FACULTY OF PHARMACY

DEPARTMENT OF PHARMACOLOGY & TOXICOLOGY

3rd Year Pharmacy Students

COURSE TITLE:	Final Exam Toxicology		COURSE CODE: H57
DATE: 27/6/2021	Second semester 2	TOTAL ASSESSMENT MARKS: 150	TIME ALLOWED: 2 h

Q1 – Q5:

-Match toxicity spectrum from column (I) with its respected meaning from column (II).

-Transfer your selection match for each question properly to the answer sheet.

(I)	(II)
1-Idiosyncratic	A-Sensitization reaction.
2-Allergic	B-Usually after exposure phase.
3-Delayed	C-Usually at site of first contact.
4-Irreversible	D-Based on tissue ability to regenerate.
5-Local	E-Genetically dependent.

6-Toxicity testing for a substance is performed for:
A-Risk assessment study.
B-Determine the spectrum of toxicity of such substance.
C-Determine therapeutic regimen.
D-Both A&B. E-None of the above.

7-Acute toxicity study include:
A-Clinical chemistry study. B-Median lethal dose.
C-Teratogenicity study.
D-All of the above. E-None of the above.

8-Specical toxicity testing may include:
A-Fertility and reproductive toxicity.
B-Perinatal and postnatal toxicity.
C-Mutagenic potentials.
D-All of the above. E-None of the above.

9-A threshold dose could be determined for:
A-Teratogens. B-Carcinogen. C-Mutagen.
D-All of the above. E-None of the above.

10-Mechanisms of tissue injury may include:
A-Lipid peroxidation.
B-Covalent binding to tissue macromolecules.
C-Stimulation of residential macrophages.
D-Alteration of calcium ion homeostasis.
E-All of the above.

11-Hepatotoxicity could be:
A-Centrilobular damage. B-Massive damage.
C-Focal damage. D-Periportal damage.
E-All of the above.

Q12 – Q16:

-Match hepatotoxicant from column (I) with its most potential toxicity from column (II).

-Transfer your selection match for each question properly to the answer sheet.

(I)	(II)
12-Chronic alcohol	A-Steatosis.
13-Anabolic steroids	B-periportal necrosis.
14-Allyl alcohol	C- Cholestasis.
15-Furosemide	D-Cirrhosis.
16-Corticosteroids	E-Midzonal damage.

Q17 – Q21:

-Match toxicant from column (I) with its most potential toxic response from column (II).

-Transfer your selection match for each question properly to the answer sheet.

(I)	(II)
17-Ethylene glycol	A-Pulmonary edema; bronchitis; emphysema.
18-Radiocontrast substance	B-Pneumoconiosis.
19-Paraquat	C-Obstructive uropathies.
20-Asbestos	D-Kidney tubular necrosis.
21-Sulfur oxides	E-None of the above.

Q22 – Q25:

-Match teratogen from column (I) with its most potential teratogenic effect from column (II).

-Transfer your selection match for each question properly to the answer sheet.

(I)	(II)
22-Progestins	A-Developmental delay; microcephaly; small eyelid folds.
23-Thalidomide	B-Chromosomal aberrations.
24-Ethanol	C-Ataxia, chorea.
25-LSD-derivatives	D-Phocomelia; low set ears.
	E-Musculanization of female fetus.

26-Which of the following statements concerning chronic poisoning is correct?

A- They are caused by one large dose.

B- Developed after repeated exposure to small dose.

C- Symptoms emerge gradually.

D- B and C are correct.

27- Accidental poisoning may happen when:

A-Young children mistake poison for food or drink.

B- Persons who misuse chemical product.

C- Individuals try to kill themself, by exposed to carbon monoxide.

D- All the above. E- A &B are correct.

28- Do not induce vomiting if:

A- The poison is hydrocarbon. B- The patient is comatose.

C- The patient has severe cardiovascular disease. D- All the above.

29- Toxic substance poorly adsorbed to charcoal include:

A- Cyanide. B-Lithium. C-Corrosive.

D- Hydrocarbon. E- All the above.

30- Cathartics are contraindicated if the patient has:

A- Intestinal obstruction. B- Electrolyte disturbance.

C- Swallowed caustic substances. D- All the above.

31- Steps of skin decontamination include:

A- Avoid secondary exposures by wearing protective gloves

B- Flush exposed areas with large amounts of water for at least 15 minutes.

C- Warp the wound in bandages.

D- B & C are correct. E- A & B are correct.

32- Intentional poisoning:

A-Including both suicidal and homicidal attempts.

B-Is common among adolescents and adults. C-Both A & B.

33- Apomorphine:

A-Is central acting emetic drug.

B-Its action is reliable and more effective than syrup ipecac.

C-Should be avoided with ingested poisons which produce significant CNS depression.

D-All the above.

34- Chemicals removed by hemodialysis should have:

A-Low volume of distribution. B-High plasma protein bound.

C-High molecular weight. D-All the above.

35- Gastric lavage should be avoided in:

A-Patient with unprotected airway.

B-Substances with high potential for aspiration (hydrocarbon).

C-Ingestion of strong acid or alkali (increased risk of gastrointestinal bleeding or perforation).

D-All the above.

36- Hemoperfusion complication (adverse effect):

A-Hypoglycemia. B-Leukopenia and thrombocytopenia.

C-Microembolization. D-All the above.

37- Physiologic (functional) antagonist:

A-Compete with the poison for receptor sites.

B-Acts on one biochemical system to produce effects that are opposite from those produced on another system.

C-Reacts with poisonous chemically to produce a compound of a lesser toxicity.

D-None of the above.

38- Decrease absorption of toxin include:

A-Diuresis. B-Manipulation of urine PH.

C-Activated charcoal. D-Hemodialysis.

39- N-acetyl cysteine, works to reduce paracetamol toxicity by:

A-Replenishing body stores of antioxidant glutathione.

B-Acting as a precursor for glutathione.

C-Helping the body to regenerate glutathione enough to decrease the possible damage to the liver.

D-All the above.

40- Overdose of paracetamol may produce severe liver injury with hepatocellular necrosis. The important mechanisms of cell injury is / are:

A-Metabolic activation of paracetamol to reactive metabolite.

B-Glutathione depletion. C-Both A& B.

41- Patient with mild salicylate intoxication frequently have all the following symptoms EXCEPT:

A- Vomiting

B- Hyperventilation (moderate hyperpnea) C-Seizures and coma.

D-Tinnitus. E-None of the above.

42- Fluid resuscitation and serum alkalization will increase Salicylate elimination. Hemodialysis can also accomplish this. Indication for hemodialysis include:

A-Salicylate levels are greater than 160 mg/dl.

B-Pulmonary edema. C-Renal failure.

D-All the above. E-None of the above.

43- Airway may be obstructed in some cases of poisoning, it caused by:

A-Falling back of tongue. B-Aspiration of poison.

C-Increased secretion and edema of airways. D-All of the above.

44- We use ..... to quickly induce vomiting (1-2 minutes):

A-Apomorphine. B-Syrup of ipecac. C-Both A&B.

45- High therapeutic dose of salicylate intoxication leading to:

A-Tachypnea and respiratory alkalosis.

B-Decreased plasma co_2 ($\downarrow pco_2$). C-Both A and B.

D-Increased plasma co_2 ($\uparrow pco_2$).

46- Regarding acetaminophen (paracetamol) toxicity, which of the following is True?

A-The risk factors for toxicity include alcoholism.

B-The liver damage results from paracetamol itself.

C-The liver damage results from its conjugated metabolite (glucuronide, sulphate).

D-Liver damage result from its toxic metabolite N-acetyl-p-benzoquinoneimine.

E-A&D are correct.

47- Peritoneal dialysis is more applicable for acute ingestion of toxic substance in children because of:

A-Their large peritoneal surface area in relation to body size.

B-A child's abdominal wall is much easier to penetrate than trying to isolate an appropriate vein in a small arm.

C-Both A and B.

Q 48 – Q 50:

- Indicate whether the following statements are true (A) or false (B)

48- Toxin is a toxic agent that are produced or a byproduct of anthropogenic activities

A- True B- False

49- Ideal suicidal poisoning should be easily obtained, painless and rapid in action

A- True B- False

50- Deficiency of glucose-6-phosphate dehydrogenase enzyme leads to hemolytic anemia with the intake of fava beans.

A- True B- False

Q 51-Q 58:

-Match toxic agent from column (I) with its potential toxic effect from column(II).

-Transfer your selected match for each question properly to the answer sheet.

(I)	(II)
51-Acute trichlorfon	A-Alopecia.
52-Acute thallium	B-Liver cirrhosis.
53-Chronic lead	C-Muscle fatigue, weakness and paralysis.
54-Chronic arsenic	D-Nephrotoxicity.
55-Acute methiocarb	E-None of the above.
56-Acute DDT	
57-Chronic mercuric chloride	
58- Acute iron	

59-BAL:

A-Is contraindicated in iron toxicity because it forms insoluble complex with iron.

B-Protect sulfhydryl group of enzymes from inactivation.

C-Is used in treatment of alkyl mercury toxicity.

D-Both A & B. E-None of the above.

60-Inhalation of large amounts of CO results in:

A-Cardiac and respiratory depression. B-Encephalopathy.

C-Muscular weakness and flaccidity of the legs. D-Polyneuritis.

E-Headache, nausea, vomiting and blurred vision.

61-Suicidal toxicity is common by cyanide due to:

A-Its symptoms do not appear immediately after ingestion.

B-It is easily obtained. C-It is tasteless and odorless.

D-It causes severe abdominal pain. E-Its rapid action.

62-Lead encephalopathy is characterized by:

A-Restlessness, irritability, convulsions and coma.

B-Hemorrhage and necrosis of brain tissue.

C-Wrist and foot drop and muscular weakness.

D-Both A & B. E-All of the above.

63-Pralidoxime must be given within 24 hrs. after exposure to parathion toxicity due to:

A-Aging of AchE.

B-Additional chemical changes occur after phosphorylation of enzyme strengthen the phosphorylated complex.

C-The enzyme complex is resistant to reactivation within minutes to hours.

D-Both A & C. E-All of the above.

64-In treatment of TEPP toxicity, full atropinization is achieved and detected by:

A-Flushing of face. B-Dry mouth and dilated pupil.

C-Increased salivation and bronchial secretions.

D-Both A & B. E-All of the above.

65-In treatment of severe cyanide toxicity, establish adequate airway is/are achieved by:

A-Administer high concentration oxygen.

B-Suction of bronchial secretions. C-Insert an endotracheal tube.

D-Both A & C. E-All of the above.

66-In iron toxicity, death results from:

A-Hypovolemic shock secondary to bleeding as a result of local corrosive action.

B-Severe pulmonary edema. C-Respiratory failure.

D-Cardiovascular failure. E-Both A & D.

67-Histotoxic anoxia in cyanide toxicity is due to:

A-Binding of cyanide to the iron component of nitrate reductase enzyme.

B-Paralysis of aerobic metabolism.

C-Reduced cellular utilization of oxygen.

D-Both B & C. E-All of the above.

68-The half-life of high level of carboxyhemoglobin is greatly reduced by using:

A-100% oxygen. B-Hyperbaric oxygen.

C-Mouth to mouth resuscitation. D-Both A & B.

E-All of the above.

69-The sources of cadmium poisoning include all the followings EXCEPT:

A-Released during mining of lead and zinc. B-Cigarette smoking.

C-Electroplating. D-Contaminated food and water.

E-None of the above.

Q 70- Q75:

-Match toxic agent from column (I) with antidote used for its treatment from column (II).

-Transfer your selected match for each question properly to the answer sheet.

(I)	(II)
70-Carbryl	A-Ca Na_2 EDTA.
71-Warfarin	B-Atropine & pralidoxime.
72-Lead	C-Methylene blue.
73-OPIDN	D-Phytonadione.
74-Cyanide	E-None of the above.
75-Elemental mercury	