

Baba Farid University of Health Sciences



Ordinances & Syllabus

**Certificate course Emergency-cum-Ambulance Attendant
(One Year Certificate Course)**

Faridkot -151203

Ordinances

(Certificate Course in Emergency-cum-Ambulance Attendant)

1. Duration of course

There shall be a course leading to Certificate Course in Emergency-cum-Ambulance Attendant under the Faculty of Medical Sciences. The duration of the course shall be One Year.

2. Eligibility

a) A person who attains the age of 17 years or more as on 31st of December of the year of admission and has passed the 10th Examination or any recognized examination as equivalent thereto shall be eligible to join the Certificate Course in Emergency-cum-Ambulance Attendant.

OR

b) Any other examination recognized by the Board of Management of this University as an equivalent course / examination thereto, from time to time.

3. Medium of Instructions:

The medium of instruction during the course and examinations shall be English/Punjabi.

4. Examination Schedule:

4.1 The examination shall be held twice a year in the months of May/June and November/December or on such other dates as may be decided by the Board of Management on the recommendation of Faculty of Medical Sciences and Academic Council.

4.2 Normally, the University shall conduct not more than two examinations in a year, for any subject, with an interval of not less than four and not more than six months between the two examinations.

4.3 The last date by which examination forms and fee must reach the Registrar shall be as follows :-

Examinations	without late fee	with late fee of Rs.200/-	with late fee of Rs.500/-	with late fee of Rs.1500/-
May/June	March 1	March 15	March 31	April 15
Nov./Dec.	Sept. 15	Sept. 30	Oct. 15	Oct. 31

Note: Vice-Chancellor may permit acceptance of examination form and fee ten days before the commencement of examination with a late fee of Rs.2000/-. The fee structure is revisable by the University from time to time.

5. **One Year Certificate Course in Emergency-cum-Ambulance Attendant**

The One Year Certificate Course in Emergency-cum-Ambulance Attendant shall be open to a person who

- a) has been enrolled for a period of one year preceding the examination in affiliated Colleges/Institutions to this University.
- b) has submitted his/her name to the Controller of Examination/Registrar by the Principal of the College/Institutions with the following certificates:-
 - i) of having attended separately in theory and practical/clinical not less than 75% percent of the lectures delivered and practicals conducted in each of the subjects prescribed for the examination provided that deficiency in the number of lectures delivered and practicals conducted may be condoned by the Principal to the extent of 10% of the lectures delivered.
 - ii) of having secured at least 50% marks of the total marks fixed for internal assessment in each subject, separately, in order to be eligible to appear in all University examinations.
 - iii) of good moral character.

Note: 1) Internal Assessment shall be submitted to the University at least two weeks before the commencement of theory examinations or within one week from the issuance of Roll Numbers by the University. All the colleges shall adopt uniform criteria for Internal Assessment as follows:-

- a) Attendance above 90% to be acknowledged with 10% extra weight-age for Internal Assessment.
- b) At least two tests to be held in each year in addition to the pre-final (Send Up) examination. The Internal Assessment should be the average of all awards of these tests taken together.
- c) **Criteria for calculation of Internal Assessment**

1. House Examinations	- 80%
2. Attendance (above 90%)	- 10%
3. Subject assessment (candidate's conduct and extra curricular participation)	- 10%

- d) Additional mandatory requirement for Internal Assessment to be observed by all colleges.
 - i) All test marks obtained by candidates will be displayed on Notice Boards of respective departments as and when they are awarded.
 - ii) All computations of Internal Assessment of the entire class made by the HOD of the department shall be displayed on the notice board of the department showing individual test marks, advantage of all tests, attendance advantage and subjective assessment and the total Internal Assessment thus derived for at least one week before sending the awards to the Principal's office.

- iii) Professor Incharge/HOD preparing Internal Assessment shall certify that the detailed assessment of the entire class has been displayed on the department Notice Board for at least one week prior to its being submitted for onward transmission to the University and that adequate opportunity has been given to all the students to file any objections and that the same have been addressed satisfactory.
 - iv) The Principal forwarding the Internal Assessment to the University shall countersign the above referred certificate of the HOD/Professor Incharge preparing the Internal Assessment.
 - e) The re-appear/fail students will be re-assessed every time for the purpose of Internal Assessment.
2. If a candidate fulfils the condition laid down in clause 5 above for one or more subject (s) he/ she may be allowed to take the examination in such subject (s) in which he/ she fulfils the requirements.
 3. Every candidate before appearing in First Year Examination must have cleared House Examination securing at least 50 percent marks in both theory as well as practical separately.
- c) The One Year Certificate Course in Emergency-cum-Ambulance Attendant Examination shall be held in Nov/Dec and the supplementary within six months of the Final Examination.
 - d) The Six Months' Certificate Course in Emergency-cum-Ambulance Attendant examination shall be held in the following subjects and candidate shall be required to pass all the subjects:-

Subject Code/ Paper	Subject	Theory	Practical	Internal Assessment	Total Marks
CCECAA-01/ Paper I	Module I-A	40	40	20	100
CCECAA-02/ Paper-II	Module I-B	40	40	20	100
CCECAA-03 / Paper-III	Module-II	40	40	20	100
CCECAA-04 / Paper-IV	Module-III	40	40	20	100
	Total	160	160	80	400

- i) Each theory paper shall be of three hours duration.
- ii) The minimum number of marks to pass the examination shall be 50% in theory and 50% in practical including Internal Assessment in each subject separately.
- iii) The candidate who will absent himself/herself from the examination will be deemed to have been failed in that subject.
- iv) A candidate who passes in one or more subjects shall be exempted from appearing in these subject at a subsequent examination, but the candidate must pass the examination in a maximum of three (1+2) +1 (mercy chance on the discretion of Vice-Chancellor), failing which he/she will not be allowed to continue his studies.

7. Grace Marks:

There shall be grace marks up to 5 (five) be given to the best advantage of the students irrespective of Theory or Practical examinations.

8. Appointment of Examiners:

i) There shall be two examiners –one internal and one external.

ii) Internal Examiner shall be appointed by annual rotation from amongst the Professor & Head /Professors/Associate Professors and Assistant Professors with at least three years teaching experience. In case of non-availability of Professors/Associate Professors/Assistant Professor in the department the teacher working in another Medical College affiliate to this University, who fulfils the minimum requirements to be an examiner may be appointed as Internal Examiner.

iii) The examiners shall be appointed by the University from the teachers working in the Medical Colleges affiliated to it, preferably from the colleges where this course is being run, on the recommendations of the Board of Studies in Medical Sciences and Faculty of Medical Sciences.

9. Paper setting and moderation of Question Papers:

The University may get each paper set from External Examiner only. The moderation of question papers may be got done under the directions of the Vice-Chancellor, if necessary.

10. Evaluation of Answer Books:

The answer books shall be got evaluated by putting fictitious roll numbers thereon or spot evaluation (table marking) or any other method under the directions of the Vice-Chancellor.

11. Minimum pass marks:

A candidate shall be declared successful who has obtained a minimum of 50% in theory and 50% in practical including Internal Assessment separately.

A successful candidate on the basis of theory and practical marks taken together shall be classified as under: -

Second Class : A candidate obtaining 50% or more marks but less than 60% marks

First Class : A candidate obtaining 60% or more marks

First Class : A candidate obtaining 80% or more marks

with Distinction

12. Declaration of Result:

The Registrar/Controller of Examinations shall publish the result after the examination. The candidates shall be issued Detailed Marks Certificate through their Principals of colleges.

13. Award of Certificate:

On successfully passing the One Year Certificate Course in Emergency-cum-Ambulance Attendant, the candidate shall be awarded the Certificate in Emergency-cum-Ambulance Attendant.

SYLLABUS

Certificate Course in Emergency-cum-Ambulance Attendant

INTRODUCTION

The certificate course in Casualty-cum-Ambulance Attendant has been designed with an overall objective to prepare a cadre of manpower for ambulances in the field of care of trauma victims and resuscitation, who can provide care at least at hospital level as well as a first level management team at the site of trauma. Beside care of trauma patients, these trained personnel will also accompany and take care of any kind of patients during their referral to the health facilities. There are several institutions (including Government Medical College, Chandigarh) that offer similar courses.

OBJECTIVES OF THE COURSE

An ambulance – cum - casualty attendant upon successfully completing the certificate training program will be able to:

- Describe about human body and physiological functions of individual system.
- Describe basic information about the drugs used in the pre hospital trauma care.
- Describe on the various sterilization techniques and common infections in the pre hospital trauma care.
- Describe about various types of trauma and first aid measures to be taken during pre-hospital trauma care.
- Assess the patient and record vitals.
- Demonstrate the various procedures done for cardiopulmonary resuscitation.
- Demonstrate immobilization techniques, patient transfers in the pre hospital trauma care.

EMPLOYMENT OPPORTUNITIES

A certified Casualty – cum - Ambulance Attendant can take gainful employment in following areas:

- Government Hospitals.
- Private Multi-Specialty Hospitals.
- Private Nursing Homes.

The One Year Certificate Course shall have 3 modules as below:

S. No.	Module	Days X Hours	Total hours
1	Module 1A & 1B	45 X 6	270
2	Module 2	45 X 6	270
3	Module 3	45 X 6	270
Total			810

SYLLABUS

Certificate Course in Emergency-cum-Ambulance Attendant

Instructions to the Paper Setter

- a. Question paper will be showing subject code, subject name and total marks on the top of the question paper.
- b. Each question paper of individual subject will be carrying 40 (forty) marks.
- c. There will be 8(Eight) questions of 5 (five) marks each.
- d. All the questions will be compulsory.

SYLLABUS

MODULE 1 –A

CCECAA -01, PAPER I

Certificate Course in Emergency-cum-Ambulance Attendant

Module 1A- Theory

S. No.	Subject	Teaching Hours
1	Introduction to Trauma	1
2	Epidemiology of Trauma	1
3	Trauma – Causes	2
4	Trauma Systems - Components <ul style="list-style-type: none">• Injury Prevention• Pre hospital Care• Emergency Department Care• Interfacility Transportation• Trauma - Critical Care	5
5	Trauma Systems - Trauma Centres Levels Role	1
6	Introduction to Pre hospital Trauma System (PTS)	1
7	Pre hospital Trauma System (PTS) operation	5
8	Medico Legal Aspects in Trauma	1
9	Ethical issues in trauma	1
10	Wellbeing of the Trauma Technician	1
11	Social issues in Trauma	1
12	Psychological issues in trauma victims and attendants	1
13	Motivation Skills for Management of Trauma Victim	1
14	Leadership Training	1
15	Field Situations and Management Issues	2
16	Protection of Victim and Bystanders	1
17	Personal Safety	1
18	Managing Violence	2
19	Civil Disturbances	1
20	Disasters and Mass Causality	1
21	Awareness of Hazardous Waste	1
22	Record Keeping	1
23	Electrical Safety	2
24	Wireless Communication	1
25	Patient Examination and Assessment	5
26	Moving and Lifting of Patient	5

Module 1A- Practical

S. No.	Equipments and Procedures	Teaching Hours
1	Thermometers and Stethoscope	3
2	Blood Pressure Measurement Apparatus	4
3	Face Mask and Airway	4
4	Laryngoscope	4
5	Endotracheal Tube	4
6	Suction Machine	4
7	Lung Mask Airway	4
8	ICU Ventilators	8
9	Combi tube, Light Wand, Fastrack, Fibreoptic Bronchoscope	4
10	Defibrillator	4
11	Monitors <ul style="list-style-type: none"> • ECG • NIBP • CVP • Invasive BP • Capnography • Oxymetry 	6
12	Syringing and Infusion Pump	4
13	Basic Surgical Instruments	8
14	Extrication Equipments	7
15	Medical Gas Cylinders	4
16	Equipment Checking and Maintenance	7
17	Demonstrate the protective equipment used for <ul style="list-style-type: none"> • Rescue Operations • Violent Scenes • Crime Scenes • Electrocutation • Drowning 	10
18	Demonstration of Ambulance and Parts	10
19	Various types of Stretchers	4
20	Practical demonstration on Patient Transportation	8
21	Demonstration of Communication Devices	10

SYLLABUS

CCECAA -02, PAPER II

Certificate Course in Emergency-cum-Ambulance Attendant

MODULE 1 –B

Module-1B – Theory

S. No.	Subject	Teaching hours
ANATOMY		
1	Anatomy of Upper Limb	2
2	Anatomy of Lower Limb	2
3	Anatomy of Vertebral Column	4
4	Anatomy of Head & Neck	2
5	Anatomy of Central Nervous System	2
6	Anatomy of Chest and Respiratory System	2
7	Anatomy of Circulatory System	2
8	Anatomy of Genito-Urinary System	2
9	Anatomy of Abdomen and Gastrointestinal System	2
10	Anatomy of Ear, Nose, Throat	2
11	Anatomy of Eye	2
PHYSIOLOGY		
1	Physiology of Fluid and Electrolytes	2
2	Physiology of Circulatory System	2
3	Blood, Blood Groups, Blood Components	2
4	Physiology of Central Nervous System	2
5	Physiology of Respiratory System	2
6	Physiology of Genito-Urinary System	2
7	Physiology of Endocrine System	2
8	Physiology of Temperature Regulation	2
9	Pathophysiology of Pain	2
10	Physiology of Gastrointestinal System	2

PHARMACOLOGY		
1	I.V. Anaesthetic Drugs	1
2	Muscle Relaxants	1
3	Local Anaesthetics	1
4	Vasopressors/ Inotropes	1
5	Sedatives and Anxiolytic Drugs	1
6	Vasodilators	1
7	Antiarrhythmic Drugs	1
8	Analgesics	1
9	Potassium, Calcium	1
10	I/V Fluids	1
11	Blood Transfusion	2

12	Drugs used in Critically ill Patient	2
MICROBIOLOGY		
1	Cleaning and Sterilization of Trauma Equipments	1
2	Common Trauma Infections	1
3	Tetanus, Gas Gangrene	1
4	Hepatitis- B, C	2
5	HIV/AIDS	2

Module 1B- Practical

S. No.	Subject	Teaching Hours
ANATOMY		
1	Osteology <ul style="list-style-type: none"> • Demonstration of Bones and Joints of Upper Limb • Demonstration of Bones and Joints of Lower Limb • Demonstration of Bones and Joints of Vertebral Column • Demonstration of Skull and Mandible 	12
PHYSIOLOGY		
1	Pulse, Heart rate, Blood Pressure Measurement	6
2	Temperature Measurement	2
PHARMACOLOGY		
1	Demonstration of various types of I.V. Fluids	4
2	Demonstration of various types of I.V. Drugs	8
MICROBIOLOGY		
1	Demonstration of various Sterilization Equipments and Procedures	9
2	Universal Precautions and Safety Procedures	

SYLLABUS

CCECAA -03, PAPER III

Certificate Course in Emergency-cum-Ambulance Attendant

MODULE 11

Module II- Theory

S. No.	Subject	Teaching Hours
TRAUMA		
1	Patterns of injury in <ul style="list-style-type: none">• Blunt Trauma• Penetrating Trauma• Crush Injury• Blast Injury• Thermal Injury	1 1 1 1 1
2	First Aid in <ul style="list-style-type: none">• Bleeding Patient• Limb Injuries• Chest Injury• Abdominal Injury• Head Injury• Spinal Injury• Burns• Disaster and mass casualty• Electrocution• Poisoning	2 3 3 3 3 2 2 2 2 2
CARDIOPULMONARY RESUSCITATION		
1	Cardio Pulmonary Resuscitation	3
2	Describe the Chain of Survival	3
3	Oxygen Therapy	2
4	Adult Basic Life Support	2
5	CPR Techniques and Devices	3
6	Adjunct for Airway Control and Ventilation	3
7	Symptomatic Bradycardia and Tachycardia	2
8	Monitoring Medications	2
9	Post Resuscitation Support	2
10	Electrical Therapies - Defibrillation, Cardio version, Pacing	3
11	Anaphylaxis	1
12	Hypothermia/ Hyperthermia	2
13	Drowning	2
14	Non Cardiogenic Pulmonary Oedema	1

15	Electrical Shock	2
16	Paediatric Basic Life Support	3
17	Neonatal Resuscitation Guidelines	3
18	Transportation of Ante-natal woman in Labour Pains	5
19	Monitoring ECG, NIBP, Oxymetry, Temperature	5
GENERAL SURGERY		
1	Haemorrhage	4
2	Blood Transfusion and Complications	4
3	Shock	3
4	Burns	4
5	Maxillofacial Injuries	4
6	Position of vital structures in the neck and Assessment of Punctured Wound and Cervical Spine Fracture	1
7	Chest Trauma	3
8	Abdominal Injuries	6
9	Soft tissue Wound Management	4

Module II- Practical

S. No.	Subject	Teaching Hours
TRAUMA		
1	Patient Assessment <ul style="list-style-type: none"> • Assessing Airway • Assessing the Breathing Status • Feeling a Pulse • Examining for External Bleeding • Assessing Skin colour, Temperature, Condition • Prioritizing a patient for Care and Transport 	15
2	Demonstrate focused and detailed Physical Examination Triage	9
3	Demonstrate measuring and recording Breathing, Pulse and Blood Pressure, Skin Examination	
4	Demonstrate documentation of Patient Information	4
CARDIOPULMONARY RESUSCITATION		
1	Demonstration of: <ul style="list-style-type: none"> • Head Tilt, Chin Tilt • Jaw Thrust • How to use resuscitation mask to ventilate a patient • How to clear a foreign body airway obstruction in an unresponsive adult and child 	10
2	Basic Cardiac Life Support	4
3	Bag Valve Mask Ventilation	6
4	Demonstrate Technique of Suctioning	4
5	Demonstration of Monitors	2
6	Demonstrate how to measure and insert an	6

	Oropharyngeal Airway	
7	Demonstrate how to measure and insert a Nasopharyngeal Airway	6
8	Demonstrate Ventilating a patient with a Bag-Valve-Mask	4
9	Cardiopulmonary Resuscitation: <ul style="list-style-type: none"> • List reasons for the heart to stop beating • Define CPR • Describe the chain of survival and how it relates to pre hospital trauma services system • Explain when the casualty-cum-ambulance attendant is able to stop CPR • Demonstrate the Use of Automated External Defibrillator 	16
10	Demonstrate the treatment of patients with: <ul style="list-style-type: none"> • Mild Hypothermia • Drowning 	2
GENERAL SURGERY		
1	Bleeding Control <ul style="list-style-type: none"> • Explain Procedure • Pressure Application • Elevation of Extremities • Use of Splintages • Application of Dressings and Pressure Bandages • Preservation and Transportation of Amputated part • Monitoring of patients with continuous Bleed • Use of Tourniquet • Treatment for Shock 	19
2	Basic Shock Treatment <ul style="list-style-type: none"> • Evaluate level of Consciousness • Monitoring of BP, Pulse, Respiratory Rate • Positioning of Patient • Initiation of Oxygen Therapy • External Haemorrhage Control • Maintenance of Body Temperature • Communication and Reassurance of Patient • Identify needs for Rapid Transport 	15
3	Demonstrate use of Pneumatic anti Shock Garment	4
PROCEDURES TO BE LEARNT		
1	Start I.V. line and care	6
2	Intubation	6
3	Airway Maintenance	4
4	Cricothyroidotomy/ Tracheostomy	2
5	Setting up of Ventilator	6
6	Nebulisation of Drugs and Humidification	6

7	Chest Tube	4
8	Urinary Catheterization	2

**SYLLABUS
CCECAA -04, PAPER IV**

Certificate Course in Emergency-cum-Ambulance Attendant

MODULE 11I

Module III- Theory

S. No.	Subject	Teaching hours
HEAD INJURY		
1	Epidemiology	1
2	Coma Scales	3
3	Presentation of Head Injury	2
4	Assessment and Examination of Head Injury Patient	5
5	How to minimize Secondary Brain Injury	2
6	Management of ENT Bleed & CSF Leak	2
7	Management of Head Injury in Children	2
8	Management of Head Injury in Elderly	2
9	Management of Penetrating Head Injuries	6
SPINAL CORD INJURY		
1	Pathophysiology of Spinal Injury	2
2	Assessment and examination of Spinal Injury Patient	7
3	Stabilization of spine in suspected cases of Spinal Injury	4
4	Management of Spinal Injury Patient	8
ORTHOPEDICS		
1	Soft Tissue injuries in Upper Limb	4
2	Soft Tissue injuries in Lower Limb	4
3	Injury to major Blood Vessels	4
4	Principles of management of Fractures and Dislocations	4
5	Classification of Fractures	6
6	Clinical features of Fractures and Dislocations	4
7	Matters related to Fracture Care	6
8	Initial emergency Management of Fractures	4
9	Splints and their use	8
10	Compartment Syndrome of Upper Limb and Lower Limb	2
11	Open Fractures	4
12	Definition, Aetiology and Classification of Open Fracture	4
13	Initial Wound Management	4
14	Management of Traumatic Amputation	4
15	Injuries of the Pelvis	2
16	Fractures in the Elderly	4

Module III- Practical

S. No.	Subject	Teaching hours
FRACTURE MANAGEMENT		
1	Long Bone Immobilization	10
2	Splintage Techniques	8
3	Demonstration of Traction Splint for Immobilization	8
DEMONSTRATION OF SPINAL INJURY PATIENT IMMOBILIZATION		
1	Stabilization of Cervical Spine	6
2	Application of Cervical Collar	5
3	Assess Circulation, Motor, Sensory functions in all extremities	6
4	Positioning in Immobilization Device	6
5	Rolling of patient to Long Board	5
6	Positioning of patient on Long Board	5
7	Application of Straps on Chest, Hips and Legs	5
8	Head Stabilization and securing to Board using Blankets, Blocks, Head roll and Bulky dressings	6
9	Reassessment of Circulation, Motor function and Sensation in all Extremities	6
10	Demonstration of Application of Slings	4
11	Demonstration of Bandaging Techniques	10
12	Demonstrate performance of Triage in Mass Casualty Incident	12
ON FIELD AND OFF FIELD SKILLS DEMONSTRATIONS FOR CLINICAL CASES		
	For all on field and off field practical demonstrations <ul style="list-style-type: none"> • Introductory Case Scenario • Learning Objectives • Introduction • Summary Points • Case Scenarios • Review Questions 	
1	Case of Upper Extremity Trauma	10
2	Case of lower Extremity Trauma	10
3	Case of Abdominal Trauma	10
4	Case of Spinal Trauma	10
5	Case of Head Trauma	10
6	Case of Thermal Trauma	10
7	Case of Paediatric Trauma	10
8	Case of Geriatric Trauma	10
9	Case of Pregnancy with Trauma	10
