



Mansoura University Faculty of Medicine

Log Book Forensic Medicine Department 2016 - 2017

		2010-2011	
	ختم القسم		
		Log Book	إيصال تسليم
_			اسم الطالب:
			الفرقـــة:
			رقم الجلوس:
	***************************************		تاريخ التسليم:
			توقيع المستلم:



كلية الطبع-جامعة المنصورة



Student's Logbook

Forensic Medicine and Clinical Toxicology

For Fourth Year Students

2016-2017

Student's name:	
Student's number:	
Starting date:	

رسالة الكلية

تقديم مستوى عال التميز في التعليم والتدريب الطبي وتقديم خدمات صحية متميزة للمجتمع عن طريق المراكز الطبية المتخصصة وكذلك الإرتقاء بالبحث العلمي

رؤية الكلية

أن نصنف إقليميا ونحقق التميز في التعليم الطبي والبحوث وخدمة المجتمع

تم إعتماد الكلية في 21 أغسطس 2011

Preface

Dear students

Forensic Medicine and Clinical Toxicology Department. This logbook aims to accomplish Intended Learning Outcomes (ILOS) and enable undergraduate medical students to enrich their intellectual and practical skills in Forensic Medicine and Clinical Toxicology. We think that it will meet your needs in your future practical career by training especially how to write traumatic wound or toxicological reports that will help you to avoid common mistakes in the medical practice later on. Also, our curricula will be a usefulguide for developing your knowledge about different aspects of medical ethics and malpractice encountered in daily your future life. We wish you all studying for the Forensic and Toxicology subjects that will satisfy your interest, creation, thinking and accomplish interactive learning and activities.

Staff members of Forensic Medicine and Clinical

Toxicology Department

2016-2017

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Students activities (self learning)				

Instructions for the 4th year undergraduate students

- 1. Attendance should be within 15 minutes from the starting time of section or lecture (i.e 9 9.15 am).
- 2. Attendance in Skills Lab or Virtual Lab must be on schedule.
- 3. Students should attend clinical rounds in the emergency hospital according to the scheduled tables.
- 4. Students will be divided into groups distributed on department staff members for their self learning activities and there will be a competition for best student activity at the end of the round and a ceremony will be held at the end of the year, to honor the winners.
- 5. **By the end of the round, all students should** deliver their practical books (logbook), forensic reports and student activities (self-learning), to secretary office and sign in front of their names.

Prerequisites for mid-year MCQ exam

- 1. Attendance rate: 75%.
- 2. Fulfilling the formative exam one week before mid-year MCQ exam on "Faraby system".

** Subjects included in mid-year exam are: Identification – Wounds – Head injuries – Firearm injuries- Pregnancy, abortion, and delivery - Seeds & capsules- General toxicology – Corrosives – Pesticides.

Skills lab

Location: Block D – Ground Floor.

Laboratory No.: Lab (1) & Lab. (2).

Objectives: How to perform the technique of gastric lavage. **Method of assessment:** practical exam according to checklist.

Time of exam: at the end of the clinical round.

Virtual lab

Location: Block D – Ground Floor.

Laboratory no.: Lab (1)

Objectives: How to approach for diagnosis and treatment of

toxicological case.

Method of assessment: MCQ examination.

Time of exam: at the end of the clinical round.

Intended Learning Outcomes of Course (ILOs)

a- Knowledge and Understanding:

By the end of the course the student will be able to:

- A1 Discuss different parameters used in identifications of collection of bone, living or dead persons for medico legal aspects
- A2 Identify Thanatology and explain medicolegal importance of postmortem changes.
- A3 Describe different types of wounds and explain their medicolegal aspects.
- A4 Recognize the different medico-legal (ML) aspects of head injuries.
- A5 Identify basics of firearm weapons.
- A6 Discuss medico-legal (ML) aspects of firearm injuries.
- A7 Indicate the medicolegal importance of disputed paternity and blood grouping.
- A8 Classify thermal injuries and identify discuss medico-legal (ML) aspects of thermal injuries.
- A9 Classify different types of asphyxia and identify the medicolegal aspects of different types of violent asphyxia.
- A10 Identify the different types of sexual offences.
- A11 Indicate medicolegal importance of virginity.
- A12 Define different types of child abuse and discuss the medicolegal aspects of physical child abuse.
- A13 Explain medicolegal aspects of medical ethics, consents and legal aspects of malpractice.
- A14 Identify medicolegal aspects of pregnancy, delivery and abortion.
- A15 List classification of poisons and factors affecting their action.
- A16 Identify drug dependence and its biological, social and psychological basis.
- A17 Discuss dependence of common illicit substances.

b) Intellectual Skills:

By the end of the course the student will be able to:

B1 Determine causes of death of different injuries and toxins.

- B2 Determine postmortem interval in different criminal incidents.
- B3 Analyze case scenario of forensic medicine cases.
- B4 Appraise cases of malpractice and ethical aspects of the medical practice.
- B5 Integrate results of history, physical and laboratory investigations into a meaningful diagnostic formulation.
- B6 Construct an appropriate management plan of acute or chronic intoxicated patient.
- B7 Assess mental status for intoxicated patients.
- B1 Determine causes of death of different injuries and toxins.
- B2 Determine postmortem interval in different criminal incidents.
- B3 Analyze case scenario of forensic medicine cases.
- B4 Appraise cases of malpractice and ethical aspects of the medical practice.
- B5 Integrate results of history, physical and laboratory investigations into a meaningful diagnostic formulation.
- B6 Construct an appropriate management plan of acute or chronic intoxicated
- B7 patient.

Assess mental status for intoxicated patients.

c- Professional and Practical Skills:

By the end of the course the student will be able to:

- C1 Examine collection of bones to identify its sex, age and race.
- C2 Estimate age by X ray examination.
- C3 Identify characters of different types of wounds.
- C4 Demonstrate characters different types of head injuries.
- C5 Recognize different parts of firearm weapons.
- C6 Demonstrate different types of firearm injuries.
- C7 Predict the causative instruments, survival period and causes of death of different types of injuries.
- C8 Demonstrate different toxic capsules, seeds and roots and explain their medicolegal aspects.
- C9 Predict the intrauterine fetal ages.
- C10 Assess uteri of illegal abortion and interpret the cause of death and survival periods after abortion.

- C11 Construct a proper primary wound report.
- C12 Elicit findings of medico-legal importance through demonstration of forensic case photograph.
- C13 Demonstrate a thin layer chromatography plate and calculate rate of flow for the unknown substance.

d- General and Transferable Skills:

By the end of the course, the student should be able to:

- D1 Adopt principles of life-long learning in medical professionalism.
- D2 Use information and communication technology effectively.
- D3 Perform a good power point presentation.

E- Professional attitude:

By the end of the course, the student should be able to:

- E.1. Work effectively in a team with colleges and other health care professions.
- E.2. Be aware of the National Code of Ethics issued by the Egyptian Medical Syndicate.

Selective Mark distribution for each topic in the exams:

I- Forensic Medicine

Topics (Midyear topics)	Teaching hours	Weight %	Mark	Midyear Exam	Final Exam
Identification	4	5.97	8 (7.76)	3	5
Death	4	5.97	8 (7.76)	-	8
Wounds& reports	4	5.97	8 (7.76)	4	4
Head injuries	3	4.47	5 (5.82)	3	2
Firearm injuries	4	5.97	8 (7.76)	4	4
Thermal injuries	2	2.98	4 (3.88)	-	4
Disputed Paternity	1	1.49	2 (1.94)	-	2
Asphyxia	4	5.97	8 (7.76)	-	8
Pregnancy, abortion, delivery. (Seeds & capsules)	2	2.98	3 (3.88)	1	2
Child abuse & SIDS	2	2.98	4 (3.88)	-	4
Sexual offenses	2	2.98	4 (3.88)	-	4
Medical Ethics	2	2.98	3 (3.88)	-	3
Total Marks			65	15	50

II- Clinical Toxicology

Topics (Midyear topics)	Teaching hours	Weight %	Mark	Midyear Exam	Final Exam
General toxicology	4	5.97	8 (7.76)	5	3
Corrosives	2	2.98	3 (3.88)	1	2
Irritant poisons (virtual)	4	5.97	7 (7.76)	3	4
Pesticides	3	4.47	6 (5.82)	3	3
Analgesics	2	2.98	4 (3.88)	-	4
Theophylline &Atropine	2	2.98	3 (3.88)	-	3
Opiate	1	1.49	2 (1.94)	-	2
Cannabis& cocaine	2	2.98	4 (3.88)	-	4
Digitalis	2	2.98	4 (3.88)	-	4
CO poisoning	1	1.49	1 (1.94)	-	1
Volatile poisoning (alcohols & hydrocarbon)	2	2.98	4 (3.88)	-	4
Drug dependence	4	5.97	8 (7.76)	-	8
CNS depressant TCA & Carbamazepine	2	2.98	3 (3.88)	-	3
Food poisoning & Botulism	2	2.98	3 (3.88)	-	3
Animal poisons(virtual)	2	2.98	4 (3.88)	2	2
Seeds & capsules	1	1.49	1 (1.94)	1	-
Total Marks			65	15	50

Assessment System

Examination	Description	Marks	Total			
	MCQ	25				
Mid-Term exam	Virtual lab	5	40			
Wild-Term exam	Logbook	5	40			
	Students activities (presentation)	5	1			
Final written exams	Written toxicology paper	35				
Short essay questions,	MCQ toxicology paper	15	100			
problem solving and MCQ	Written forensic paper	35	100			
	MCQ forensic paper	15	1			
Objective structured practical exam	Final practical Exam (Museum specimens, TLC)	25				
practical exam	Skill lab exam	5	40			
	Reports for wounds	5				
	Forensic photography	5				
Structured oral exam	Forensic Medicine Clinical Toxicology	20	20			
Total			200			

^{*}First paper: Clinical Toxicology; Second paper: Forensic Medicine

Assessment Schedule:

Method of assessment	Time
MCQs	At the end of the round
Virtual lab	At the end of the round
Log book	At the end of the round
Students activities	The student will present the topic in front of senior staff at the end of the round.
Skill lab exam	At the end of the round
Final written examanition	At the end of the academic year
Final practical Exam	At the end of the academic year
(Museum specimens, TLC)	
Reports for wounds	At the end of the academic year
Forensic photography	At the end of the academic year
Structured oral exam	At the end of the academic year

I-Practical Sections 115

Date / / 20
1- Identification (1)
1. How can you diagnose age 15?
If female
2. How can you diagnose age 18?
If female
3. How can you diagnose age 23?
······································
If female
Tutor
TUIOI

Date / /20
2- Identification (2)
1. Mention MLI of teeth examination.
2. Differentiate between male and female hip-bones.
1
3.Differentiate between male and female sternums.
5.Differentiate between male and female sternams.
Tutor

Date / / 20
3- Identification (3)- Radiographs
1. Comment on this x-ray film.
Tutor

Date	/	/ 20								
		4- Me	dico-l	legal im	portai	nce (M	(LI) of	wou	nds	
1. Di	ffer	entiate b	etwee	n cut an	d contu	sed wo	ounds.		•••••	•••••
2. Dif	ffere	entiate be	etwee	n cut and	d stab w	ounds	•			
Tutor										

Date / / 20
5- MLI of head injuries (1)
1. Define fissure fracture, mention causative instrument.
2. Define localized depressed fracture, mention characters.
Tutor

Date / / 20 6- MLIof head injuries (2) 1. Define brain concussion. 2. Define brain compression. 3. Define lucid interval. **Tutor**

Date / / 20	
7- MLIof firearm v	veapons
1. Define rifling marks.	
2. Define riflings.	
3. Differentiate between black and smo	okless gun powder.
Tutor	

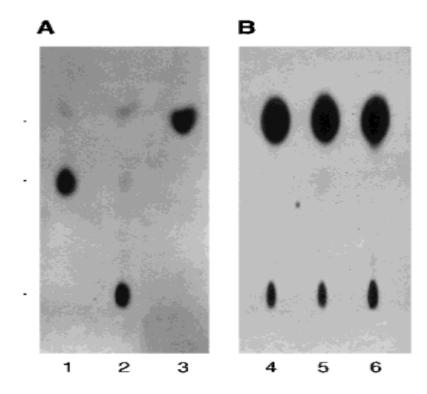
Date / / 20	
8- MLI of firearm	injuries
1. Differentiate between inlet and exit	wounds.
2. Mention medicolegal importance of	powder marks.
Tutor	

Date / / 20
9- MLI of pregnancy& abortion
1. Mention characters of 8 th month intrauterine foetus.
2. Mention different types of abortifacient drugs.
Tutor

Date / / 20
10- Roots, capsules and seeds
I- Describe, mention active principle(s)& differential diagnosis (if present):1. Strychnusnux vomica:
2.Datura fastiosa:
3.Cannabis
seed:
II. Differentiate between aconite and Jalap roots.
III. Describe& mention active principle(s):1. Colocynth capsule:
2 Danayana maifanium agasula.
2.Papaversomniferium capsule:
Tutor

11- Thin Layer Chromatography (TLC)

1. Define and calculate the RF



Sample No. ()

Tutor

H-Clinical Toxicology Sy

a-Clinical Training 18 at Emergency Hospital 1a

Objectives:

- 1. Demonstration of antidotes
- 2. Demonstration of instruments used for airway support.

Date / / 20
a- Clinical Toxicology at Emergency Hospital
Answer the given quiz.
······································
Tutor



Date / / 20	
Discussion of case problems Answer the questions in your assessment model according to the problem given to you.	
Case	The Answer
1- A toxicological case of	
2- A toxicological case of	
Tutor	

Date / / 20	
Discussion of case problems Answer the questions in your assessment model according to the problem given to you.	
Case	The Answer
3- A toxicological case of	
4- A toxicological case of	
Tutor	1

Date / / 20	
Discussion of case problems Answer the questions in your assessment model according to the problem given to you.	
Case	The Answer
5- A toxicological case of 6- A toxicological case of	
Tutor	

Date / / 20	
Discussion of case problems Answer the questions in your assessment model according to the problem given to you.	
Case	The Answer
7- A toxicological case of 8- A toxicological case of	
Tutor	

Date / / 20	
Discussion of case problems Answer the questions in your assessment model according to the problem given to you.	
Case	The Answer
9- A toxicological case of	
10- A toxicological case of	
Tutor	

Date / / 20
Substance abuse cases
Case1 Question: Answer
Case 2 Question: Answer
Case 3. Question:
Answer
Tutor

Date / / 20

Nicotine dependence scoring (Fagerström test)

Questions	Answer	Scoring	Case1	Case 2
	Within 5 min.	3		
(1) After you wake up, how soon do you	" 6-30 min.	2		
smoke your first cigarette?	" 31-60 min.	1		
smone your most engarester.	After 60 min.	0		
(2) Do you find it difficult to refrain from	Yes	1		
smoking in places where it is forbidden,	No	0		
e.g., in bus, at the library, at the cinema, etc.?				
(3) Which cigarette would you hate most to	The first one in the	1		
give up?	morning	0		
give up:	All others			
	10 or less	0		
(4) How many cigarettes/day do you	11–20	1		
smoke?	21–30	2		
SHORE.	31 or more	3		
(5) Do you smoke more frequently during	Yes	1		
the first hours after waking than during the rest of the day?	No	0		
(6) Do you smoke if you are so ill that you	Yes	1		
are in bed most of the day?	No	0		
Total score:				
Interpretation of the score:				

Tutor

III- Skills Labab

Technique of gastric lavage

1- Procedure of nasogastric intubation

- 1. Wearing of gloves.
- 2. Standing on the left side of the patient near to the head.
- 3. Positioning of the patient (awake or comatose).
- 4. Placing a towel across the chest up to the patient's neck.
- 5. Explaining the nasal intubation procedure to the patient.
- 6. Asking about:
- e- Any prior nasosurgery
- f- Nasal trauma
- g- Difficulty in breathing through a particular nostril.
- 7. Asking the patient to inhale alternatively through each nostril, noting which side provides superior flow, then to blow his nose and inspecting nares for obstruction orseptal deviation.
- 8. Applying nasal decongestant to nasal mucosa that allow easier insertion of the tube and reduce the risk of epistaxis.
- 9. Installing viscous lidocaine 2% into the more patent nostril with the head tilted backwards and ask the patient to sniff and swallow to anesthetize.
- 10. Estimating tube insertion length by measuring "ear-nose-xiphoid distance" and mark with tape.
- 11. Creating gentle curve in the proximal end of the tube by coiling 4-6 inches tightly around the hand.
- 12. Lubricating the proximal end of the tube with gel.
- 13. Passing the lubricated tube along floor of nose till nasopharynx then rotate the tube 180; so the curved end of the tube passes towards the esophagus.
- 14. Asking the patient to swallow or to sip water, to facilitate quick entry of the tube.
- 15. Confirming right placement by:
 - Asking the patient to talk. If the patient cannot make a sound, so the tube has passed wrongly through the vocal cords and into the trachea.

- Using a flashlight to look into the patient's mouth to view the tubing. It should appear straight in the back of the throat with no coiling into the mouth.
- Drawing 10-20 cc of air into the syringe, place the stethoscope over the patient's stomach and quickly inject the bolus of air into the stomach. A whooshing sound should be audible over the stomach if the tube is in the stomach.
- The most accurate way to check for tube placement is portable chest x ray.
- 16. Fixing the tube with tape. (The uncut end will be placed along the patient's nose and the tails wrapped around the tube in opposite directions to secure the tube to the nose after insertion.

2- Procedure of gastric lavage:

- 1. After confirmation of the tube position, aspirate as much as you can. This sample should be for laboratory diagnosis.
- 2. Pouring about 200-300 cc of warm water (only 50-100cc for infants and children). The fluid will enter the tube by gravity.
- 3. Allowing the stomach contents to regurgitate by gravity>
- 4. Washing is repeated with warm water or with a specific antidote until the fluid becomes clear and odourless.
- 5. Before extraction of the tube, activated charcoal should be left in the stomach to ensure adsorption of any poison.
- 6. Finally, the external end should be tightly closed by fingers before withdrawal to prevent the escape of any fluid from the lower end into the air passages.

swer the simple quiz.	
1- The Question:	
	• • • • • • • • • • • • • • • • • • • •

Virtual Lab Activities Answer MCQs: No. Signature The Answer **Case no. (1)** Case no. (2) Date: / / 201

IW-Forensic Medicine Inc

Objectives to teach the students the following skills:

- a- Forensic cases problem discussions.
- **b- Applied forensic photography.** Students will be shown photographs of different forensic cases followed by discussion.
- c- Writing reports on Wounds

The primary report must include the following:

- 1. Personal data and do not mention the patient name but his serial.
- 2. In reports on wounds, describe the injury; its location and mention the type of possible instrument, expected duration of healing (more or less than 20 days) and whether it is expected to leave a permanent infirmity or not.

a- Forensic^{S1C} Case Problem Discussions

	n of case problems ment model according to the problem give
Case	The Answer
A forensic case of	
A forensic case of	

se problems odel according to the problem given to
The Answer

b-Applied Forensic Photography

Date / /20	
	orensic cases photography essment model according to the problem given to
Case	The Answer
1. A forensic case of	
2. A forensic case of	
3. A forensic case of	
4. A forensic case of	
Tutor	

c-Writing Reports on Wounds

Data	/	12	ſ
Date	/	12	Ų,

التقاري الأصابية للحروح

التفارير (۱) تقرير (۱)
بناء على طلب قسم الطب الشرعى والسموم الإكلينيكية بكلية الطب جامعة المنصورة قمت انا الطالب رقم الجلوس بتوقيع الكشف الطبى الإصابى الإبتدائى بمستشفى الطؤارى الجامعى على المريض (x)، رقمه المسلسل السن الجنس المهنة العنوان التاريخ: الساعة ظروف الحادث (جنائى / إنتحارى / عرضى) (حسب أقوال المصاب): نوع الآلة المستخدمة في إحداث الأصابات (حسب أقوال المصاب): درجة الوعى: وبالكشف عليه وجدت الإصابات الآتية:
المدة اللازمة للعلاج: العاهة المتخلفة المتوقعة: التدخل الجراحي والعلاجي (الذي تم عمله للمصاب): أي أصابات أو جروح قديمة أو حالات مرضية مصاحبة:

الــــرأي
Tutor

Date / /20
تقریر (۲)
بناء على طلب قسم الطب الشرعى والسموم الإكلينيكية بكلية الطب- جامعة المنصورة قمت انا الطالب بتوقيع الكشف الطبى الإصابى الإبتدائى بمستشفى الطؤارى الجامعى على المريض (x)، رقمه المسلسل السن الجنس المهنة التنوان التاريخ: الساعة الساعة في إحداث الأصابات (حسب أقوال المصاب):
وبالكشف عليه وجدت الإصابات الاتية:
المدة اللازمة للعلاج: العاهة المتخلفة المتوقعة:
التدخل الجراحي والعلاجي (الذي تم عمله للمصاب):
أى أصابات أو جروح قديمة أو حالات مرضية مصاحبة:

الــــرأي
Tutor

Date / / 20
Wound reports (for Malaysian)
(report 1)
At the request ofForensic Medicine and Clinical Toxicology Department.
I doctor performed provisional clinical and injurie
examination in MansouraEmergencyHospital on the patier
Age: Religion Sex
Job
Address:
Date Hour serial Number
Circumstances of injury (according to victim story):
(Accidental/homicidal/Suicidal)
Type of Instrument used in making the injuries (according to victim story):
(Blunt or sharp)
Level of consciousness:
On examination injuries were found
Time needed for healings
Time needed for healing:
Evnaata
Expecte

Surgical or Medical interference done to the patient.....

Old injuries or wounds or any associated medical condition or
diseases
Opinion in Summary
Tutor
Tutor

Data	/	/ 20
Date	/	/ 20

Wound reports (for Malaysian) (report 2)

			and Clinical Tox	0.		
			rmed provisiona			•
			ergencyHospital			
			Religion		Sex	
Address:						
Date	· • • • • • •	Hour	serial N	Number		
Circumstances	of in	jury (according	to victim story):			
	-					
,		,	the injuries (acco			
		_		_		-
			• • • • • • • • • • • • • • • • • • • •			
		juries were fou				
	-					
	· · · · · · · · · · · · · · · · · · ·					
Time needed	for he	ealing:	•••••			
Expected infi	rmity	that would be	left:			
Emperior initial	11110	tildt wodia be				
					· • • • • • • • • • • • • • • • • • • •	
					. 	
Surgical or M	ledica	l interference o	done to the patio	ent		

Old injuries or wounds or any associated medical condition or
diseases
WIDOUDED
Opinion in Summary
Tutor
Tutor

Students Activities 125

Students' activities are a trial to achieve National Academic Reference Standards (NARS) which include knowledge, intellectual skills, practical and transferable skills. Students can do many forms of activities. Choosing any activity depends on the student himself and the supervising staff member. The aim of these activities is to achieve many scientific or social skills and community services. These activities may include one of the following:

- 1- Preparing power point presentations.
- 2- Scientific research e.g. questionnaire regarding exposure to certain pesticides in a village, questionnaire about substance abuse among students or measuring stature and foot length in relation to sex, age and race, etc.