

B.Tech. (Agricultural Engineering): Third Semester

Course-wise Syllabus with Teaching Schedules

Semester	: III
Course No.	: AEC-234
Credit Hrs. : 2(0+2)	
Course Title : Physical Education, First Aid, Yoga Practices and Meditation	
Gradial Common Course across all UG Degrees	

SYLLABUS

Objectives : (i) To make the students aware about Physical Education, First Aid and Yoga Practices,
(ii) To disseminate the knowledge and skill how to perform physical training, perform first aid and increase stamina and general wellbeing through yoga.

PRACTICAL

Physical Education; Training and Coaching- Meaning and concept; Aerobic and Aerobic exercises; Calisthenics, Weight Training, Circuit Training, Interval Training, Fartlek Training; Effect of Exercise on Muscular, Respiratory, Circulatory and Digestive systems; Balanced Diet and Nutrition- Effect of Diet on Performance; Physiological Changes due to ageing and Role of exercise on ageing process; Personality, its dimensions and types, Role of Sports in Personality Development; Motivation and Achievements in Sports; Learning and Theories of Learning; Adolescent Problems and its Management; Posture; Postural Deformities, Exercises for Good Posture.

Yoga: History of Yoga, Types of Yoga, Introduction to Yoga.

- Asanas (Definitions and Importance)- Padmasan, Gaumukhasan, Bhadrasan, Vajrasan Shashakasan, Pashchimothasan, Ushtrasan, Tadasan, Padhastasan, Ardhchandrasan, Bhujangasan, Utanpadasan, Sarvanganasan, Parvatasan, Patangasan, Shishupalanasan- left & right leg, Pavanmuktasan, Halasan, Sarpasan, Ardhhanurasan, Shawasan.
- Suryanamaskar, Pranayama (Definitions and Importance)- Omkar, Suryabhedan, Chandrabhedan, Anulom, Vilom, Shitali, Shitkari, Bhastrika, Bhramari.
- Meditation (Definitions and Importance)- Yogic Kriyas (Kapalbhati), Tratak, Jalneti and Tribandh Mudras (Definitions and Importance)- Gyanmudra, Dhyanmudra, Vayumudra, Akashmudra, Prutvimudra, Shunyamudra, Suryamudra, Varunmudra, Pranmudra, Apanmudra, Vyanmudra, Uddanmudra.
- Role of Yoga in Sports.
- Teaching of Asanas- Demonstration, Practice, Correction and Practice.

History of Sports and Ancient games, Governance of Sports in India; Important Sporting events-Awards in sports, History, Latest rules, Measurement of playfield, Specifications of equipment, Skill, Technique, Style and Coaching of major games (Cricket, Football, Table tennis, Badminton, Volleyball, Basketball, Kabaddi and Kho-Kho and Athletics).

Need and Requirement of First Aid: First Aid techniques, Equipment and Upkeep First Aid techniques; First aid-related with respiratory system; First aid-related with Heart, Blood and Circulation; First Aid-related with wounds and injuries; First Aid-related with Bones, Joints muscles related injuries; First Aid-related with Nervous system and Unconsciousness; First Aid-related with Gastrointestinal Tract, Skin Burns; First Aid-related with Bites and stings, poisoning; First Aid-related with Sense organs; Handling and transport of injured traumatized persons- Sports injuries and their Treatments.

TEACHING SCHEDULE

PRACTICAL [AEC-234]

Exercise No.	Topic	Exercise Title / Sub-topics
1	Physical Education	To study the training and coaching- Meaning and concept of Physical Education
2 - 7	Methods of Training	To study the method of training - Aerobic and Aerobic exercises
		To study the method of training - Calisthenics
		To study the method of training - Weight Training
		To study the method of training - Circuit Training
		To study the method of training - Interval Training
		To study the method of training - Fartlek Training
8	Effect of Exercise	To study the effect of exercise on Muscular, Respiratory, Circulatory and Digestive systems
9	Balanced Diet and Nutrition	To study the Balanced Diet and Nutrition- Effect of diet on performance
10	Physiological Changes	To study the physiological changes due to ageing and role of exercise on ageing process
11	Personality Development	To study the dimensions and types - Role of sports in personality development

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12	Motivation and Achievements in Sports	To study the Motivation and Achievements in Sports
13	Learning and Theories of Learning	To study the Learning and Theories of Learning
14	Adolescent Problems and its Management	To study the Adolescent Problems and its Management
15	Posture	To study the Postural Deformities, Exercises for Good Posture
16 - 22	Yoga	To study the Introduction, History and Types of Yoga
		To study the Asanas: Padmasan, Gaumukhasan, Bhadrasan, Vajrasan, Shashakasan, Pashchimotasan, Ushtrasan, Tadasan, Padhastasan, Ardhchandrasan, Bhujangasan, Utanpadasan, Sarvangasan, Parvatasan, Patangasan, Shishupalanasan- left leg- right leg, Pavanmuktasan, Halasan, Sarpasan, Ardhhanurasan, Shawasan
		To study the Suryanamaskar, Pranayama, Omkar, Suryabhedan, Chandrabhedan, Anulom, Vilom, Shitali, Shitkari, Bhastrika, Bhramari
		To study the Meditation, Yogic Kriyas (Kapalbhati), Tratak, Jalneti and Tribandh
		To study the Mudras: Gyanmudra, Dhyanmudra, Vayumudra, Akashmudra, Prutvimudra, Shunyamudra, Suryamudra, Varunmudra, Pranmudra, Apanmudra, Vyanmudra, Uddanmudra
		To study the Role of Yoga in Sports
		To study the Demonstration, Practice, Correction and Practice of Asanas
23 - 26	Sports	To study the History of Sports and Ancient games
		To study the Governance of Sports in India
		To study the Awards in Sports, History, Latest rules, Measurement of playfield, Specifications of equipment in important sporting events
		To study the Skill, Technique, Style and Coaching of major games (Cricket, Football, Table Tennis, Badminton, Volleyball, Basketball, Kabaddi and Kho-Kho and Athletics)

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27 - 32	First Aid	To study the Need and Requirement of First Aid- First Aid techniques, Equipment and Upkeep
		To study the First aid related with Respiratory system, Heart, Blood and Circulation
		To study the First aid related with Wounds and Injuries, Bones, Joints muscles related injuries
		To study the First aid related with Nervous system Unconsciousness, Sense organs
		To study the First aid related with Gastrointestinal Tract, Skin Burns, Bites and Stings, Poisoning
		To study the Handling and Transport of Injured Traumatized Persons- Sports Injuries and their Treatments