



جمعية القلب السعودية
Saudi Heart Association
National Life Support Committee

BLS

SHA BLS Instructor Manual

Basic Life Support

2023





SHA Basic life Support Provider Course “SHA BLS Provider Course”

Preface

This manual is developed to guide SHA BLS instructors when teaching BLS provider courses to maintain course consistency and standardize the course delivery teaching methods. The learning objectives, instructor roles, and teaching methodologies are specified for each lesson.

Acknowledgements

The Saudi Heart Association would like to acknowledge the Clinical Skills and Simulation Center at King Saud University Medical City and their staff for their cooperation and support during the development of the content of this course to enhance the simulation technologies and teaching methods incorporated in this course.

Hakem Shakkour, RN, MSN

& Simulation Technician, Clinical Skill
,Simulation Center, King Saud University
Riyadh, Saudi Arabia

Fahad Alsohime, MD

Associate Professor
College of Medicine, King Saud University,
Riyadh, Saudi Arabia

The Saudi Heart Association Basic Life Support Instructor Manual (2023)

LIST OF CONTENTS

Section 1: Course Overview	2
Section 2: Teaching the course	6
Section 3: Lessons Plan	9
Lesson 1: Course Introduction and overview	9
Lesson 2: Chain of survival	10
Lesson 3: Adult BLS	11
Lesson 4: Multi-Rescuers Team	17
Lesson 5: Child BLS	18
Lesson 6: Infant BLS	21
Lesson 7: Relief Foreign Body Airway Obstruction (FBAO)	25
Lesson 8: Other Considerations	28
Section 4: Written Exam, Skill Testing and remediation	31

Section 1

Course Overview

The Saudi Heart Association Basic Life Support (BLS) course provides students with the necessary knowledge and skills which are enough to assess, recognize and care for patients who are experiencing respiratory arrest, cardiac arrest, airway obstruction or opioid overdose to achieve the best possible patient outcomes.

Course Objectives

At the end of the course, the students will be able to:

- Recognize the signs of cardiac and respiratory arrest.
- Recognize the in hospital and out of the hospital chains of survival.
- Demonstrate an organized and systematic approach to evaluate, recognize and manage the life-threatening emergency in adults, children and infants.
- Provide care for adults, children and infants in cardiac arrest.
- Provide care for adults, children and infants in respiratory arrest.
- Understand the effective high-quality CPR elements.
- Demonstrate the proper skills of effective high-quality chest compressions for adults, children and infants.
- Deliver effective ventilations to adults, children and infants using a pocket mask and bag-valve-mask (BVM) resuscitator.
- use of an automated external defibrillator (AED) for adults, children and infants.
- Demonstrate the high-quality BLS care for adults, children and infants in case of single rescuer.
- Demonstrate the high-quality BLS care for adults, children and infants in case of two rescuers.
- Demonstrate the high-quality BLS care for adults, children and infants in case of multi-rescue teams .
- Manage airway obstruction in adult, child, infant and pregnant women.
- understand the management of special consideration.

Target group

The intended audience for this course includes healthcare and non health care providers who either provide direct or participate in the assessment and management of cardiac arrest victims .

This includes, but is not limited to, nurses, physicians, respiratory therapists, dentists, emergency medical services, students, and other professional responders.

Course Delivery Method

An instructor-led course conducted in an on site training center.

This instructor's manual is intended for the Saudi heart association Led Training course.

Course Instructional Design

The instructor's manual Lessons use different methods of teaching and adult learning principles in a safe and non-threatening environment to meet participants' needs.

To help participants acquire new information, correct psychomotor skills, and develop critical-thinking and problem-solving skills, traditional lectures are integrated with powerpoint presentations, skill practice sessions, team practice scenarios, discussions and instructor demonstrations.

In order to meet the course objectives, students must successfully complete the skill practice sessions and participate in all lessons through instructor-led discussions. Then they will move through skill practice sessions where an instructor facilitates "hands-on" learning. Each skill practice session includes a combination of instructor-led demonstration, skill practice and skill testing. Participant competency is assessed through skills testing and a final exam.

Instructor preparation

Before teaching the course the instructor should have time to read and review :

- The instructor manual
- BLS provider manual
- Testing checklists

Students Preparation

Participants should read the provider manual before the course (ebook is available once he registered in SHA portal.

Participant-to-Instructor Ratios

BLS Learning course designed for a ratio of six participants to one instructor (6:1), and could be extended up to 1:9 in case of a senior instructor.

Classroom

The classroom should be clean, well ventilated, with adequate space to conduct a safe practice and testing scenarios, and also must be prepared audiovisually.

Equipments and supplies

- 3 adult manikins with feedback devices (1 manikin per 3 students)
- 3 child manikins with feedback devices (1 manikin per 3 students).
- 3 infant manikins with feedback devices (1 manikin per 3 students).
- 1 adult choking manikins (1 manikin per 6 students).
- Antiseptic solutions.
- Timing device.
- 3 adult size pocket masks (1 mask per 3 students).
- 3 child size pocket masks (1 mask per 3 students).
- 3 infant size pocket masks (1 mask per 3 students).
- 3 Adult size Bag Mask Ventilation (1 mask per 3 students).
- 3 Child size Bag Mask Ventilation (1 mask per 3 students).
- 3 Infant size Bag Mask Ventilation (1 mask per 3 students).
- One Way valve (1 valve per each student).
- AED (1 AED per 3 students).

Section 2

Teaching the course

To understand how you will teach each part in the course, you need to understand the following icons to remind you what the action you need to take

Icon Key Discussion



PPT Presentation



Skills practice



Skills Testing



Written exam



Each student should participate and demonstrate the following skills:

- Assessment and recognition of cardiac arrest for adult, child and infant victims.
- High quality CPR as a single and two rescuers for adult, child and infant victims.
- Relief of airway obstruction in adult and infant choking.

Sample SHA BLS Provider Course Agenda

6 Participants, 1 Instructor

Time	Activity
8:00 - 8:10	Lesson 1 Course introduction and overview
8:10 - 8:25	Lesson 2 Chain of survival
8:25 - 9:45	Lesson 3 Adult CPR
9:45 - 10:00	Lesson 4 Multiple rescuers Team
10:00 - 10:15	Break
10:15 - 10:45	Lesson 5 Child CPR
10:45 - 11:45	Lesson 6 Infant CPR
10:45 - 11:10	Lesson 7 Relief of choking
11:10 - 11:30	Lesson 8 Special Considerations
11:30 - 12:00	Written Exam

Section 3

Lesson plan

Lesson 1

Course Introduction and Overview

10 minutes

Instructor role

With students discuss the following :

- Introduce yourself and let the students introduce themselves: Name ,specialty and working area
- Explain the layout of the place
- Put the ground rules e.g mobile silent during the course
- Discuss with students learning skills station
- Discuss with students the testing criteria and remediation
- Discuss the course certificate completion requirments.

Lesson 2

Chain of Survival

15 minutes

Learning Objectives

At the end of this lesson, the students will be able to

1. Recognizing the signs of cardiac arrest.
2. Discuss the chain of survival links either in hospital and out of hospital cardiac arrest.
3. Identify the differences of chain of survival between adult and pediatric victims.

Instructor role

- Tell participants to open Basic Life Support Participant's Manual (chapter # 1).
- The instructor will use a powerpoint presentation to discuss the lesson contents.

Lesson 3

Adult CPR

80 minutes

Lesson Objectives

After completing this lesson, participants will be able to:

- Discuss the components of high-quality CPR.
- Learn how to approach the victims after ensuring the scene safety.
- Demonstrate pulse and breathing assessment
- Provide effective chest compressions.
- deliver effective ventilations using a pocket mask or a bag-valve-mask (BVM) resuscitator.
- Use an AED safely and identify considerations for the safe use and maintenance.

- Put the skills all together when dealing alone with an adult victim in cardiac arrest.
- Demonstrate two rescuers adult CPR

Instructor role

- Tell participants to open Basic Life Support Participant's Manual (chapter # 2 & 3).
- The instructor will use a powerpoint presentation to discuss the lesson contents.
- Conduct the skill practices, "Scene Safety and check the responsiveness", call for help and AED "checking pulse and breathing" "Chest Compressions," "Pocket Mask Use," "Single-Provider CPR for Adults," "BVM Use" and "Multiple-Provider CPR for Adults."

Conducting the lesson

1- Assessment of the scene, responsiveness, pulse and breathing and activation for help and AED.

- Explain to participants that ensuring the safety of the scene and performing the assessment is the essential first step of cardiac arrest recognition. To perform a rapid assessment:
- assessing for safety of you, victim and bystander.
- Check for responsiveness—shout "Are you OK?" and tap the shoulder, then shout again.
- Call for help or EMS system by calling 997 Or 911 and ask to bring AED
- Open the airway and simultaneously check for breathing and a carotid pulse, for at least 5 seconds but no more than 10.
- Demonstrate these skills initially in front of students.
- Make sure to use timing devices during students practice.
- Ask the first 3 students to get into position beside their manikins (1 student :1 manikin) and provide immediate corrective feedback.
- Rotate the remaining students on the manikins.
- Make sure all students practice these skills.
- Ask if there are any questions before proceeding to the next lesson.

2- Chest Compression

- Discuss with students the key points in chest compression skill (hands placement, rate, depth, chest recoil).
- Demonstrate chest compression initially in front of students (one set of compression).
- Make sure to use timing devices during students practice.
- Ask the first 3 students to get into position beside their manikins (1 student :1 manikin) and provide immediate corrective feedback.
- Ask them to practice 3 sets of compressions (each 30 compressions)
- Rotate the remaining students on the manikins.
- Make sure all students practice these skills.

- Ask if there are any questions before proceeding to the next lesson.

3- Opening airway and deliver breath via pocket mask



- Discuss with students the key points in opening the airway technique (hands placement, rate, chest rise).
- Demonstrate opening airway and delivering breaths using pocket mask with one way valve initially in front of students (two sets of breaths).
- Make sure to use timing devices during students practice.
- Ask the first 3 students to get into position beside their manikins (1 student :1 manikin) and provide immediate corrective feedback.
- Ask them to practice 5 sets of effective breathing using pocket mask (each set consists of two breaths)
- Rotate the remaining students on the manikins.
- Make sure all students practice these skills.
- Ask if there are any questions before proceeding to the next lesson.

4- Putting all together skills (single rescuer BLS)



- Discuss with students the key points in chest compression skill (hands placement, rate, depth, chest recoil).
- Demonstrate putting all together skills initially in front of students (assessment of the safety of the scene, check responsiveness, activation of EMS, checking pulse and breathing, two cycles of compression and breathing).
- Make sure to use timing devices during students practice.
- Ask the first 3 students to get into position beside their manikins (1 student :1 manikin) and provide immediate corrective feedback.
- Ask them to practice 2 cycles of breathing and compressions.
- Rotate the remaining students on the manikins.
- Make sure all students practice these skills.
- Ask if there are any questions before proceeding to the next lesson.

5- Bag Mask Ventilation



- Discuss with students the key points in providing effective positive ventilation using BMV (rescuer position, hands placement, opening airway using C-E clamp technique, rate, chest rise).
- Demonstrate opening airway and delivering breaths using BMV initially in front of students (two sets of breaths).
- Make sure to use timing devices during students practice.
- Ask the first 3 students to get into position at the head of manikins (1 student :1 manikin) and provide immediate corrective feedback.
- Ask them to practice 5 sets of effective breathing using BMV (each set consists of two breaths)
- Rotate the remaining students on the manikins.
- Make sure all students practice these skills.
- Ask if there are any questions before proceeding to the next lesson.

6- AED practice

- Discuss with students the key points of using AED (indications, contraindications, steps of operating AED, and special considerations)
- Demonstrate AED practice initially in front of students.
- Ask the first student to get into a position beside AED and provide immediate corrective feedback while using it.
- Rotate the remaining students on the AED.
- Make sure all students practice these skills.
- Ask if there are any questions before proceeding to the next lesson.

7- Two rescuers CPR

- Discuss with students the key points of 2 rescuers adult CPR and the roles of first and second rescuers.
- Demonstrate 2 rescuers adult BLS and ask any volunteer from students to practice as a second rescuer:
- Your role as a first rescuer is to assess the safety of the scene, check responsiveness, ask the second rescuer to activate EMS and bring AED ,check pulse and breathing, then perform two cycles of compression and breathing .
- THEN the second rescuer will arrive with AED, ask the second rescuer to take over the chest compression while you as a first rescuer operating AED and follow the prompts.
- Make sure to use timing devices during students practice.
- Divide the students into three groups (each group consists of first and second rescuers).
- Each group of two will practice separately while the remaining groups watch their performance.
- Switch the roles of the first group (the first rescuer will play now as a second rescuer while the second rescuer will play a role of first rescuer).
- Rotate the remaining groups in the manikin using the same technique.
- Ask them to practice 2 cycles of breathing and compressions and AED.
- Make sure all students practice as a first and second rescuer .
- Provide immediate corrective feedback every time the group practices.
- Ask if there are any questions before proceeding to the next lesson.

Adult BLS testing

Lesson Objectives

After completing this lesson, participants will be:

- Tested using testing checklists without instructor hints, guiding or coaching..
- Tested privately with maintaining the confidentiality of the test.
- Instructor role
- Inform the students about the skill testing ground roles:
- Act as you are in real life and demonstrate what you know.
- Skill testing stops when the instructor verbalizes that.
- Test the students as a group of two (The first student will be evaluated only as a first rescuer while the second student plays a role of second rescuer without evaluation.
- Disclose the skill testing results privately (if students met all the critical actions will be marked as pass and if one of these actions not performed or performed incorrectly provide feedback and refer the student to remediation lessons.
- Rotate the students as much as needed in the skill testing
- Use a timing device.

Lesson 4

Multi-Rescuers Team

15 minutes

Lesson Objectives

After completing this lesson, participants will be able to:

- How to apply the skills as a BLS provider in a multi-rescuers resuscitation effort.
- Understand the components of of Multi-Rescuers team Dynamics
- Explain the importance of multi-rescuers team components.
- understand the importance of debriefing sessions after any resuscitation event.

Instructor role

- Tell participants to open Basic Life Support Participant's Manual (chapter # 4).
- The instructor will use a powerpoint presentation to discuss the lesson contents.

Lesson 5

Child CPR

30 minutes

Lesson Objectives

After completing this lesson, participants will be able to:

- Discuss the components of child high-quality CPR.
- Learn how to approach the victims after ensuring the scene safety.
- Demonstrate pulse and breathing assessment
- Differentiate between adult and child CPR one & two rescuers components.
- Provide effective chest compressions.
- deliver effective ventilations using a pocket mask or a bag-valve-mask (BVM) resuscitator.
- Use an AED safely and identify considerations for the safe use and maintenance.
- Put the skills all together when dealing alone with a child victim in cardiac arrest.
- Demonstrate two rescuers child CPR

Instructor role

- Tell participants to open Basic Life Support Participant's Manual (chapter # 6 & 5).
- The instructor will use a powerpoint presentation to discuss the lesson contents.
- Conduct the skill practices, "Single-Provider CPR for child," "BVM Use" and "Multiple-Provider CPR for child."

Conducting the lesson

Two rescuers CPR practice

- Discuss with students the key points of 2 rescuers child CPR and the roles of first and second rescuer.
- Demonstrate 2 rescuers child BLS and ask any volunteer from students to practice as a second rescuer:
- Your role as a first rescuer is to assess the safety of the scene, check responsiveness, ask the second rescuer to activate EMS and bring AED ,check pulse and breathing, then perform two cycles of compression and breathing .
- THEN the second rescuer will arrive with BMV, ask the second rescuer to take over the Ventilation while you as a first rescuer continue the compression.
- Tell them that they have to switch their roles after 2 minutes of CPR (will be prompted by the instructor).
- Make sure to use timing devices during students practice.
- Divide the students into three groups (each group consists of first and second rescuers).
- Each group of two will practice separately while the remaining groups watch their performance.
- Switch the roles of the first group (the first rescuer will play now as a second rescuer while the second

rescuer will play a role of first rescuer).

- Rotate the remaining groups in the child manikin using the same technique.
- Ask them to practice 2 cycles of breathing and compressions.
- Make sure all students practice as a first and second rescuer .
- Provide immediate corrective feedback every time the group practices.
- Ask if there are any questions before proceeding to the next lesson.

Child BLS testing

Lesson Objectives

After completing this lesson, participants will be:

- Tested using testing checklists without instructor hints, guiding or coaching..
- Tested privately with maintaining the confidentiality of the test.

Instructor role

Inform the students about the skill testing ground roles:

- Act as you are in real life and demonstrate what you know.
- Skill testing stops when the instructor verbalizes that.
- Test the students as a group of two (The first student will be evaluated only as a first rescuer while the second student plays a role of second rescuer without evaluation.
- Disclose the skill testing results privately (if students met all the critical actions will be marked as pass and if one of these actions not performed or performed incorrectly provide feedback and refer the student to remediation lessons.
- Rotate the students as much as needed in the skill testing
- Use a timing device.

Lesson 6

Infant CPR

60 minutes

Lesson Objectives

After completing this lesson, participants will be able to:

- Discuss the components of infant high-quality CPR.
- Learn how to approach the infant victims after ensuring the scene safety.
- Demonstrate pulse and breathing assessment
- Provide effective chest compressions.
- Deliver effective ventilations using a pocket mask or a bag-valve-mask (BVM) resuscitator.
- Put the skills all together when dealing alone with an infant victim in cardiac arrest.
- Demonstrate two rescuers infant CPR

Instructor role

- Tell participants to open Basic Life Support Participant's Manual (chapter # 7).
- The instructor will use a powerpoint presentation to discuss the lesson contents.
- Conduct the skill practices, "Scene Safety and check the responsiveness", call for help and AED "checking

pulse and breathing””Chest Compressions,””Pocket Mask Use,””Single-Provider CPR for infants ,””BVM Use” and ”Multiple-Provider CPR for infants.”

Conducting the lesson

1- Assessment of the scene, responsiveness, pulse and breathing and activation for help and AED.

- Explain to participants that ensuring the safety of the scene and performing the assessment is the essential first step of cardiac arrest recognition. To perform a rapid assessment:
- assessing for safety of you, victim and bystander.
- Check for responsiveness—tapping the sole of their feet, and talk to them loudly.
- Call for help or EMS system by calling 0 997r 911 and ask to bring AED
- Open the airway and simultaneously check for breathing and a brachial pulse, for at least 5 seconds but no more than 10.
- Demonstrate these skills initially in front of students.
- Make sure to use timing devices during students practice.
- Ask the first 3 students to get into position beside their infants manikins (1 student :1 infant manikin) and provide immediate corrective feedback.
- Rotate the remaining students on the manikins.
- Make sure all students practice these skills.
- Ask if there are any questions before proceeding to the next lesson.

2- Single Rescuer Chest Compression

- Discuss with students the key points in chest compression skill (fingers placement, rate, depth, chest recoil).
- Demonstrate chest compression initially in front of students (three sets of compression).
- Make sure to use timing devices during students practice.
- Ask the first 3 students to get into position beside their manikins (1 student :1 infant manikin) and provide immediate corrective feedback.
- Ask them to practice 3 sets of compressions (each 30 compressions) using 2 fingers technique.
- Rotate the remaining students on the manikins.
- Make sure all students practice these skills.
- Ask if there are any questions before proceeding to the next lesson.

3- Two rescuers CPR

- Discuss with students the key differences between single and two rescuers infant BLS
- Demonstrate 2 rescuers adult BLS and ask any volunteer from students to practice as a second rescuer:
- Your role as a first rescuer is to assess the safety of the scene, check responsiveness, ask the second rescuer to activate EMS and bring AED ,check pulse and breathing, then perform two cycles of

- compression and breathing using a pocket mask .
- THEN the second rescuer will arrive with BMV, ask the second rescuer to take over the ventilation while you as the first rescuer continuous compression with a ratio of 2 :15 using 2 thumbs encircling technique .
 - Make sure to use timing devices during students practice.
 - Divide the students into three groups (each group consists of first and second rescuers).
 - Each group of two will practice separately while the remaining groups watch their performance.
 - Switch the roles of the first group (the first rescuer will play now as a second rescuer while the second rescuer will play a role of first rescuer).
 - Rotate the remaining groups in the infant manikin using the same technique.
 - Ask them to practice 2 cycles of breathing and compressions.
 - Make sure all students practice as a first and second rescuer .
 - Provide immediate corrective feedback every time the group practices.
 - Ask if there are any questions before proceeding to the next lesson.

Infant BLS testing

Lesson Objectives

After completing this lesson, participants will be:

- Tested using testing checklists without instructor hints, guiding or coaching..
- Tested privately with maintaining the confidentiality of the test.

Instructor role

Inform the students about the skill testing ground roles:

- Act as you are in real life and demonstrate what you know.
- Skill testing stops when the instructor verbalizes that.
- Test the students as a group of two (The first student will be evaluated only as a first rescuer while the second student plays a role of second rescuer without evaluation.
- Disclose the skill testing results privately (if students met all the critical actions will be marked as pass and if one of these actions not performed or performed incorrectly provide feedback and refer the student to remediation lessons.
- Rotate the students as much as needed in the skill testing
- Use a timing device.

Lesson 7



Relief of Choking

25 minutes

Lesson Objectives

After completing this lesson, participants will be able to:

- Recognize signs and symptoms of adult or child and infant victims with an obstructed airway.
- Provide care for responsive adult or child and infant victims with an obstructed airway.
- Demonstrate the management of an unresponsive adult or child and infant victims with an obstructed airway.

Instructor Role:

Discuss with students following:

- Signs and symptoms of adult or child and infant victims with an obstructed airway.
- The management of an responsive adult or child and infant victims with an obstructed airway.
- The management of an unresponsive adult or child and infant victims with an obstructed airway.

Conducting the lesson

1- Relief Foreign Body Airway Obstruction (FBAO): Choking of responsive and unresponsive adult victim

- Discuss with students the key points of choking relief for responsive adult victims.
- Demonstrate abdominal thrust initially in front of students using adult choking (at least 5 times) . .
- Ask students to get into position behind the manikins (1 student :1 adult choking manikin) and provide immediate corrective feedback.
- Rotate the remaining students on the manikins.
- Make sure all students practice these skills.
- Discuss the following care for a choking adult or child who becomes unresponsive:
- Carefully lower them to a firm, fat surface, while protecting their head.
- Ask someone to call for help and get an AED.
- Begin CPR with chest compressions.
- Open the patient's mouth and look for the object before attempting ventilations after each set of compression.
- If you see the object in the patient's mouth, remove it using a finger sweep.do not perform a blind finger sweep.
- Never try more than 2 breaths even if the chest does not rise.
- Continue performing CPR cycles, checking for an object before each set of ventilations.
- Ask if there are any questions before proceeding to the next lesson.

2- Relief Foreign Body Airway Obstruction (FBAO): Choking of responsive and unresponsive infant victim

- Discuss with students the key points of choking relief for responsive infant victims.
- Demonstrate 5 sets of 5 back blows and 5 chest thrusts initially in front of students using adult choking.
- Ask students to get into position with infant manikins(1 student :1 infant manikin) and provide immediate corrective feedback.
- Rotate the remaining students on the manikins.
- Make sure all students practice these skills.
- Discuss the following care for a choking adult or child who becomes unresponsive:
- Carefully lower them to a firm, flat surface, while protecting their head.
- Ask someone to call for help and get an AED.
- Begin CPR with chest compressions.
- Open the patient's mouth and look for the object before attempting ventilations after each set of compression.
- If you see the object in the patient's mouth, remove it using a finger sweep, do not perform a blind finger sweep.
- Never try more than 2 breaths even if the chest does not rise.
- Continue performing CPR cycles, checking for an object before each set of ventilations.

Lesson 8

Special Considerations

10 minutes

Lesson Objectives

After completing this lesson, participants will be able to:

- Perform rescue breathing in respiratory arrest for adult and infant victims.
- Demonstrate CPR modifications in victims with advanced airway
- Recognize the differences in CPR skills in cardiac arrest pregnant woman
- Understand the management of an opioid Overdose related life threatening condition.

Instructor role

Conducting the lesson

1- Opioid Overdose

- Communicate the signs and symptoms of opioid overdose.
- Discuss the management of opioid overdose (Administer naloxone as soon as it is available; however, remember, chest compressions, ventilations and or defibrillation are the priority over naloxone administration).

1. If the victim is found to have a pulse but not breathing normally, begin rescue breathing and give naloxone.
2. If the victim does not have a pulse and is not breathing normally, start CPR and consider naloxone.

2- Rescue Breathing

- Discuss with students the key points in providing effective positive ventilation using BMV (rescuer position, hands placement, opening airway using C-E clamp technique, rate, chest rise) in respiratory arrest victims(adult, child and infant) .
- Discuss with students the key differences of rescue breathing ratio in adult, child and infant victims).
- Communicate the importance of pulse check every 2 minutes.
- Students will practice only rescue breathing for adult victims.
- Demonstrate opening airway and delivering breaths using BMV initially in front of students (1 breath every 6 seconds (repeat it for 5 times)).
- Make sure to use timing devices during students practice.
- Ask the first 3 students to get into position at the head of manikins (1 student :1 adult manikin) and provide immediate corrective feedback.
- Rotate the remaining students on the manikins.
- Make sure all students practice these skills.
- Ask if there are any questions before proceeding to the next lesson.

3- CPR with An Advanced Airway

- Discuss with students the key points in providing effective positive ventilation using BMV with victims with advanced airway in place and chest compression is ongoing (1 breath/ 6 seconds with continuous chest compression for all age groups).
- Ask if there are any questions before proceeding to the next lesson.

4- CPR in pregnant women

- Discuss the modifications of CPR procedures in case the victim was pregnant women.
- Communicate the following techniques with the students:
 - Technique
 - 1 Handed technique- the rescuer should be on the right side of the mother and pushing the uterus upward and leftward.
 - 2 Handed technique- rescuer on the left side of the bed with 2 hands pulling the uterus to the left side of the mother.

Section 4

Written Exam, Skill Testing and remediation

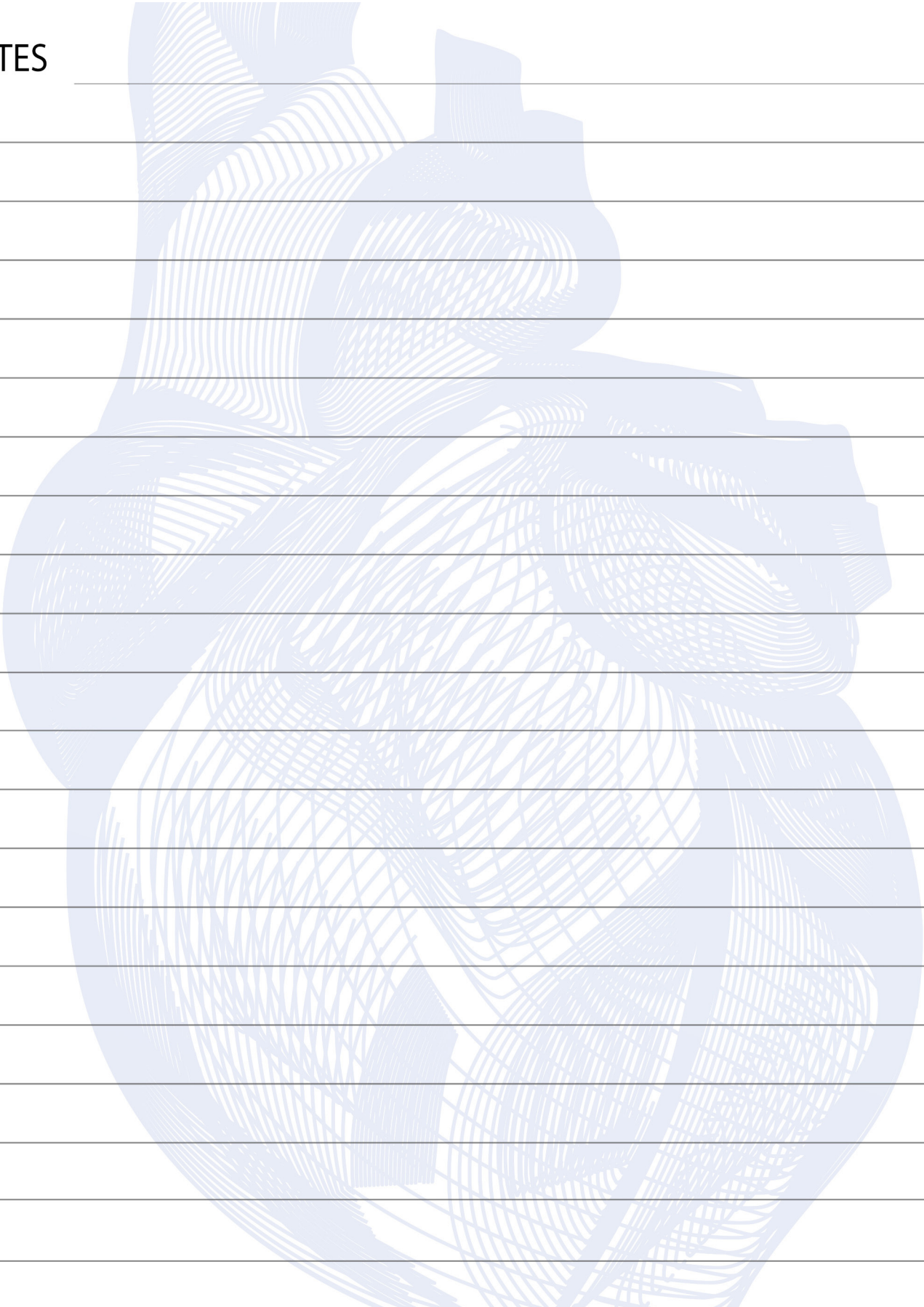
- Each student should be tested in adult, child and infant CPR and the student who didn't pass in skill testing must be retested one time only for each skill testing with the same or another instructor after the testing session.

Students must be remediated using the following technique:

1. Refer students to the SHA BLS provider manual and review the critical actions that are not performed or performed incorrectly.
2. Practice the skills that are not performed or performed incorrectly with instructors immediate corrective feedback.
 - When the student is ready to retest again, inform him/her that this is the last trial.
 - The passing score of the written exam (25 MCQ's) is 80 %, students who score less than %80 will be remediated immediately verbally.
 - If participants score less than 60 %; repeat the exam with another version.
 - Written exam is 30 minutes long.



NOTES





جمعية القلب السعودية
Saudi Heart Association

Basic Life Support