

**FACULTY OF MEDICINE****DEPARTMENT OF MEDICINE****MPMRVAC01- First Aid and Emergency Care****Learning objective**

The objective of this course is student will be able to acquire knowledge and demonstrate skill in providing First Aid treatment in emergencies that may be met in any settings.

The following are the objectives of course

- Understand the scope of First Aid and role of First Aid
- Comprehend the ways to manage and incident
- Demonstrate the techniques of assessing a casualty
- Describe the life saving measures for an unconscious casualty
- Explain First Aid management for respiratory problems
- Describe First Aid measures for wounds and circulation problems
- Identify a bone joint and muscle injuries and provide appropriate First Aid measures
- Describe First Aid process for the effects of heat and cold
- Provide First Aid measures for foreign objects, poisoning bits and stings
- Provide First Aid for emergency conditions
- Identify and give First Aid treatment in community emergencies and natural disorders
- Describe the techniques and equipment's for First Aid

**Unit 1**

Becoming a First Aider, What is a first aider?, How to prepare yourself, Protection from infection, Dealing with a casualty, Requesting help, The use of medication, Remember your own needs. Managing an incident Action at an emergency, Traffic accidents, Fires, Electrical incidents, Water incidents, Major incident/Mass casualties Assessing a Casualty Assessing the sick or injured, Mechanisms of injury, Primary survey, Secondary survey, Head-to-toe examination, Monitoring vital signs. The Unconscious Casualty

Breathing and circulation, Life-saving priorities, Unconscious adult, Unconscious child, Unconscious infant, How to use an AED

## **Unit II**

Respiratory problems The respiratory system, Hypoxia, Airway obstruction, Choking adult, Choking infant, Choking child, Hanging and strangulation, Inhalation of fumes, Drowning, Hyperventilation, Asthma, Croup, Penetrating chest wound. Wounds and circulation The heart and blood vessels, Bleeding and types of wound, Shock, Severe external bleeding, Impalement, Amputation, Crush injury, Cuts and scrapes, Bruising, Blisters, Infected wound, Foreign object in a wound, Scalp and head wounds, Eye wound, Bleeding from the ear, Nosebleed, Knocked-out adult tooth, Bleeding from the mouth, Finger wound, Wound to the palm, Wound at a joint crease, Abdominal wound, Vaginal bleeding, Bleeding varicose vein

## **Unit III**

Bone, Joint and muscle injuries The skeleton, Bones, muscles and joints, Fractures, Dislocated joint, Strains and Sprains, The nervous system, Head injury, Facial injury, Lower jaw injury, Cheekbone and nose injury, Collarbone injury, Shoulder injury, Upper arm injury, Elbow injury, Forearm and wrist injuries, Hand and finger injuries, Rib injury, Fractured pelvis, Back pain, Spain injury, Hip and thigh injuries, Lower leg injuries, Knee injury, Ankle injury, Foot and toe injuries, Cramps Effects of heat and cold The skin, Assessing a burn, Severe burns and scalds, Minor burns and scalds, Burns to the airway, Electrical burn, Chemical burn, Chemical burn to the eye, Flash burn to the eye, Incapacitant spray exposure, Dehydration, Sunburn, Heat exhaustion, Heatstroke, Hypothermia, Frostbite

## **Unit IV**

Foreign objects, poisoning, bites & stings The sensory organs, Splinter, Embedded fishhook, Swallowed foreign object, Foreign object in the eye, Foreign object in the ear, Foreign object in the nose, How poisons affect the body, Types of poisons, Swallowed poisons, Drug poisoning, Alcohol poisoning, Animal and human bites, Insect sting, Tick bite Other bites and stings, Snake bite, Stings from sea creatures, Marine puncture wound. Medical conditions Angina, Heart attack, Stroke, Diabetes mellitus,

Hyperglycemia, Hypoglycemia, Seizures in adults, Seizures in children, Fever meningitis, Fainting, Allergy, Anaphylactic shock, Headache, Migraine, Sore throat, Earache and toothache, Abdominal pain, Vomiting and diarrhea, Childbirth, Emergency childbirth

### **Unit V**

Techniques and Equipment Removing clothing, Removing headgear, Casualty handling, First aid materials, Dressings, Cold compresses, Principles of bandaging, Roller bandages, Tubular gauze bandages, square knots, hand and foot cover, Arm sling, Elevation sling, improvised slings.  
Unit - XII - Emergency First Aid Action in an emergency, CPR for an adult, chest compression only CPR, CPR for an infant, child, Community emergencies such as fire explosions, earth quakes, flood and famine

### **References:**

American college of emergency physicians, First Aid manual, 2014. 5th edition, Dorling Kindersley, London

Clement, 2013. Text book on First Aid & Emergency Nursing, First edition, JP brothers.

Philip Jevon, Emergency care and First Aid for Nurses, A practical guide, Churchill Living Stone, 2007.

The authorized manual of St. John Ambulance, St. Andrew's Ambulance association and the British red cross society, First Aid manual, 9th edition, Dorling Kindersley, London.