loss, poaching of wildlife, man-wildlife conflicts., Endangered and endemic species of India, Conservation of biodiversity : In-situ and Ex-situ conservation of biodiversity. People's participation in biodiversity conservation- Biodiversity Register; Global Climate change and Biodiversity.

### **Module III (15 hrs) Environmental Pollution**

Air pollution: sources- mobile, stationary, fugitive; type of pollutants- primary and secondary air pollutants, Smog- classical smog and photochemical smog, Acid rain; Ozone depletion; impacts of air pollutants on environment; control measures.

Water pollution: Sources- Point and non-point sources; Types – chemical, biological and physical; impacts on the environment; water quality – water quality standards ; control measures.

Soil pollution: sources and impacts

Noise pollution: sources, impacts on health, management strategies Thermal pollution and Nuclear pollution - sources and impacts Solid wastes – types, sources, impacts on Environment.

Municipal Solid waste Management: Essential steps- source segregation, collection, Processing and Disposal of residues. Environmental Pollution - case studies

Natural and anthropogenic Disasters and their management : floods, earthquake, cyclone and landslides.

### **Module IV (15 hrs)**

History of environment protection

Silent spring, Ramsar Convention, Stockholm conference, Montreal protocol, Kyoto protocol, earth summit, Rio+10, Rio+20, Brundtland commission Report, Sustainable development Environmental movements in India, Global initiatives for Environmental protection Environmental education – basics ,Tbilisi conference, Environment Management Systems Environment Information Systems, Environmental Impact assessment (EIA) – definition and significance, EIA notification; National and state level Authorities; role of public in EIA of a development project

### **Social Issues and the Environment**

## **Environmental movements**

From Unsustainable to Sustainable development-Urban problems related to energy- Water conservation- Rain water harvesting; Watershed management Environmental ethics : Issues and possible solutions.

Environmental Economics, Green house effect and Climate change Natural and Anthropogenic disasters

Disaster Management, Wasteland reclamation-Consumerism and waste products-Environmental Laws – General introduction; Major laws in India. Environment Protection Act-Air (Prevention and Control of Pollution) Act-Water (Prevention and control of Pollution) Act-Wildlife Protection Act- Forest Conservation Act-Issues involved in enforcement of environmental legislation-Public awareness

### ***Text Book***

Textbook for Environmental Studies For Undergraduate Courses of all Branches of Higher Education – Erach Bharucha for University Grants Commission

### ***Further activities***

- Field work
- Visit to a local area to document environmental assets river / forest / grassland / hill / mountain
- Visit to a local polluted site-Urban/Rural/Industrial/Agricultural/ Solid waste dump yards
- Study of common plants, insects, birds.
- Study of simple ecosystems-pond, river, hill slopes, etc. (Field work Equal to 5 lecture hours)

## SEMESTER - V

### MFTG502: HEALTH AND FITNESS PSYCHOLOGY (T)

Total Credits: 4

Hours/week: 3

#### Objectives

1. Introduce the relationship between human psychology and sports and fitness activities.
2. Understanding motor learning
3. Understanding the personality trait of individuals.
4. Understanding the learning abilities.
5. Understanding the motivational level of an individual

#### **Module I : Introduction to sports psychology**

- Unit 1 : Psychology, Exercise and Sport Psychology  
Unit 2 : Meaning, Definition, Nature and Scope. Developmental  
Unit 3 : Characteristics at Different Stages of Growth  
Unit 4 : Psychological benefits of exercise, Motive for exercise  
Unit 5 : Physical exercise Habits and health behaviour

#### **Module II : Basic consideration in Motor Learning**

- Unit 1 : The definition and measurement of attitude, attitude towards sport  
Unit 2 : Behavioural tendencies, Cognitive and behavioural strategies, Factors influence health behaviour, Causes of self-destruction behaviour,  
Unit 3 : Definition and composition of personality, measuring personality, Effect of sports on personality and its implications  
Unit 4 : Personality traits as predictors of health behaviour  
Unit 5 : Psycho tonic and autogenic training.

#### **Module III : Theories of Learning**

- Unit 1 : Theories of Learning, Theories of Learning, Conditional Response, Trial and Error, Imitation, Insightful Learning,  
Unit 2 : Laws of Learning: Law of Exercise, Law of Effect, Law of Readiness, Law of Recency  
Unit 3 : Law of Frequency, Learning curve, Transfer of Learning.  
Unit 4 : Theories and models of exercise behavior; Health belief model, Self-efficacy theory, Theories of reasoned action and planned behavior.  
Unit 5 : Social Constructive theory

#### **Module IV : Motivation**

- Unit 1 : Definition of motivation, extrinsic and intrinsic motivation,  
Unit 2 : Reinforcement, success and failure, punishment, praise and criticism,  
Unit 3 : Knowledge of result, feedback and its implications.  
Unit 4 : Theories of motivation; Achievement motivation theory, Achievement goal theory, Attribution theory,

Unit 5 : Competence motivation theory- Emotional effects, tensions, anxiety and stress. Aggression and performance, definition of aggression, types of aggression.

**Module V : Mental Plans**

Unit 1 : Developing the mental plan, self-assessment

Unit 2 : pre-competition plan, event focus, pre- competition refocusing, refocusing within the competition

Unit 3 : post competition evaluation, enhancing self-confidence

Unit 4 : Exercise adherence: Obstacles of adopting a healthy lifestyle, Orientation, styles and exercise adherence, Reasons for exercise participation

Unit 5 : Measuring adherence, Steps to achieve exercise adherence, Mental barriers exercise adherence.

**Reference:**

1. Kamlesh, M. L. (2011). Fundamental elements of physical education. KSK publishers.
2. Kamlesh, M. L. (2009). Educational sports psychology. Friends publications.
3. Weinberg,R.S.,&Gould,D(1995) Foundations of sport and exercise psychology.Champaign,IL: Human Kinetics.
4. Mark H Anshel,(2014) Applied Health Fitness Psychology. Champaign,IL: Human Kinetics.
5. Mark H Anshel,(2014) Applied Exercise Psychology.Springer publishing company,Newyork.
6. Baumgardner, R. S (2009). Positive psychology, Indian edition. Dorling kindersIndian pvt
7. Branden, N. (1994). The six pillars of self-esteem. Bantan Books, New York.



## SEMESTER - V

### MFTG503: INTRODUCTION TO RESEARCH METHODOLOGY (T)

Total Credits: 4

Hours/week: 3

#### Objectives

1. To identify and apply appropriate research methodology in order to plan, conduct and evaluate basic research
2. Describe the value, scope, relevance and mandatory steps of research as well as principles of effective research
3. Students shall be able to use and apply a wide variety of specific statistical methods
4. Students shall identify how to organize, manage, and present data
5. Show ability to explore and organize data for analysis

#### Module I

- Unit 1 : Introduction, Meaning and Purpose of Research, Characteristics of Good Research
- Unit 2 : Scope of research in Fitness and sport
- Unit 3 : Types of Research, Steps in the Research Process
- Unit 4 : Meaning of Research Problem, Guidelines and Criteria for Selecting a Research Problem
- Unit 5 : Formulating a Research Problem, Techniques for Formulating a Research Problem

#### Module II

- Unit 1 : Research Design: Introduction, Meaning of Research Design, Characteristics of Good Research Design
- Unit 2 : Concepts related to Research Design, Types of Research Design
- Unit 3 : Sample Selection, Importance and Advantages of Sampling, Census vs. Sample
- Unit 4 : Characteristics of Good Sample, Sampling Techniques,
- Unit 5 : Criteria for Selection of a Sampling Technique

#### Module III

- Unit 1 : Probability Sample – Simple Random Sample, Systematic Sample, Stratified Random Sample & Multi-stage sampling
- Unit 2 : Determining size of the sample – Practical considerations in sampling and sample size
- Unit 3 : Data Collection: Introduction, Sources of Data, Primary Data Collection Techniques
- Unit 4 : Secondary Data, Secondary Data Collection Techniques, Advantages and Disadvantages
- Unit 5 : Qualitative vs Quantitative Data

#### **Module IV**

- Unit 1 : Questionnaire Design: Introduction, Types of Questionnaires  
Unit 2 : Methods of Sending the Questionnaire, Guidelines for Questionnaire Design, Characteristics of Good Questionnaire  
Unit 3 : Data Processing: Introduction, Editing, Coding the Data, Tabulation  
Unit 4 : Quantitative and Qualitative Analysis  
Unit 5 : Report Writing Steps, Components and Format of Research Reports, Guidelines for Writing Research Reports

#### **Module V**

- Unit 1 : Analysis, Interpretation and Presentation of Findings: Introduction, Statistical Analysis and Interpretation, Techniques of Interpretation  
Unit 2 : Measurement Scales, Sources of error in measurement  
Unit 3 : Measures of central Tendency (Mean, medium, Mode)  
Unit 4 : Measures of dispersion (range, mean deviation, standard deviation)  
Unit 5 : Graphical representation of Data

#### **Reference**

1. Clarke, H. David., Research Processes in Physical Education, Recreation & Health Prentice Hall Inc.1985
2. Kathleen Armour, Doune Macdonald, Research Methods in Physical Education and Youth Sport,
3. Krishnan Vijaya, Statistics for Beginners (English, Paperback)
4. David Lane, Introduction to Statistics, Rice University
5. B L Agarwal, Basic Statistics, New Age International
6. K Vijayakumaran Nair and Biju Dharmapalan, Methodology and perspectives of science, Academica publications
7. Jeffrey A Lee, Pearson, The scientific endeavor, Methodology and perspectives of sciences

## SEMESTER - V

### MFTS504: SELF DEFENCE III- FITNESS APPROACH - KRAV MAGA (AOC)

Total Credits: 6

Hours/week: 5

#### Objectives

1. Introduction to the Combat Sport Krav Maga
2. To learn the fundamental techniques of Krav maga – a self defense view
3. Practical knowledge of offensive and defensive techniques based on situations
4. To learn instruction techniques in Krav Maga
5. To design Krav Maga practice for different age group

#### Module I : Introduction to Kravmaga

- Unit 1 : History of Kravmaga, Principles of Kravmaga
- Unit 2 : Structure of Kravmaga- Self Defence, Contact Combat
- Unit 3 : Basic rules and principles of Kravmaga
- Unit 4 : balance in Kravmaga, disrupt balance,
- Unit 5 : Need of speed and strength, attacking on vulnerable points of the human body

#### Module II : Fundamentals of offensive and defensive techniques

- Unit 1 : Basic stands, Basic punches - Direct strikes- Direct punch with the right hand in the head - Side strikes- Side punch of right hand in the head- Strikes from below- Strike from below with a right hand fist to the head- Blows with the edge of the palm- Strikes with the edge of the palm from the outside inwards- Strike with the edge of the palm from inside outwards- Side strike with the elbow, Hammer fist, jab cross
- Unit 2 : Krav Maga basic kicks- points that you should pay attention to when using kicks- Direct kick with left foot- Straight pushing kick with left foot- Side kick with left foot- Left-footed kick to the side- Kick backward with the left foot- Direct knee kick with left foot
- Unit 3 : Krav Maga basic defense techniques- blocking the path of impact, taking the enemy's attack away from the target, - forcing the enemy to miss, - Left hand block on the upper level and direct punch with the fist of the right, hand, Left hand block on the lower level and direct punch with the first of the right hand, Block with the left elbow, Defense from a side punch to the head, Defense from direct punch to the head with step forward, The enemy attacks you with a direct fist of the right hand in the head
- Unit 4 : Escape from capture, Escape from capture, The enemy has captured your right hand, The enemy captured you for the neck with two hands from behind, Defense from a direct kick, The enemy attacks you with a direct blow with his left foot
- Unit 5 : Attacks and threats from various distance, Take control, holds and Break falls- Breaking forward falls, backward falls, Defense Position on the Floor and Subsequent Standing

**Module III : Structure of Krav Maga Instruction**

- Unit 1 : Basic class structure, Prepare lesson, training space, and necessary equipment  
Unit 2 : Review previous lesson to the current lesson  
Unit 3 : Warm up to the current session, setting of the attack, Present the technique with quick and slow executions of the solution  
Unit 4 : Break down the technique, Demonstrate and explanation of the techniques  
Unit 5 : Partner exercise, Summarize the technique drill, Perform a stress and aggression drill, Cool down participants, Provide a preview of the next lesson.

**Module IV : Good Krav Maga Lesson**

- Unit 1 : Group dynamics, Professional guidance, preparation, lesson plan  
Unit 2 : Voice, enthusiasm, movement, observation, communication, knowledge, group control  
Unit 3 : learning through fun and preparation, learning effect, training on different surface and environment, fun team building exercise  
Unit 4 : Avoiding overtraining, rest and recovery keep your kravists motivated, tips for effective time management  
Unit V : training feedback, getting workouts done, using motivation magic

**Module V : Krav Maga - different group and for fitness**

- Unit 1 : Kravmaga practice with weapon, techniques and tactics  
Unit 2 : Kravmaga for Women, self-confidence, self-image, self-motivation  
Unit 3 : Kravmaga for Children, fun group activities, team building techniques  
Unit 4 : Kravmaga practice for Burning fats, weight loss, Core training  
Unit 5 : Kravmaga for overall fitness and will power

**Reference**

1. Samuel Greenberg, Krav Maga-Simple and effective self-defense techniques for everyone, 2020
2. Carsten Draheim, Krav Maga A Comprehensive Guide For Individuals, Security, Law Enforcement And Armed Forces, Meyer & Meyer Sports, Member of the World Sports Publishers' Association (WSPA), 2017
3. Carsten Draheim, Effective Techniques For Self-Defense, Meyer & Meyer Sport (UK) Ltd., 2019

## SEMSTER - V

### MFTS505: ADVANCE PROGRAMING AND PERIODIZATION (AOC)

Total Credits: 6

Hours/week: 5

#### Objectives

1. To understand the plyometric drills for power enhancement
2. Learning agility workouts and to design tactical oriented programmes
3. To practice and learn skill oriented speed workouts
4. Learning periodization and its importance in performance
5. To enrich the knowledge in various training cycles and its advantages for recovery and preventing injuries

#### **Module I : Plyometric Training**

- Unit 1 : What is Plyometric training  
Unit 2 : Need for Power within Tactical Populations  
Unit3 : Types of Plyometric Drills  
Unit4 : Program Design Recommendations  
Unit5 : General Considerations

#### **Module II : Agility Training**

- Unit 1 : Primary abilities that contribute to agility.  
Unit 2 : Types of Agility Drills and Progression  
Unit 3 : Fundamental Agility Skills, Training Status and General Considerations  
Unit 4 : Program Design Recommendations  
Unit 5 : Demands Specific to the Tactical Population

#### **Module III : Speed Training**

- Unit 1 : Need for Speed Training in Tactical Populations  
Unit 2 : Running Technique, Support Phase, Flight Phase  
Unit 3 : Speed drills  
Unit 4 : Program Design Recommendations  
Unit 5 : Additional Technique Considerations

#### **Module IV : Periodization of Training**

- Unit 1 : Periodization of biomotor abilities  
Unit 2 : Periodization for strength, Endurance and Speed  
Unit 3 : Integrated periodization  
Unit 4 : Annual Training plans, phases and characteristics  
Unit 5 : peaking, defining a taper

#### **Module V : Workout planning and training cycles**

- Unit 1 : Macrocycle and microcycles  
Unit 2 : Importance of planning, types of training plans and training session  
Unit 3 : Daily cycle of training, modeling the training session plan  
Unit 4 : Rest and recovery, fatigue and overtraining  
Unit 5 : Recovering interventions and modalities

## Reference

1. Alvar, Brent A. Deuster, Patricia A. Sell, NSCAs essentials of tactical strength and conditioning
2. Tudor O. Bompa, G. Gregory Haff, Periodization, theory and methodology of training, 5th Edition, Human kinetics, 2009
3. High-Performance Training for Sports-2nd Edition, David Joyce, Dan Lewindon, pub-Human kinetics

## **SEMESTER - V**

### **MFTS506: PROJECT III – (BUSINESS PROTO TYPE)**

Total Credits: 6

Hours/week: 5

The objective is to analyse the outcome of learning process of students by completing the project. Students have to submit 15 lesson plan which includes Krav Maga, Pilates training, Judo, Kurash. Each lesson plan should include the following

1. Objectives
2. Instructions
3. Explanation
4. Equipments used
5. Benefits
6. Procedure of doing activity
7. Do's and don't

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**DETAILED SYLLABUS**

**SEMESTER - VI**



## SEMESTER - VI

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### BOCG601: ENTREPRENEURSHIP DEVELOPMENT (T)

Total Credits: 4

Hours/week: 4

#### **Objectives**

To familiarize the students with the concept and overview of entrepreneurship with a view to enhance entrepreneurial talent. To impart knowledge on the basics of entrepreneurial skills and competencies to provide the participants with necessary inputs for creation of new ventures. To explore new vistas of entrepreneurship in 21st century environment to generate innovative business ideas

#### **Module I**

To make the students understand about entrepreneurs and different classifications. Entrepreneur and entrepreneurship - Definition; traits and features; classification; Entrepreneurs; Women entrepreneurs; Role of entrepreneurs in India.

#### **Module II**

Create an awareness about EDP. Entrepreneurial development programme concept; Need for training; phases of EDP; curriculum & contents of Training Programme; Support systems, Target Groups; Institutions conducting EDPs in India and Kerala.

#### **Module III**

General awareness about identification of project financing new enterprises. Promotion of a venture; opportunity Analysis Project identification and selection; External environmental analysis economic, social, technological and competitive factors; Legal requirements for establishment of a new unit; loans; Overrun finance; Bridge finance; Venture capital; Providing finance in Approaching financing institutions for loans.

#### **Module IV**

To identify different opportunities in small business. Small business Enterprise - Identifying the Business opportunity in various sectors - formalities for setting up of a small business enterprise - Institutions supporting small business enterprise - EDII (Entrepreneurship Development Institute of India), SIDO (Small Industries Development Organization NSIC (National small Industries

Corporation Ltd.) NIESBUD (National Institute for Entrepreneurship and Small Business Development) Sickness in small business enterprise causes and remedies

#### **Module V**

To understand about a project report relating to a small business. Project formulation - Meaning of a project report, significance, contents, formulation planning commissions guidelines for

formulating a project report - specimen of a project report, problems of entrepreneurs, case studies of entrepreneurs.

### **Reference**

1. Clifton, Davis S. and Fyvie, David E., Project Feasibility Analysis, John Wiley, New York, 1977.
2. Desai A. N., Entrepreneur and Environment, Ashish, New Delhi, 1990.
3. Drucker, Peter, Innovation and Entrepreneurship, Heinemann, London, 1985
4. Jain Rajiv, Planning a Small Scale Industry: A guide to Entrepreneurs, S.S. Books, Delhi, 1984
5. Kumar S. A., Entrepreneurship in Small Industry, Discovery, New Delhi, 1990
6. McClelland, D. C. and Winter, W. G., Motivating Economic Achievement, Free Press, New York, 1969

## SEMESTER - VI

### MFTG602: FITNESS CENTRE MANAGEMENT (T)

Total Credits: 4

Hours/week: 4

#### Objectives

1. To plan design a fitness centre
2. To understand the requirement needed exercise equipments and its maintenance
3. Systematic approach to organize the equipments in a fitness centre
4. Marketing of training programmes
5. Understanding the legal matters related with fitness centres

#### Module I : Facility Design and Planning

- Unit 1 : Pre-design Phase, Design Phase, Construction Phase, Preparation Phase.
- Unit 2 : Facility Specification Guidelines, General Health and Fitness Facility Guidelines, Passageways, Natural lighting and windows, Repair and maintenance shop , Emergency–first aid kit and automated external defibrillator (AED Water fountain, Background music and noise, Electrical requirements, Temperature and humidity control, Communication boards, Suggestion box
- Unit 3 : Resistance Training Room Guidelines, Location of resistance training room, Space for supervisors, staff-to-client ratios, Ceiling height. Windows, Doors, Lighting, Storage area, Mirrors, Floor, Walls
- Unit 4 : Training Specific Areas - Aerobic Exercise Area, Group section areas etc...
- Unit 5 : Budget planning, availability of fund

#### Module II : Selecting Exercise Equipment and Maintenance

- Unit 1 : Develop Functional Criteria for the Equipment
- Unit 2 : Evaluate Specifications and Effectiveness of the Equipment
- Unit 3 : Evaluate Manufacturers' Business Practices
- Unit 4 : After Ordering New Exercise Equipment: Delivery and Arrival
- Unit 5 : Stock keeping, repair and maintenance

#### Module III : Floor Plan and Equipment Organization

- Unit : Equipment Placement, Taller machines, circuit weight training, Dumbbell racks and weight trees. Treadmills and any other cardiovascular machines
- Unit 2 : Equipment Spacing, Facility Traffic Flow, Stretching and Body Weight Exercise Area, Resistance Training Machine Area, Olympic Lifting Area, Aerobic Exercise Area
- Unit 3 : Special Considerations for a Home Facility, Home Exercise Equipment Purchases, Home Equipment Layout, Facility and Equipment Maintenance
- Unit 4 : basic knowledge of inviting quotation, tender, procedure to keep documents
- Unit 5 : Payment plans, billing and pricing option

**Module IV : Personal training business**

- Unit 1 : Five basic business model sole proprietorship, independent contractor, partnership, corporation, and corporation, Franchise Operation Businesses
- Unit 2 : Franchise Operation Businesses, payment plans
- Unit 3 : Business administration, establishing a Budget
- Unit 4 : Control your finance, Management and Policies
- Unit 5 : Foundation for running your business, Marketing and Sales

**Module V : Legal Issues and Responsibilities**

- Unit 1 : Potential exposure to liability, Safe Premises
- Unit 2 : Scope of Practice, Supplements, medical or dietary advice, Sexual Harassment, Proper Qualifications
- Unit 3 : Risk management Strategies. Written Policies, Procedures, and Forms
- Unit 4 : Informed Consent, Liability waiver, Negligence
- Unit 5 : Understanding Legal Implications, legal consultation, Insurance Coverage

**Reference**

1. Armitage-Johnson, S. 1989. Maintenance and safety: Maintaining a safe environment in the strength facility. National Strength and Conditioning Association Journal 11: 56-57.
2. The Complete book of Personal Training – Douglas S Brooks
3. Armitage-Johnson, S. 1994. Providing a safe training environment for participants, part I. Strength and Conditioning 16: 64-65.
4. Bates, M. 2008. Choosing the right equipment. In: Health Fitness Management, 2nd ed., M. Bates, ed. Champaign, IL: Human Kinetics.
5. American College of Sports Medicine. ACSM's Resources for the Personal Trainer. 2nd ed. Baltimore: Lippincott Williams & Wilkins; 2005.
6. American College of Sports Medicine. ACSM's Guidelines for Exercise Testing and Prescription. 8th ed. Baltimore: Lippincott Williams & Wilkins; 2010.
7. American College of Sports Medicine. ACSM's Health/Fitness Facility Standards and Guidelines. 3rd ed. Champaign (IL): Human Kinetics; 2007.

## SEMESTER - VI

### MFTS603: RECOVERY AND WELLNESS (AOC)

Total Credits: 4

Hours/week: 5

#### Objectives

1. Introducing wellness and its dimensions
2. To learn different strategies for wellness
3. Introducing sports massage and its benefits
4. Practical experience of massaging technique
5. To understand the benefits of foam roller
6. To understand the classical strokes of massage
7. To know the effect of sports massage on human systems
8. Importance of massage for recovery and to prevent injury

#### **Module I : Wellness: new health goal**

Unit 1 : Concept of wellness

Unit 2 : Understanding wellness and fitness

Unit 3 : Importance of wellness

Unit 4 : Dimensions of wellness – Physical, emotional, intellectual, interpersonal, cultural, environmental

Unit 5 : Wellness and performance

#### **Module II : Strategies for wellness**

Unit 1 : Recovery strategies for wellness - sleep, sun exposure/outdoor, hydration, nutrition, proper warm-up and cool-down, etc

Unit 2 : Performance based on breathing strategies

Unit 3 : elite performance and mental training – cognitive aspects

Unit 4 : Movement and wellness – pain free – mobility – stability –motor control

Unit 5 : Lifestyle Management is the Key to Wellness - stress dosage for well being (environment, community, relationships, belief, hope, mindfulness)

#### **Module III : Introduction to sports massage**

Unit 1 : History origin and development of sports massage

Unit 2 : Sports massage different from other massage types

Unit 3 : Type of sports massage, Deep Tissue - Neuro-Muscular Techniques, Muscle Energy Techniques, Facilitated Stretching - Soft Tissue Release, Myofascial Release, Trigger Points and Strain Counter, Strain,

Unit 4 : Post event sports massages Benefits of massage, elimination of waste products, reduce chance of injury, decrease recovery time between workouts

Unit 5 : Effect and benefits of sports massage- physical, physiological, Psychological, Mechanical effects

**Module IV : Basics, Techniques and Specific classical Strokes of massage**

- Unit 1 : Techniques and basic skill - Basic massage movements - Effleurage, Petrissage, (Kneading, rolling, Wringing, and lifting), Friction, Tapotement, Vibration (practical)
- Unit 2 : Specific Classical strokes of massage
- Unit 3 : Setting up a sports massage practice
- Unit 4 : Types of equipment needed for sports massage
- Unit 5 : Maintenance and keep client records

**Module V : Foam Roller for self-massage**

- Unit 1 : Basics of foam rolling – Foam Roller Exercises, Self-Massage, Trigger Point Therapy & Stretching for Injury Prevention & Increased Mobility
- Unit 2 : Foam Rolling Do's and Don'ts
- Unit 3 : The Many Shapes and Sizes of Foam Rollers –
- Unit 4 : Practicals - Upper body foam - Neck, shoulder, lowerback, abdominal, etc.. Lower body foam roll – quadriceps, hamstring, adductor, feet, gluteus, calf.
- Unit 5 : Massage for recovery, Massage for preventing injury

**Reference**

1. Thomas D Fahey, Paul M Insel, Wlton T Roth, Clarie E A Insel, Fit & Well, Core concepts and labs in Physical Fitness and Wellness, 12th Edition, Mc Graw Hill Education
2. Scott K. Powers Stephen L. Dodd, Total Fitness and Wellness, 8th Edition, Pearson
3. Kristian Staff, Foam Rolling, Foam Roller Exercises, Self-Massage, Trigger Point Therapy & Stretching For Injury Prevention & Increased Mobility, Authors Own All Copyrights
4. Sandy Fritz, Sports And Exercise Massage: Comprehensive Care In Athletics, Fitness And Rehabilitation, Elsevier Mosby
5. Anders Jelveus, Inegrated Sports Massage Therapy: A Comprehensive Handbook, Elsevier Health – UK
6. Michael McGillicuddy, “Massage for Sport Performance”, Human Kinetics

## SEMESTER - VI

### MFTS604: YOGA THERAPY (AOC)

Total Credits: 6

Hours/week: 6

#### Objectives

1. Introducing Yoga Therapy
2. Understanding the human movements, yogasana & its effects
3. To understand the effect of yoga practices in relation to disorders
4. To know the effect of yoga practice on human organs
5. To learn psychological disorders and its treatment through yoga
6. To understand the value of Yoga practice in daily life and they will be able to prescribe yoga practices Therapeutically & for fitness

#### Module I : Yoga Therapy and Sports Injury

- Unit 1 : Fundamental principle of Yoga therapy
- Unit 2 : Role of Shuddhi Prakriyas in preventive, promotive and curative aspects of Yoga Therapy
- Unit 3 : Concept of Aahara, Vihara, Aachara and Vichara, Role of Yogic Positive Attitudes
- Unit 4 : Yoga Therapy and Sports Injury – Muscle, Ligament, Tendon
- Unit 5 : Concept of Yoga and Health in Indian Traditional Systems of Medicine

#### Module II : Yoga and body Mechanism

- Unit 1 : Effect of Yogasana on human body (lying, sitting, standing positions), suryanamaskar, Pranayama and Meditation
- Unit 2 : Understanding of muscles physiology with the help of model/chart and its practical applications in Asana.
- Unit 3 : Knowledge of COG, LOG, BOS in Asanas (in Sitting, standing, lying, balancing asanas)
- Unit 4 : Knowledge of Biomechanics of Yogic postures
- Unit 5 : Concept of energy expenditure and role of asana practice on energy expenditure.

#### Module III : Role of Yoga practice on various system I

- Unit 1 : Role of Yoga practices on various Musculo-Skeletal disorders
- Unit 2 : Role of Yoga on Back Pain, Neck pain
- Unit 3 : Role of Yoga on Arthritis, Fibromyalgia and Muscular dystrophy
- Unit 4 : Role of Yoga practices on various Respiratory Disorders like Bronchial Asthma, Bronchitis, Allergic Rhinitis, Sleep apnea & Sinusitis
- Unit 5 : Role of Yoga practices on various Cardiovascular disorders like Hypertension

#### Module IV : Role of Yoga practice on various system II

- Unit 1 : Role of Yoga practices on various Neurological Disorder like Migraine, Headaches

- Unit 2 : Role of Yoga practices on various Digestive and Excretory Disorders like Peptic Ulcers, Constipation
- Unit 3 : Role of Yoga practices on various Obstetric & Gynecological Disorders like Menstrual Disorder
- Unit 4 : Role of Yoga practices on various Endocrine & Metabolic Disorders like Diabetes Mellitus, Thyroid Disorders,
- Unit 5 : Role of Yoga Obesity and Metabolic Syndrome

**Module V : Yoga and Psychological disorders**

- Unit 1 : Role of Yoga practices on various Psychological Disorder
- Unit 2 : Role of Yogic Counselling
- Unit 3 : Effect of yoga & meditation in stress relief, bodily structure & appearance
- Unit 4 : Role of Yoga on Mood and mental health
- Unit 5 : Role of mudra and its physiological functions of the body

**Reference**

1. Website- [www.yogacertificationboard.nic.in](http://www.yogacertificationboard.nic.in)
2. James Foulkes, An Introduction to Integrative Mind/body Yoga Therapeutics by Singing Dragon London, 2017
3. An Swanson, Science of Yoga, DK Publishing, 2019
4. Integral approach of Yoga Therapy to common ailments. by Swami Kavalayanand, Kaivalaya dhama, Lonavala



## SEMESTER - VI

### MFTS605: SELF DEFENCE IV-FITNESS APPROACH – KALARIPAYATTU (AOC)

Total Credits: 6

Hours/week: 6

#### Objectives

1. To Introduce Kalaripayattu and its basics
2. To learn the kalari moves for improving fitness components
3. To understand the different styles of kalaripayattu
4. Practical moves of Kalaripayattu
5. Promotion of kalaripayattu in Kerala tourism

#### Module I : Introduction to Kalaripayattu

- Unit 1 : History of Kalaripayattu, Global destination for the martial arts  
Unit 2 : Meaning and Kalari Niyama  
Unit 3 : Kalari Vyayama – practical moves  
Unit 4 : Place of Practice, Angakalari  
Unit 5 : Physical body and the first fruit of practice, Physical Discipline

#### Module II : Best of Kalaripayattu

- Unit 1 : Benefits of practicing kalaripayattu – physical and mental  
Unit 2 : Kalaripayattu- for coordination and flexibility (specific)  
Unit 3 : Prarambha vyayama  
Unit 4 : Kalari marmangal  
Unit 5 : Kalaripayattu for general fitness

#### Module III : Styles of Kalaripayattu

- Unit 1 : Styles of Kalaripayattu – Northern, Southern, Central  
Unit 2 : Northern Style – Activities in Northern Kalari  
Unit 3 : Southern Style – methods of practicing  
Unit 4 : Central Style - Methods of practicing  
Unit 5 : Classification of Weapons used in Kalaripayattu, Injury and treatments in Kalaripayattu

#### Module IV : Basics of Kalaripayattu - Practical experience

- Unit 1 : Breathing exercise and Kalari warm up  
Unit 2 : Kalaripayattu- Performing art - Chuvadukal and its benefits  
Unit 3 : Different form of leg exercises, vadiवेशal-single and double  
Unit 4 : free hand techniques, Kalaripayattu - a self-defense techniques  
Unit 5 : Individual, partners, group movements – for fitness

#### Module V : Kalaripayattu for promoting Kerala Tourism

- Unit 1 : Importance of Cultural Tourism in Kerala, Types of Cultural Tourism and its benefits  
Unit 2 : Martial Art Tourism, Types of Martial Art.  
Unit 3 : Exploring the relevance of kalaripayattu as a cultural Resource, Health Tourism-Medical Tourism

Unit 4 : Kalaripayattu Destinations in Kerala

Unit 5 : Benefits of Artisans, Kerala Schools for Martial Arts

**Reference**

1. Poonthura Soman, Kalaripayattu, Albhuthavahamaayi Ayodhanakala,
2. Shaji K john, Kalaripayattu The Martial and healing art of Kerala, published by the author
3. A Vinodan & S Meera(2018)-Exploring The Relevance of Cultural Resource Management ,Journal of heritage Management

## **SEMESTER - VI**

### **MFTS606: INTERNSHIP - III**

Total Credits : 6

After the completion of the sixth semester, Students should complete an Internship Programme of minimum two weeks by taking part in live fitness trainings in any Health club/ Gymnasium /Multi Fitness Centre / Martial Arts Centre etc. Students can choose the Health club/ Gymnasium /Multi Fitness Centre/ Martial Arts Centre within the State / Country or abroad for their internship (The training centre must have a minimum two years of exposure in field of Health club / Gymnasium /Multi Fitness Centre/ Martial Arts Centre etc..). College will provide a certificate to prove their identity. A faculty member will supervise the Internship activities.

During the internship period, the organisation is responsible to give the attendance of the students and they should keep a log book for this and also follow ups must be there in a proper track to ensure the skill development of the interns and the students should maintain a record of their daily activities and it should be submitted for verification.

At the end of the internship, the students should prepare a comprehensive report. The report and the specimens of the work done by the student should be attested by the organization. Student should also produce a certificate of internship from the Health club/ Gymnasium /Multi Fitness Centre / Martial Arts Centre etc. All the above details should be submitted to the Head of the Department for evaluation. The report will be evaluated by the external and internal examiners appointed by the University. Delayed, incomplete submissions will be considered as per the University rules.

**B.VOC. ADVANCED COURSE IN  
MULTI SPORTS AND FITNESS TRAINING**

**MODEL QUESTION PAPERS**

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Reg No.....

Name.....

## **B.VOC DEGREE EXAMINATION**

### **First Semester Model Question Paper**

#### **BOCG101: LISTENING AND SPEAKING SKILLS IN ENGLISH**

Time: Three Hours

Maximum: 80 Marks

#### **PART A**

**Answer any 10 questions. Each question carries 2 marks.**

1. Describe an auto rickshaw.
2. What is intensive reading?
3. What is the difference between a definite article and an indefinite article?
4. What is rising tone?
5. What is an index?
6. What is a phrasal verb?
7. Who is a good reader?
8. What is an embedded question?
9. Write a few phrases which can be used to express mild disagreement.
10. What are the three functions of conjunctions?
11. What are grammatical words?
12. What are people skills?

#### **PART B**

**Answer any 6 questions. Each question carries 5 marks.**

13. What is telephone etiquette?
14. Who is an active listener?
15. Prepare a vote of thanks to be presented for the residents' association meeting.
16. Write short note on conjunctions.
17. What are the features of fluent speech?
18. You are a project leader. Introduce the members of your team to a visiting dignitary.
19. Write a short note on reading for a purpose.
20. What are the steps in cancelling and rescheduling appointments?
21. Describe the qualities of your college to your friends.

#### **PART C**

**Answer any 2 questions. Each question carries 15 marks.**

22. Discuss ' the importance of social media' with two other participants in a group discussion.
23. Write a conversation with your panchayath member, complaining about the lack of streetlights. or
  - a. Write a model interview you make with an actor.
24. Write a note on subject-verb agreement.
25. What are the roles and functions in a group discussion?

(2x15 = 30)

Reg No.....

Name.....

**B.VOC DEGREE EXAMINATION**  
**First Semester Model Question Paper**  
**BOCG102: IT FOR BUSINESS (AOC)**

Time: Three Hours

Maximum: 80 Marks

**PART A**

**Answer any 5 questions. Each question carries 4 marks.**

1. What you mean by Operating System?
2. What are the uses of Powerpoint presentation?
3. Explain few useful functions in Excel
4. How Can One Customize Slide Layouts?
5. What Does PowerPoint Environment Contain?
6. What is Information and Communication Technology?
7. Write about memory hardware.
8. Discuss briefly about important input hardwares.

(5x4=20)

**PART B**

**Skill Assessment 60 marks**

Reg No.....

Name.....

## **B.VOC DEGREE EXAMINATION**

First Semester Model Question Paper

### **MFTG103: FOUNDATION OF HEALTH AND FITNESS (T)**

Time: Three Hours

Maximum: 80 Marks

#### **PART A**

**Answer any 10 questions. Each question carries 2 marks.**

1. What is the meaning of Health?
2. Define Aerobic activity
3. What BMI
4. Briefly explain the importance of health education.
5. Muscular Strength
6. What is the scope of health and fitness?
7. Define types of endurance.
8. What are the dimension of health?
9. What is FITT
10. Enumerate the health related physical fitness components.
11. What is Balance?

(10 x 2 = 20)

#### **PART B**

**Answer any 6 questions. Each question carries 5 marks.**

12. Explain physical fitness and its benefits.
13. Explain the Stages of Human growth and development?
14. Describe the difference between health related physical fitness and skill related physical fitness
15. Guidelines for Aerobic fitness
16. Explain skill related fitness components.
17. Explain the Factors to Consider during Daily Physical Activity?
18. Briefly explain the Physical Activity in the Heat and Cold & Other Environment?
19. Explain Principles of Physical Activity?
20. Explain different Body types
21. Explain the concept of moderate physical activity

(6 x 5 = 30)

#### **PART C**

**Answer any 2 questions. Each question carries 15 marks.**

22. Define fitness, its components? physical fitness components.
23. Describe in detail the role of physical fitness and activities developing for fitness
24. Explain the Physical Activity for different age groups?
25. Describe Vigorous and Moderate Physical activities and its benefits?

(2 x 15 = 30)

Reg No.....

Name.....

**B.VOC DEGREE EXAMINATION**

**First Semester Model Question Paper**

**MFTS104: BASIC ANATOMY & KINESIOLOGY (AOC)**

Time: Three Hours

Maximum: 80 Marks

**PART A**

**Answer any 5 questions. Each question carries 4 marks.**

1. Structure of a heart
2. Appendicular and axial skeleton
3. Type of muscles
4. Synovial joints
5. Heart rate and Stroke volume
6. Anatomical movements of shoulder
7. What is meant by Kinesiology and
8. What is sagittal plane and vertical axis

(5 x 4 = 20)

**PART B**

**SKILL ASSESSMENT (60 Marks)**

Students have to submit 10 lesson plans which includes, Anatomical structure of human system, Muscles and movement etc... Each lesson plan should include the following

8. Objectives
9. Instructions
10. Explanation
11. Equipments used
12. Benefits
13. Procedure of activity
14. Do's and don'ts

Reg No.....

Name.....



**B.VOC DEGREE EXAMINATION**

**First Semester Model Question Paper**

**MFTS105: INTRODUCTION TO GYM TRAINING (AOC)**

Time: Three Hours

Maximum: 80 Marks

**PART A**

**Answer any 5 questions. Each question carries 4 marks.**

1. Different type of flexibility training equipments and how to use?
2. Write 5 Push movements workouts ?
3. Write 5 pull Push movements workouts?
4. What is mobility and stability ?
5. What is Specificity?
6. Skinfold measurement sites for males and females
7. Name 3 Fitness Tracking equipment's and its use ?
8. How to maintain Resistance Training Rooms?

(5 x 4 = 20)

**PART B**

**SKILL ASSESSMENT (60 Marks)**

Students have to submit 10 lesson plans of Gym training. Each lesson plan should include the following

1. Objectives
2. Instructions
3. Explanation
4. Equipments used
5. Benefits
6. Procedure of activity
7. Do's and don'ts

Reg No .....

Name.....

## B.VOC DEGREE EXAMINATION

### Second Semester Model Question Paper

#### BOCG201: WRITING AND PRESENTATION SKILLS IN ENGLISH (T)

Time: Three Hours

Maximum: 80 Marks

#### **PART A**

**Answer any 10 questions. Each question carries 2 marks**

1. What is a resume?
2. What is a group discussion?
3. What is a project report
4. What is proxemics?
5. What is a letter of enquiry?
6. What is a flip chart?
7. What is a seminar?
8. What is a power of attorney?
9. What is netiquette?
10. What are narrative essays?
11. What are the components of a typical seminar paper?
12. What is paralanguage?

(10x2 = 20)

#### **PART B**

**Answer any 6 questions. Each question carries 5 marks**

13. What are the important points to be considered while sending collection letters?
14. What is a channel of communication? What are the different types of channel of communication?
15. Write a letter to the editor about the street dog menace in your city.
16. You want to sell your book collection. Prepare a notice to be put up in the college notice board.
17. Write a short note on Kinesics.
18. Prepare an agenda for the monthly board meeting of your firm.
19. What are the points to be remembered while filling an application form?
20. You are the owner of a supermarket. Write a letter inviting quotations from a wholesale dealer.
21. Write a short note on visual aids that are often used in presentations.

(6x5 = 30)

#### **PART C**

**Answer any 2 questions. Each question carries 15 marks**

22. You are Ravi/Jaya. Prepare an application letter and a resume for the post of an assistant engineer.
23. Write an essay arguing for or against single sex educational institutions.
24. What are the barriers to effective communication? How can we overcome them?
25. Write a descriptive essay about your favourite place.

(2x15 = 30)

Reg No.....

Name.....

**B.VOC DEGREE EXAMINATION**

**Second Semester Model Question Paper**

**MFTG202: EXERCISE PHYSIOLOGY AND BIOENERGETICS (AOC)**

Time: Three Hours

Maximum: 80 Marks

**PART A**

**Answer any 5 questions. Each question carries 4 marks.**

1. What is meant by physiology
2. Mechanism of Respiratory system
3. Explain heart rate and stroke volume
4. Effect of exercise on muscular system
5. What VO<sub>2</sub> max
6. Common expressions of energy
7. What is mean by ATP and glycogen
8. Explain detraining

(5 x 4 = 20)

**PART B**

**SKILL ASSESSMENT (60 Marks)**

Students have to submit 10 lesson plans (previously learned workouts) which consist effect of exercise on various systems, energy giving systems, muscular contractions, muscle type (drawings). Each lesson plan should include the following

1. Objectives
2. Instructions
3. Explanation
4. Equipments used
5. Benefits
6. Procedure of activity
7. Do's and don'ts

Reg No.....

Name.....

**B.VOC DEGREE EXAMINATION**

**Second Semester Model Question Paper**

**MFTG203: INTRODUCTION TO RECREATION AND WELLNESS (AOC)**

Time: Three Hours

Maximum: 80 Marks

**PART A**

**Answer any 5 questions. Each question carries 4 marks.**

1. Concept of wellness
2. Benefits of recreational activities
3. Explain team building games and its benefits
4. Explain Recreational outdoor activities
5. Explain any two indoor Recreation games for martial arts player
6. What is meant by indigenous games
7. What is team cohesion
8. Explain recreation and aging

(5 x 4 = 20)

**PART B**

Students have to submit 10 lesson plans of recreational games and team building games. Each lesson plan should include the following

**SKILL ASSESSMENT (60 Marks)**

1. Objectives
2. Instructions
3. Explanation
4. Equipments used
5. Benefits
6. Procedure of activity
7. Do's and don'ts

Reg No.....

Name.....

**B.VOC DEGREE EXAMINATION**  
**Second Semester Model Question Paper**  
**MFTS204: PRACTICAL APPROACH TO YOGA (AOC)**

Time: Three Hours

Maximum: 80 Marks

**PART A**

**Answer any 5 questions. Each question carries 4 marks.**

1. Benefits of practicing asanas
2. Steps in surya namaskar
3. Explain yogic concept of health
4. What is mitahara
5. Psychological benefits of pranayama
6. Explain two standing asana with its meaning
7. Principles of practicing asana
8. What is meant by kriyas

(5 x 4 = 20)

**PART B**

**SKILL ASSESSMENT (60 Marks)**

Students have to submit 10 lesson plans of Yogic asanas, pranayama and kriya. Each lesson plan should include the following

1. Objectives
2. Instructions
3. Explanation
4. Equipments used
5. Benefits
6. Procedure of activity
7. Do's and don'ts

Reg No.....

Name.....

**B.VOC DEGREE EXAMINATION**

**Second Semester Model Question Paper**

**MFTS205: SELF DEFENCE -1 – FITNESS APPROACH-TAEKWONDO (AOC)**

Time: Three Hours

Maximum: 80 Marks

**PART A**

**Answer any 5 questions. Each question carries 4 marks.**

1. Explain duty of referee on mat
2. What is meant by kyorugi
3. Explain basic stance of taekwondo
4. Psychological Benefits of practicing taekwondo
5. Duty of a taekwondo instructor
6. What are types of kicks in taekwondo
7. How does taekwondo practice help for overall body fitness
8. Accessories and equipments used for practicing taekwondo

(5 x 4 = 20)

**PART B**

**SKILL ASSESSMENT (60 Marks)**

Students have to submit 10 lesson plans of Taekwondo class. Each lesson plan should include the following

1. Objectives
2. Instructions
3. Explanation
4. Equipments used
5. Benefits
6. Procedure of activity
7. Do's and don'ts

Reg No.....

Name.....

**B. VOC DEGREE EXAMINATION**  
**Third Semester Model Question Paper**  
**BOCG301: PRINCIPLES OF MANAGEMENT (T)**

Time: Three Hours

Maximum: 80 Marks

**Part A (Short Answer Questions)**

**Answer any 10 questions (each question carries 2 marks each)**

1. Define Management.
2. What is MBO?
3. What do you mean by induction?
4. What is span of control?
5. Explain the term organisational structure?
6. Explain the concept of HRD.
7. What is decentralization?
8. What do you mean by standing plan?
9. Distinguish between authority and responsibility.
10. What is recruitment?
11. What is the purpose of aptitude test?
12. What is orientation?

2 x 10 = 20 Marks

**Part B (Descriptive / Short Essay Questions)**

**Answer any 6 of the following questions Each question carries 5 Marks**

1. What are the benefits of training to employer and employees?
2. Distinguish between recruitment and selection.
3. Explain in detail the informal organisational structure.
4. Explain the contingency school of management thought.
5. What are the steps involved in planning process?
6. What are the factors involved in organisational culture?
7. What do you mean by Maslow's Need Hierarchy Theory?
8. What are the methods of establishing control?
9. What are the qualities required for a leader?

5 x 6 = 30

**Part C (Long Essays)**

**Answer Any two of the following Each question carries 15 Marks**

22. What is manpower planning? Discuss the need and steps involved in it?
23. "Control is the fundamental management function that ensures work accomplishment according to plans" Analyze the statement
  1. Explain various styles of leadership
  2. "Decision making is the essence of planning". Elucidate

15 x 2 = 30

Reg No.....

Name.....

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**B.VOC DEGREE EXAMINATION**  
**Third Semester Model Question Paper**  
**MFTG302: FITNESS NUTRITION (AOC)**

Time: Three Hours

Maximum: 80 Marks

**PART A**

**Answer any 5 questions. Each question carries 4 marks.**

1. What is sports nutrition
2. What is macro and micro nutrients
3. What is meant by BMR
4. What is TEA and TDEE
5. What are nutritional supplements
6. What is meant by doping
7. What is HDL LDL cholesterol
8. What is meant by caloric value of food

(5 x 4 = 20)

**PART B**

**SKILL ASSESSMENT (60 Marks)**

Students have to submit 10 lesson plans includes Nutrients (Carbohydrates, protein, fat, vitamins, minerals, water) for clients-gym & martial arts trainees, (different age group), Each lesson plan should include the following

1. Objectives
2. Instructions
3. Explanation
4. Equipments used
5. Benefits
6. Procedure of activity
7. Do's and don'ts

Reg No.....

Name.....

## B.VOC DEGREE EXAMINATION

### Third Semester Model Question Paper

#### MFTG303: INTRODUCTION TO PERSONAL TRAINING (T)

Time: Three Hours

Maximum: 80 Marks

#### **PART A**

**Answer any 10 questions. Each question carries 2 marks.**

1. Meaning and definition of personal training?
2. List the factors affecting personal training.
3. Define Current issues facing the industry?
4. Write about Making first impression?
5. State the of technology for time management?
6. Write about the First workout?
7. Describe Developing training style?
8. Define introductory packet?
9. Define feedback mechanism?
10. Define Increasing the sales skills?
11. List any four qualities of a leader.
12. Write about Current issues facing the industry?

(10 x 2 = 20)

#### **PART B**

**Answer any 6 questions. Each question carries 5 marks.**

13. Briefly explain importance and cultivating existing core clients?
14. Explain Diversifying the business, Expanding client base?
15. What is Keeping the client motivated, keeping yourself motivated?
16. Describe briefly about the qualities of a communication skills in personal training?
17. Explain Billing and pricing options?
18. Describe Partnering with a retail business for client referrals?
19. Explain the Virtual training, merits and demerits,?
20. Describe the personal burnout?
21. Explain Establishing credibility?

(6 x 5 = 30)

#### **PART C**

**Answer any 2 questions. Each question carries 15 marks.**

22. Elaborate The making of process of a personal trainer?

23. History of personal training Industry,?
24. Current issues facing the fitness industry and future of personal training?
25. Explain procedures of process of starting personal training?

(2 x 15 = 30)

Reg No.....

Name.....

**B.VOC DEGREE EXAMINATION**

### Third Semester Model Question Paper

#### MFTS304: FITNESS ASSESSMENT AND EVALUATION (AOC)

Time: Three Hours

Maximum: 80 Marks

#### **PART A**

**Answer any 5 questions. Each question carries 4 marks.**

1. Importance of assessment
2. What Kyphosis and scoliosis
3. What is 1 RM
4. Explain harward step test
5. Explain movement assessment
6. Define V test
7. What is meant by anterior and posterior
8. Duties during test

(5 x 4 = 20)

#### **PART B**

#### **SKILL ASSESSMENT (60 Marks)**

Students have to submit 10 lesson plans of various fitness test. Each lesson plan should include the following

1. Objectives
2. Instructions
3. Explanation
4. Equipments used
5. Benefits
6. Procedure of activity
7. Do's and don'ts

Reg No.....

Name.....

#### **B.VOC DEGREE EXAMINATION**

#### **Third Semester Model Question Paper**

## MFTS305: INTRODUCTION TO AEROBICS & ZUMBA (AOC)

Time: Three Hours

Maximum: 80 Marks

### PART A

Answer any 5 questions. Each question carries 4 marks.

1. Psychological benefits of Aerobics
2. Types of moves in aerobics
3. Aerobics during pregnancy
4. Origin of Zumba Dance
5. Qualities of a Zumba trainer
6. What is meant by ZIN and ZES
7. Online practice Zumba – disadvantages
8. Physical benefits of practicing Zumba

(5 x 4 = 20)

### PART B

#### SKILL ASSESSMENT (60 Marks)

Students have to submit 10 lesson plans of Zumba and Aerobics moves. Each lesson plan should include the following

1. Objectives
2. Instructions
3. Explanation
4. Equipments used
5. Benefits
6. Procedure of activity
7. Do's and don'ts

Reg No.....

Name.....

### B.VOC DEGREE EXAMINATION

#### Fourth Semester Model Question Paper

#### BOCG401: SOFT SKILLS AND PERSONALITY DEVELOPMENT

**Part A (Short Answer Questions)**

1. Answer any 10 questions (each questions carries 2 marks each
2. What is etiquette?
3. Illustrate the importance of body language?
4. What is the importance of personal values for a person?
5. Explain professional etiquette.?
6. How problem solving skill can be developed?
7. What are the steps to be taken to develop good business relationship?
8. Why personal grooming is important in business etiquette?
9. Define job oriented skills?
10. Why it is said that problem solving skill is important in interpersonal relationship?
10. Define telephone etiquette?
11. Define organizational skills?
12. Explain the importance of team work?

(2 x 10 = 20)

**Part B**

**(Descriptive / Short Essay Questions) Answer any 6 of the following questions Each question carries 5 Marks**

13. Explain the importance of interpersonal skill.
14. Why, knowing one self is important in confidence building?
15. How can we develop personal values to manage time and stress?
16. Illustrate organizational skills?
17. Why non verbal communication is important in interpersonal communication?
18. What are the skills required to participate actively in a group discussion
19. How a mock group discussion will help a candidate to excel in group discussion?
20. What are the different types of etiquette that a person should be aware of?
21. Explain the importance of team work as an organizational skill

(5 x 6 = 30)

**Part C**

**(Long Essays) Answer Any two of the following Each question carries 15 Marks**

22. Define etiquette? Why it is important for both personal and professional life?
23. Why group discussions are used as a tool to evaluate candidates in an interview? How can a person excel while participating in a group discussion?

24. Define organizational skills and its importance in developing the organization?
25. Define non verbal communication? Why it is said that it is important in developing personality of a person and also for social skills

(15 x 2 = 30)

Reg No.....

Name.....

**B.VOC DEGREE EXAMINATION**

**Fourth Semester Model Question Paper**

**MFTG402: PROGRAMME DESIGN & EXERCISE PRESCRIPTION (AOC)**

Time: Three Hours

Maximum: 80 Marks

## **PART A**

**Answer any 5 questions. Each question carries 4 marks.**

1. Fitness Assessment & Evaluation (AOC)
2. Advantages of fitness assessments and importance of assessments ?
3. List of correctable and non correctable deviation ?
4. How to use RPE Scale?
5. What are the health related assessments and skill related assessments?
6. How to calculate BMI?
7. Explain 1RM strength test ?
8. Different between VT1 and VT2 ?
9. Common postural deviations and correction ?

(5 x 4 = 20)

## **PART B**

### **SKILL ASSESSMENT (60 Marks)**

Students have to submit 10 lesson plans Designing exercise programme considering age groups and disease (obesity, osteoporosis, asthma, cardiac disease etc..). Each lesson plan should include the following

1. Objectives
2. Instructions
3. Explanation
4. Equipments used
5. Benefits
6. Procedure of activity
7. Do's and don'ts

Reg No.....

Name.....

## **B.VOC DEGREE EXAMINATION**

### **Fourth Semester Model Question Paper**

### **MFTG403: INJURY ASSESSMENT AND RISK MANAGEMENT (AOC)**



Time: Three Hours

Maximum: 80 Marks

**PART A**

**Answer any 5 questions. Each question carries 4 marks.**

1. Aim of first aid
2. First aid for nose bleeding
3. What is DR ABC's of first aid
4. Explain CPR
5. Inidan Samaritan Protection guidelines
6. What is delayed onset muscle soreness
7. Characteristics of a first aider
8. Explain about the prevention of injuries

(5 x 4 = 20)

**PART B**

**SKILL ASSESSMENT (60 Marks)**

Students have to submit 10 lesson plans includes, Sports injuries & their management and Red flag and emergencies. Each lesson plan should include the following

1. Objectives
2. Instructions
3. Explanation
4. Equipments used
5. Benefits
6. Procedure of activity
7. Do's and don'ts

Reg No.....

Name.....

**B.VOC DEGREE EXAMINATION**

**Fourth Semester Model Question Paper**

**MFTS404: CORE STRENGTHENING & PILATES (AOC)**

Time: Three Hours

Maximum: 80 Marks

**PART A**

**Answer any 5 questions. Each question carries 4 marks.**

1. History of pilates
2. What is core muscles
3. Importance of breathing in pilates
4. Explain modified pilates stance
5. Exercise for shoulder shrug
6. Principles of pilates
7. Benefits of pilates
8. Difference between yoga and pilates

(5 x 4 = 20)

**PART B**

**SKILL ASSESSMENT (60 Marks)**

Students have to submit 10 lesson plans of Pilates exercise (upper and lower body). Each lesson plan should include the following

1. Objectives
2. Instructions
3. Explanation
4. Equipments used
5. Benefits
6. Procedure of activity
7. Do's and don'ts

Reg No.....

Name.....

**B.VOC DEGREE EXAMINATION**

**Fourth Semester Model Question Paper**

**MFTS405: SELF DEFENCE II – FITNESS APPROACH – JUDO & KURASH (AOC)**

Time: Three Hours

Maximum: 80 Marks

**PART A**

**Answer any 5 questions. Each question carries 4 marks.**

1. What is mean by off balance in judo
2. Classification of Judo Techniques
3. History of Kurash
4. Types of techniques in Kurash
5. Dimensions of Mat area Kurash / Judo
6. Explain 8 terminology in Judo / Kurash
7. Type of rolling techniques in Judo
8. Kurash Referee's duties on mat

(5 x 4 = 20)

**PART B**

**SKILL ASSESSMENT (60 Marks)**

Students have to submit 10 lesson plans including Judo and Kurash Techniques (Breakfall, Techniques, Rolling etc...). Each lesson plan should include the following

1. Objectives
2. Instructions
3. Explanation
4. Equipments used
5. Benefits
6. Procedure of activity
7. Do's and don'ts

Reg No.....

Name.....

**B.VOC DEGREE EXAMINATION**

**Fifth Semester Model Question Paper**

**BOCG501: ENVIRONMENTAL STUDIES (T)**

**PART A**

**Answer any ten of the following questions, each in two or three sentences.**

**Each question carries 2 marks**

1. Differentiate between renewable and non-renewable energy resources.
2. Define environment.
3. What is biodiversity?
4. Define EIA.
5. Explain in-situ and ex-situ conservation of biodiversity.
6. What is sustainable development?
7. Explain Human Development Index.
8. What is Biodiversity Register?
9. What are point and non-point sources of water pollution?
10. Explain Food Webs.
11. Explain anthropogenic disaster.
12. What is nuclear pollution?

(10 x 2 = 20)

**PART B**

**Answer any six of the following questions, each in about 100 words**

**Each question carries 5 marks**

13. What is the significance of wetland ecosystem?
14. Explain the structure and function of ecosystem.
15. Write the impact of air pollutants on environment.
16. Explain water quality standards and its control measures.
17. Write a short note on biodiversity hotspots.
18. Explain Gandhian Principles on Sustainability.
19. How can the growing energy needs of the population be solved? Give suggestions.
20. Explain Earth's structure.
21. What is bio geographical classification of India?

(6 x 5 = 30)

**PART C**

**Answer any two of the following questions, each in about 300 words.**

**Each question carries 15 marks**

22. Explain the impact of human population on environment.
23. Write a note on the history of Environmental protection.
24. What are major laws and acts of environmental protection in India? Explain its significance.

25. Explain resource utilization and its impact on environment?

(2 x 15 = 30)

Reg No.....

Name.....

**B.VOC DEGREE EXAMINATION**

**Fifth Semester Model Question Paper**

**MFTG502: HEALTH AND FITNESS PSYCHOLOGY (T)**

Time: Three Hours

Maximum: 80 Marks

## **PART A**

**Answer any 10 questions. Each question carries 2 marks.**

1. Define personality.
2. What is the meaning of psychology?
3. Write down any 2 definition of motivation?
4. Define sports personality?.
5. Define motivation?
6. List the different stages of growth.
7. Define aggression.
8. Distinguishe feedback and it's implications?
9. State the law of readiness in learning.
10. Define eccentric motivation?
11. Define psychology.
12. What are the types of learning?

(10 x 2 = 20)

## **PART B**

**Answer any 6 questions. Each question carries 5 marks.**

13. Write about the scope of psychology in Physical Education.
14. State effect of sports on personality.
15. Explain theories of motivation?
16. Explain any two theories of learning.
17. Explain Extrinsic and intrinsic motivation.
18. Write about Personality traits as predictors of health behavior?
19. Mental preparation during practice & competition.
20. Write note on emotional effect on performance?
21. Explain the law of effect in learning.

(6 x 5 = 30)

## **PART C**

**Answer any 2 questions. Each question carries 15 marks.**

22. Describe in detail the theories of learning.
23. Elaborate the Theories and models of exercise behavior?
24. Describe in detail the influence of aggression on sports performance.
25. Explain Behavioural tendencies and behavioural strategies?

(2 x 15 = 30)

Reg No.....

Name.....

### **B.VOC DEGREE EXAMINATION**

#### **Fifth Semester Model Question Paper**

#### **MFTG503: INTRODUCAION TO RESEARCH METHDODOGY (T)**

Time: Three Hours

Maximum: 80 Marks

## **PART A**

**Answer any 10 questions. Each question carries 2 marks.**

1. Define Research and need and importance of research.
2. List the types of research.
3. Define hypothesis.
4. List the type of experimental designs.
5. Define type I error.
6. Explain Documentation of experiment?
7. Define null hypothesis?.
8. Define plagiarism?
9. List the factors affecting research?
10. State the importance of level of significance.
11. Define sampling technique?
12. Define data collection?

(10 x 2 = 20)

### **PART B**

**Answer any 6 questions. Each question carries 5 marks.**

13. Explain the measure of central tendency?
14. Describe Null hypothesis and alternative hypothesis,?
15. Explain Type I and Type II errors?
16. Explain descriptive statistics.
17. Describe Tabulation and graphical representation?
18. Explain primary sources.
19. Write about scope of research in physical education and sports.
20. Explain the Chi-square test?
21. Explain level of significant?

(6 x 5 = 30)

### **PART C**

**Answer any 2 questions. Each question carries 15 marks.**

22. Describe in detail the need and importance of research in physical education and sport.
23. Explain the types of research.
24. Explain stages in statistical testing of hypothesis?
25. Explain the steps in research?

(2 x 15 = 30)

Reg No.....

Name.....

## **B.VOC DEGREE EXAMINATION**

### **Fifth Semester Model Question Paper**

#### **MFTS504: SELF DEFENCE III- FITNESS APPROACH - KRAV MAGA (AOC)**

Time: Three Hours

Maximum: 80 Marks

## **PART A**

**Answer any 5 questions. Each question carries 4 marks.**

1. History of Krav Maga
2. Principles of Krav Maga
3. Types of rolling in Krav Maga
4. What are the Equipments used in Krav Maga for self defense practice
5. Psychological benefits of Practicing Krav Maga for Children
6. How women can improve self confidence practicing Krav Maga
7. Explain types of stance in Krav Maga
8. Explain health benefits of Krav Maga

(5 x 4 = 20)

## **PART B**

### **SKILL ASSESSMENT (60 Marks)**

Students have to submit 10 lesson plans of Krav Maga Practice Sessions. Each lesson plan should include the following

1. Objectives
2. Instructions
3. Explanation
4. Equipments used
5. Benefits
6. Procedure of activity
7. Do's and don'ts

Reg No.....

Name.....

### **B.VOC DEGREE EXAMINATION**

#### **Fifth Semester Model Question Paper**

#### **MFTS505: ADVANCE PERFORMING AND PERIODIZATION (AOC)**

Time: Three Hours

Maximum: 80 Marks

## **PART A**



**Answer any 5 questions. Each question carries 4 marks.**

1. What is plyometrics? Two advantages of plyometric exercises ?
2. Why is Plyometric Training important for sport?
3. Describe 5 speed drills and its methods?
4. Benefits of agility Training?
5. Types of Agility Drills and its methods
6. Speed Training and What are various factors of speed?
7. What is Macrocycle and microcycles?
8. Importance of planning in training sections ?

(5 x 4 = 20)

## **PART B**

### **SKILL ASSESSMENT (60 Marks)**

Students have to submit 10 lesson plans which includes plyometric exercise, speed and agility drills considering periodization. Each lesson plan should include the following

1. Objectives
2. Instructions
3. Explanation
4. Equipments used
5. Benefits
6. Procedure of activity
7. Do's and don'ts

Reg No.....

Name.....

## **B.VOC DEGREE EXAMINATION**

### **Sixth Semester Model Question Paper**

#### **BOCG601: ENTREPRENEURSHIP DEVELOPMENT (T)**

Time: Three Hours

Maximum: 80 Marks

### **SECTION A**

**Answer any ten of the following questions, each in two or three sentences.**

**Each question carries 2 marks**

1. Define Entrepreneurship.
2. What is long term and short term plans ?

3. Mention the key skills of an entrepreneur.
4. What is a small scale enterprise?
5. Define financial planning.
6. Define Sole proprietorship business.
7. Define Competency.
8. Expand NIESBUD?
9. What is meant by term ownership?
10. What is an incentive?
11. What is tourism entrepreneurship?
12. Differentiate manager and entrepreneur.

(10x2=20)

### **SECTION - B**

**Answer any six of the following questions, each in about 100 words.**

**Each question carries 5 marks**

13. Explain the types of entrepreneurs.
14. Discuss in detail about the entrepreneurial process.
15. Explain the role and importance of MSMEs in developing countries.
16. Write a note on SIDBI , its functions and channels of assistance.
17. Discuss on various schemes of ministry of tourism for tourism entrepreneurs.
18. Distinguish between ownership structure and organizational framework.
19. Write a note on HR issues faced by an entrepreneur.
20. Discuss in detail on financial institutions for small scale enterprises.
21. Briefly explain the entrepreneurial skills for tourism and hospitality industry.

(6x5= 30)

### **SECTION – C**

**Answer any two of the following questions, each in about 300 words each.**

**Each question carries 15 marks**

22. Explain in detail about the role of entrepreneurs in development of tourism industry.
23. Briefly explain about the role of technology determination.
24. Write an essay on HR issues in various types of business units and they can be solved.
25. Write an essay on institutional support to entrepreneurs in India.

(2x15= 30)

Reg No.....

Name.....

## **B.VOC DEGREE EXAMINATION**

### **Sixth Semester Model Question Paper**

#### **MFTG602: FITNESS CENTRE MANAGEMENT (T)**

Time: Three Hours

Maximum: 80 Marks

### **PART A**

**Answer any 10 questions. Each question carries 2 marks.**

1. Define fitness center management.

2. List the factors affecting fitness center.
3. Define General Health and Fitness Facility Guidelines? .
4. Write about types of equipment
5. State the importance of equipment and supplies.
6. Write about the meaning of facility design?
7. List any four guidelines in selecting equipment and supplies.
8. Define Location of resistance training room?
9. Explain Equipment Placement?
10. Define legal consultation?
11. Explain Equipment Layout?
12. Write about stock keeping, repair and maintenance?

(10 x 2 = 20)

### **PART B**

**Answer any 6 questions. Each question carries 5 marks**

13. Briefly explain importance and scope of management in fitness center?.
14. What are the essential qualities of a good budget?
15. What is procedure to keep documents Payment plans, billing and pricing option?
16. Describe briefly about Understanding Legal Implications, legal consultation?
17. Evaluate Manufacturers' Business Practices?
18. What are the factors affecting sports fitness center?
19. Explain the Develop Functional Criteria for the Equipment?
20. Describe the Training Specific Areas?
21. Explain sponsorship?

(6 x 5 = 30)

### **PART C**

**Answer any 2 questions. Each question carries 15 marks.**

22. Prepare a complete layout for a fitness center?.
23. Elaborate legal issues and responsibility?
24. Explain Describe briefly about the five basic business model sole?
25. Risk management Strategies. Written Policies?

(2 x 15 = 30)

Reg No.....

Name.....

## **B.VOC DEGREE EXAMINATION**

### **Sixth Semester Model Question Paper**

#### **MFTG603: RECOVERY AND WELLNESS (AOC)**

Time: Three Hours

Maximum: 80 Marks

### **PART A**

**Answer any 5 questions. Each question carries 4 marks.**

1. Concept of wellness and fitness
2. Dimensions of Wellness
3. Recovery strategies for wellness
4. What is sports massage
5. Duty of a Masseur
6. Principles of massage
7. Type of Massage techniques
8. How massage help for sports performance

(5 x 4 = 20)

## **PART B**

### **SKILL ASSESSMENT (60 Marks)**

Students have to submit 10 lesson plans of Massage techniques, stretching and foam roller techniques (affected Muscles, joints are explained). Each lesson plan should include the following

1. Objectives
2. Instructions
3. Explanation
4. Equipments used
5. Benefits
6. Procedure of activity
7. Do's and don'ts

Reg No.....

Name.....

**B.VOC DEGREE EXAMINATION**  
**Sixth Semester Model Question Paper**  
**MFTS604: YOGA THERAPY (AOC)**

Time: Three Hours

Maximum: 80 Marks

**PART A**

**Answer any 5 questions. Each question carries 4 marks.**

1. What is Yoga therapy
2. Benefits of Kriyas
3. Meditation and Performance
4. Effect of yogasana on Muscular system
5. Explain Yoga therapy for sports injury
6. Explain biomechanics of Tadasana
7. What are the role of Yogic counselling in sports
8. Role of Mudra in Yogasana

(5 x 4 = 20)

**PART B**

**SKILL ASSESSMENT (60 Marks)**

Students have to submit 10 lesson plans of Therapeutical Yogasana (Role of Asana, Pranayama, Kriya on various system in relation to an individual's Physiological and psychological disorders) Each lesson plan should include the following

1. Objectives
2. Instructions
3. Explanation
4. Equipments used
5. Benefits
6. Procedure of activity
7. Do's and don'ts

Reg No.....

Name.....

**B.VOC DEGREE EXAMINATION**

**Sixth Semester Model Question Paper**

**MFTS605: SELF DEFENCE IV- FITNESS APPROACH- KALARIPAYATTU (AOC)**

Time: Three Hours

Maximum: 80 Marks

**PART A**

**Answer any 5 questions. Each question carries 4 marks.**

1. What is meant by Kalari Niyama
2. Health Benefits practicing Kalaripayattu
3. What are the types of Kalaripayattu
4. Name of weapon used in Northern Kalaripayattu
5. What are competition items in Southern Kalaripayattu
6. Explain Kalari breathing
7. Type of cultural tourism and its benefits
8. Describe Martial arts tourism in Kerala

(5 x 4 = 20)

**PART B**

**SKILL ASSESSMENT (60 Marks)**

Students have to submit 10 lesson plans of Kalaripayattu techniques for self defense. Each lesson plan should include the following

1. Objectives
2. Instructions
3. Explanation
4. Equipments used
5. Benefits
6. Procedure of activity
7. Do's and don'ts