FORENSIC MEDICINE & TOXICOLOGY – PAST QUESTIONS (2005-19)

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FORENSIC LAW

Laws, Courts of Law and Court Evidence

- 1. Medical witness is integral part of administration of justice. He is called upon by the courts to give evidence concerning the examinee he has examined. **[Annual 2017]**
 - a) Define evidence. (1)
 - b) Classify evidence. (1)
 - c) Enlist the stages of recording of evidence in a court of law. (2)
- 2. A victim of physical assault was brought in the accident and emergency department of a tertiary care hospital. His condition was so precarious hat death seems to be imminent. The duty doctors decided to record dying declaration.
 - a) Enumerate eight points that differentiate dying declaration from dying deposition. (4)
 - b) Enlist three conditions that are necessary for admissibility of evidence. (1)
 [Supple 2016 held in 2017]
- A doctor appears before the court of law to record the evidence regarding an autopsy conducted by him. Through what procedures he has to go through? [Annual 2012]
- 4. A court summoned a medical practitioner to give evidence in a trial of a murder case.
 - a) How would you define evidence? (2)
 - b) Describe the stages of recording the evidence. (3)[Supple 2015]
- In a criminal case, plea of insanity was raised in defense of an accused in the court of Law. [Annual 2015]
 - a) What are the verdicts which can be given by the court of law during course of proceeding? **(2.5)**
 - b) What is McNaughton's rule? (2.5)

- 6. In court of law, give a brief account of various stages of evidence through which a medical witness has to go. [Annual 2014]
- Write exceptions to criminal responsibility with a brief description of each.
 [Supple 2013]
- 8. A man was shot in the chest by a robber. He was rushed to hospital where he succumbed to injury. Before dying he narrated incidence to attending doctor.
 - a) What this statement would be called?
 - b) How such a statement can be differentiated from a deposition?
 [Annual 2010]

Legal Aspects of Medical Practice

- 1. The art of healing is categorized in various systems of medical practice and each system is governed by its respective laws. **(Supple 2018 held in 2019)**
 - a) Enlist statute laws governing the allopathic system of medicine. (2)
 - b) What are the privileges of Registered Medical Practitioner? (3)
- 2. A recent graduate of a medical college visits PM&DC for registration purpose.
 - a) What are requirements of medical registration for fresh graduates? (2)
 - b) What are the privileges and obligations of Registered Medical Practitioner? (3)[Annual 2018]
- 3. Write a short note on privileged communication. (2.5) [Supple 2017 held in 2018]
- Define negligence. What are factors required to prove a case of medical negligence? [Supple 2015]
- 5. Describe the role of consent in medical treatment. What are ingredients to make consent legal? What are the essential components to make consent as an informed consent? [Supple 2014]
- 6.
- a) What is professional secrecy?
- b) What is privileged communication?
- c) What are situations in which communication becomes a privileged communication? [Annual 2013]

- 7. What is professional misconduct? What practices are to be avoided to prevent the charges of professional misconduct? [Annual 2011]
- 8.
- a) Define consent.
- b) What are its types?
- c) Write prerequisites of a valid consent. [Supple 2011]
- 9.
- a) Define negligence.
- b) List types of medical negligence.
- c) What is meant by professional misconduct? [Supple 2009]
- 10. Define professional misconduct. What are professional activities which a doctor must not do so that he remains an ethical doctor? [Annual 2008]
- 11. You are going to be a Registered Medical Practitioner. What are privileges and obligations of a registered medical practitioner? [Annual 2007]
- 12. What do you understand by professional misconduct? Explain by giving examples. [Annual 2005, Annual 2006]

Medical Aspects of Law

Give classification of Qatl (murder) according to Qisas and Diyat. (2.5) [Annual 2016]
 2.

- a) Enlist hurt according to Qisas and Diyat laws.
- b) Explain Shajjah with its types. [Annual 2011]
- 3. Define hurt and Qatl and its types. [Annual 2006]
- 4. Classify hurt according to Qisas and Diyat laws. [Annual 2005]

PERSONAL IDENTITY

 Police has brought skeleton remains discovered from Cholistan to the State-of-the-art Autopsy center. What information of medico-legal importance can be obtained from the autopsy of this skeleton remains. (5) [Annual 2018]

- A human skull is presented by local police in the city morgue with the request to determine its age and gender. Enumerate the five salient features each for age and gender that will help achieve these two objectives. (2.5+2.5) [Supple 2017 held in 2018]
- 3. A police party has searched for some material which they claim as bones from suburb of a down. Enlist five information you can provide to law enforcement agencies after examination of this specimen. **[Annual 2017]**
- 4.
- a) Name different types of finger print pattern along with their percentage in population. **(2.5)**
- b) Write a short note on anthropometry. (2.5) [Supple 2016 held in 2017]
- 5.
- a) Name the physiological parameters of identification. (2)
- b) What are the differences between male and female pelvis? (3) [Annual 2016]
- 6. A human skull with mandible is found by police and brought to you. As a forensic expert, how will you determine age, sex and race by examination? [Annual 2014]
- 7. What are the surest methods to determine personal identity? [Annual 2013]
- 8. Write a brief note on dactylography. [Annual 2012]
- 9. Police has brought to you a bag containing bones. What information you can furnish to the police and how? What is commingling? [Annual 2011, Supple 2009]
- 10.
 - a) What is Hess's rule? Briefly describe its forensic importance.
 - b) What is forensic importance of DNA fingerprinting? [Supple 2011]
- 11. A thief was apprehended by the police within 24 hours after the burglary. Leaving fingerprints on a door knob made it possible. **[Annual 2010]**
 - a) What are various types of fingerprints?
 - b) Briefly mention advantages of dactylography.
- 12. An absconded soldier was apprehended after 5 years. His appearance was quite different form previously. **[Annual 2009]**

- a) How can he be identified positively?
- b) List various methods of identification.
- c) What are the advantages of dactylography?
- 13. According to WHO one has right to be identified. What is third party method of identification? What is medicolegal importance of tattoo marks? [Annual 2007]
- 14. How examination of clothes helps in identification of a person? [Annual 2005]

EXAMINATION OF BIOLOGICAL SPECIMENS

- 1. On autopsy examination of an 8-year-old girl, some hair is found clenched in her hand which were sent to the forensic science laboratory for analysis.
 - a) What is the medicolegal significance of examination of hair? (2)
 - b) How would you differentiate human hair from animal hair? (3) [Supple 2018 held in 2019]
- 2. A forensic expert recovered hair from the scene of crime.
 - a) Enlist information you would gather from the examination of hair. (2)
 - b) How would you differentiate between animal and human hair? (3)
 [Supple 2015 held in 2016]
- 3. A medicolegal examiner sent different swabs taken from the alleged victim of rape to the forensic science laboratory. **[Annual 2015]**
 - a) Name the test for detection of semen in these stains. (3)
 - b) What is Locard's exchange principle? (2)
- 4. Briefly describe he information which can be gained by examination of hair in living and dead. **[Supple 2015]**

AUTOPSY

- 1. The investigation of a case of homicide is not completed without the complete autopsy of the victim. **[Supple 2018 held in 2019]**
 - a) Define and classify autopsy. (2.5)
 - b) What are objectives of medicolegal autopsy? (2.5)

- 2. Define and classify autopsy. Compare and contrast the objectives of medical and medicolegal autopsy. (2+3) [Supple 2017 held in 2018]
- 3. Autopsy is a detailed examination of a dead body including of both external surface and internal contents of the body after opening its cavities. **[Annual 2017]**
 - a) Enumerate the various steps of this procedure. (3)
 - b) Enlist the names of contents in four bottles of routine specimens. (2)
- 4. Medicolegal autopsy is highly responsible task. Only trained medical practitioners should do it. How would you identify hazards in autopsy room for safety of those who are working there? (5) [Supple 2016 held in 2017]
- 5. Father of a recently married girl who died 2 weeks back with initial postmortem finding suggestive of suicidal hanging, requested DCO that re-postmortem should be done after diffing grave due to a suspicion of some foul play. **[Supple 2016]**
 - a) What is this procedure called? (1)
 - b) Give its objectives. (2)
 - c) What are limitations of this procedure? (2)
- 6.
 - a) Enlist four objectives of medical autopsy. (2.5)
 - b) What are limitations of exhumation? (2.5) [Annual 2016]
- 7. During exhumation/postmortem examination of a 30 years old male alleged to have died in police encounter, the medical board in addition to firearm injuries found a chip fracture of frontal bone of skull. It was declared as autopsy artifact by the board.
 - a) Define artefact. (1)
 - b) Classify postmortem artefacts. (2)
 - c) Name therapeutic/resuscitation artefacts. (2)[Annual 2015]
- 8. A medical officer conducted an autopsy in which he failed to identify the cause of death. Enumerate various causes of such an unrewarding autopsy with brief explanation. [Supple 2015]
- 9. Autopsy is a dialogue with dead. Comment. [Annual 2013]
- 10. Briefly describe the procedure of exhumation and autopsy. [Supple 2013]

- 11. Examining and afterwards dispatching the specimen to concerned laboratory ay lead to unrewarding autopsy. Briefly describe the pitfalls in the above motioned procedures which can lead to such results. **[Supple 2013]**
- 12. Make a brief description of external examination of a dead body during autopsy. [Annual 2012]
- 13. Enumerate hazards to which a pathologist is exposed while doing autopsy. [Supple 2012, Supple 2011]
- 14. What is negative autopsy? What are the conditions conducive for negative autopsy? [Annual 2011, Supple 2009]
- 15. A doctor was appointed in forensic medicine department of a teaching hospital. He was cautious of various hazards at work. **[Annual 2010]**
 - a) Enumerate various hazard one can come across in autopsy room.
 - b) How can one protect oneself from being infected while conducting autopsy?
- 16. A male victim of physical violence was brought to the emergency department of a hospital. Despite enthusiastic resuscitative measures, he died. Listed atleast five artefacts expected to be present at autopsy examination. **[Annual 2009]**
- 17. What are postmortem artefacts due to decomposition/putrefaction? [Annual 2008]
- 18. Enlist three types of autopsy. What are the objectives of performing a medicolegal autopsy? [Annual 2007]

THANATOLOGY

- 1. A body of woman with history of homicidal stabbing was found lying in park. The whole body was rigid with eyes open. [Supple 2018 held in 2019]
 - a) What is the mechanism of development of this phenomenon? (2)
 - b) Give its sequential development in the body. (3)
- 2. Foul smelling, balloted, discolored body with maggots is recovered from a room.
 - a) Name this postmortem change. (0.5)

- b) Enumerate the pressure effect of gases in this particular postmortem change.
 (4.5) [Annual 2018]
- 3. Time since death can be determined by changes occurring in dead body after death.
 - a) Classify these changes. (2)
 - b) Enumerate the conditions simulating with rigor mortis. (1)
 - c) Enumerate features differentiating between mummification and maceration. (2)
 [Supple 2017 held in 2018]
- 4.
- a) What is the sequence of putrefactive changes in the body? (2)
- b) Enlist the factors/circumstances which speed up this process. (3)
 [Annual 2017]
- 5. What is the difference between cause, mode and manner of death? Give two examples in each case. [Supple 2016 held in 2017]
- 6. The certification of death must be based on clinical judgment fulfilling certain essential criteria.
 - a) Enumerate three essential and two additional clinical parameters for the certification of death. **(2.5)**
 - b) Give the differential diagnosis of rigor mortis particularly mentioning the differentiating points between rigor mortis and cold stiffness. (2.5)
 [Annual 2016]
- 7. What do you know about the following terms? Elaborate your answers with examples. [Supple 2016]
 - a) Cause of death (1)
 - b) Mode of death. (2)
 - c) Manner of death. (2)
- 8. The postmortem phenomenon takes over the corpse as soon as the body vital systems fail. It is manifested by definite physical changes in soft parts of the body.
 - a) Enlist physical changes after death. (3)
 - b) Write note on Casper's dictum. (2)[Annual 2015]

- 9. List early postmortem changes that a dead body manifest. Draw and label timerelated changes for rigor mortis. **[Supple 2015]**
- 10. A dead body of an elder male was found in a waste dumping ground. The body was swollen and had protruding eyes and tongue. His body was discolored and was emitting foul smell. [Annual 2014]
 - a) Name the above condition of the body.
 - b) What are the processes involved that lead to above condition?
 - c) What are the stages of this condition?
- 11. Describe the changes after death in chronological order to time the postmortem interval in the first 24 hours. **[Supple 2014]**
- 12. How to determine time since death? [Annual 2013]
- 13. Name the main early postmortem changes occurring in a dead body. Briefly mention medicolegal significance of rigor mortis. **[Supple 2013]**
- 14. Briefly describe various modes of death with a few underlying mechanisms for each. [Annual 2012]
- 15. A dead body at the autopsy table is showing stiffness all over. Name the condition. What is the scientific basis of this stiffness? How can this stiffness be related to postmortem interval? [Annual 2011]
- 16. What are the current criteria to diagnose somatic death? [Supple 2011]
- 17. A dead body was discovered from forest. On initial examination at the site, rigor mortis was found fully developed. **[Annual 2010]**
 - a) Briefly motion biochemical basis for this phenomenon.
 - b) Write its medicolegal importance.
- 18. A victim of blunt trauma died due to injuries. During autopsy examination an area of skin discoloration was found on back. Write down the gross characteristic features differentiating a bruise from postmortem stasis. **[Annual 2009]**
- 19. Adult body emitting foul smelling and is swollen with protrusion of eyes and tongue and discoloration all over the body. [Supple 2009]

- a) What are the stages of this condition and in which stage the above-mentioned body is?
- b) What are the processes responsible for above condition?
- 20. How following can help in determination of time since death:
 - a) Rigor mortis.
 - b) Postmortem staining. [Annual 2008]
- 21. Death is an event which cannot be denied. What do you know about?
 - a) Mode of death
 - b) Manner of death [Annual 2007]
- 22. What is marbling? [Annual 2006]
- 23. What do you understand by the following and give one example of each?
 - a) Cause of death
 - b) Mode of death
 - c) Manner of death [Annual 2005]

TRAUMATOLOGY

General Traumatology

- 1. During the examination of the victim of physical assault, the medical examiner noted multiple injuries caused by blunt weapon on the body of the examinee.
 - a) Name and classify different injuries caused by a blunt weapon. (3)
 - b) How would you assess the age of a bruise? (2)[Supple 2018 held in 2019]
- 2. A man presented in the medicolegal clinic with multiple open gaping wounds on his head. [Supple 2017 held in 2018]
 - a) Enumerate the characteristics differentiating an incised wound from a split laceration on the head. **(2.5)**
 - b) Differentiate between homicidal and suicidal cut throat. (2.5)
- 3. Write a short note on Ewing's postulates. (2.5) [Supple 2017 held in 2018]

- 4. A 40 years old male was found in police custody. On examination, there were multiple bruises found on the body. What are different types of bruises and how will you assess the age of bruise? [Annual 2017]
- 5.
- a) What are the characteristics of self-inflicted injuries with a knife? (3.5)
- b) How will you differentiate them from defense wounds? (1.5) [Supple 2016 held in 2017]
- 6. Describe cause-effect relationship in production of lacerations. [Annual 2013]
- 7. A victim presented to a medicolegal clinic with multiple abrasions. In general, what information can be gained by examination of abrasions? [Annual 2012]
- 8. During a scuffle in cricket match, one of the players sustained a blow on the top of head by a wicket. After one day, he develops 'black eye'. [Annual 2010]
 - a) What are various causes of black eye?
 - b) Write any two medicolegal significant features of a bruise?
- 9. What is Ewing's postulate? [Supple 2009, Annual 2006]
- 10. A body of 65 years old male was recovered from a bolted room of a hotel having cut throat injury. There is history of great financial setback. How will you establish that it is the case of suicidal cut throat? **[Annual 2008]**

Thermal and Electrical Injuries

- A body was discovered from a mountainous area. There was history of thunder storm and heavy rain. The opinion about the cause of death was a lightning strike. What are autopsy findings on which this opinion is based? (5) [Annual 2018]
- 2. What are autopsy findings in case of lightning? [Annual 2009]
- 3. What are differences between antemortem and postmortem dry burns? [Annual 2006]

Firearm Injuries

1. A corpse of male is presented for postmortem examination by an investigation agency with history of firearm injury on head. Mention the signs on dead body relating to firearm wound complex to clinch the diagnosis about distance/direction

of firearm wound and manner of death in this case. (2.5+2.5) [Supple 2017 held in 2018]

- 2. A hunter aims to shoot a deer in jungle. Inadvertently, bullet hits a man at distance of 50 meters. Mention the characteristics of entry wound expected to be found if weapon was rifle. **[Supple 2015]**
- 3. On autopsy, a gunshot wound was found over the temple of a male businessman. The is stellate shaped with the collar of abrasion partly lost. There is no blackening or tattooing present. [Annual 2009]
 - a) What is the probably manner of death and distance of weapon?
 - b) On which side beveling of skull will be?
- 4. A wound over right temple in a right-handed person was examined and following findings were observed: circular collar of abrasion, tattooing, blackening and charring of tissues around the wound. **[Supple 2009]**
 - a) Write the type of weapon used.
 - b) What is the approximate distance of weapon of discharge from wound?
 - c) What is probably manner of death?
 - d) What is the cause of tattooing?
 - e) What is the specimen of choice to be sent to the ballistic expert to confirm firer?
- 5. You are going to do medicolegal autopsy of a corpse died of firearm injuries. What will be the indications of homicidal death by a pistol? [Annual 2007]
- Enumerate contrasting features of entry and exist lesions caused by rifled firearm.
 [Annual 2006]

Regional/Transport Injuries

- 1. Write a note on whiplash injury. [Supple 2011]
- 2. In road traffic accidents, how do the following injuries occur? [Supple 2014]
 - a) Clasp knife injury
 - b) Fender fracture
 - c) Dicing

ASPHYXIA & DROWNING

<u>Asphyxia</u>

- 1. Define mechanical asphyxia death. (2) [Annual 2016]
- 2. A dead body of 50 years old man who died during a stampede was brought for postmortem examination. The medical examiner gave traumatic asphyxia as a cause of death. [Annual 2015]
 - a) Define traumatic asphyxia. (1)
 - b) Give mechanism of death and autopsy findings in death due to traumatic asphyxia. **(1+3)**
- 3. What are autopsy findings in death due to garroting? [Supple 2014]
- 4. Tabulate the differences between hanging and strangulation. [Supple 2009]
- 5. How ligature marks due to hanging and strangulation can be different in autopsy? [Supple 2013]
- 6. Enlist mechanical asphyxia death. [Annual 2006]
- 7. Write a note on traumatic asphyxia. [Annual 2005]

Drowning

- 1.
- a) What are the different types of drowning? (1.5)
- b) What are the modes of death in dry and wet drowning? (1.5)[Annual 2016]
- 2. Police brought a dead body of a female for autopsy which was recovered from a canal. [Supple 2016]
 - a) Give two signs on external examination which will favor that it was a case of ante-mortem drowning. (2)
 - b) Describe the changes in respiratory tract in case of drowning. (3)
- 3. A young girl's dead body was recovered from a canal. Her clothes were spoiled with mud, gravel and sand. Police brought her to you for autopsy purpose. [Supple 2014]

- a) Enlist different types of wet drowning.
- b) What is mechanism of death in her case if the death is in fact due to drowning?
- c) Enlist surest signs of ante-mortem drowning.
- d) What is Gettler test?
- 4. What are different types of drowning? [Annual 2006]
- 5. What are modes of death in dry and wet drowning? [Annual 2006]

SEXUAL OFFENCES

- A young female was presented by the order of court in medicolegal clinic with history of alleged sexual assault. Briefly discuss the protocol of examination of such cases. (5) [Supple 2017 held in 2018]
- 2. What is difference between Zina & rape? Also refer the sections of the laws in which these sexual offences have been defined. (2+3) [Annual 2017]
- 3. A female has presented with 6 hours history of sexual assault. What is procedure of examination of such case? (2) [Supple 2016 held in 2017]
- 4. Define the legal terms fornication and rape. (3) [Supple 2016 held in 2017]
- 5. A female victim of rape is brought for examination. What are the steps of examination of such a victim in OPD? (5) [Annual 2016, Annual 2011]
- 6. Police brought an unconscious male child to the emergency room with the history that he has been sexually assaulted by a middle-aged man. [Supple 2016]
 - a) What are the procedural steps of examination in this case? (3)
 - b) Enlist the specimens which should be collected in this case. (2)
- 7. Describe the examination of a child victim of rape case. [Supple 2014]
- 8. Describe the steps of examination of victim of sodomy. [Supple 2013]
- 9. What are the steps of examination while dealing with victim of Zina-bil-Jabar in examination room? Enlist the specimens you will take for this. **[Annual 2008]**

VIRGINITY, PREGNANCY, DELIVERY & LEGITIMACY

1. Write a note on superfetation. (2) [Supple 2018 held in 2019, Annual 2015]

ABORTION & MISCARRIAGE

- 1. Define Isqat-e-Hamal and Isqat-e-Janin. (1.5+1.5) [Supple 2018 held in 2019, Annual 2015]
- 2. Elaborate causes of death in criminal abortion. (2.5) [Annual 2018, Annual 2007]
- 3. Write short note on local examination of female victim of rape. [Supple 2015]
- 4. Define abortion. What are the different methods used to bring about non-legal/criminal abortion in Pakistan? [Annual 2014]
- 5. Write briefly about various drugs and their mechanism of action which are used to procure abortion. **[Annual 2012]**
- 6. A young female dead body was brought for autopsy. Police suggest criminal abortion. What are various complications of criminal abortion which may lead to death? [Supple 2011]
- 7. Dead body of a female is being examined on autopsy table. The uterus is enlarged, bulky, congested, containing soft tissues and skull bones of the fetus. There are multiple bruises and lacerations of endometrium and cervix. What are the likely causes of death? [Annual 2010]
- 8. Describe Isqat-e-Janin. [Annual 2007]

INFANTICIDE

- 1. Elaborate crib/cot death. (2.5) [Annual 2018]
- Briefly describe the salient features of pediatric trauma at the hands of adult. [Annual 2013]

3.

- a) Define Sudden Infant Death Syndrome.
- b) Write various risks factors for SIDS. [Annual 2010]

FORENSIC PSYCHIATRY

- 1. Define delusion. What are its types? (2.5) [Annual 2016]
- 2. Write short note on sadism and masochism. [Supple 2015]

GENERAL TOXICOLOGY

Types of Toxicology

1. What are various types of toxicology? What is forensic toxicology? [Supple 2014]

Classification of Poisons

- 1. Classify poisons acting on nervous system with examples. (3) [Annual 2018]
- 2. Enlist different types of poisons according to Keith Simpson's classification giving examples. [Annual 2017]
- 3. Classify corrosives. [Annual 2015, Annual 2007]

Toxicity of a Poison

- 1.
- a) Enlist factors that influence the toxicity of poison. (4)
- b) What do you understand by the term idiosyncrasy? (1)[Supple 2018 held in 2019]
- Write a brief note on any five factors modifying the significance of dose of poison.
 [Supple 2013]
- 3. Write short note on Toxicity Rating Scale. [Annual 2010]
- 4. What are factors which modify effect of poison on human body? [Annual 2007]

Legal Duties of a Doctor/Medical Practitioner

- 1. Mention the legal duties of a medical practitioner while attending a case of poisoning in a government hospital. **[Supple 2015]**
- 2. Give an account on ethical and statutory duties of a medical man while negotiating a case of poisoning. [Annual 2014]
- 3. A case of suspected poisoning is brought in accident emergency department of hospital. What are the legal duties of attending causality MO? [Supple 2009]

General Treatment

- A 10 years old child took tablets from his grandmother's cupboard. He was brought to emergency in semiconscious state. Enlist general principles of treatment of poisoning. (2) [Annual 2018]
- 2. How are ingested/unabsorbed poisons removed from the body? [Annual 2008]

Gastric Lavage

- 1. What are the contraindications of stomach wash? (2.5) [Supple 2016 held in 2017]
- 2. An 18 years old girl with suspicion of ingestion of some poisonous substance was brought to emergency room. Medical officer on duty order gastric lavage.
 - a) What are the indications of gastric lavage? (2)
 - b) Give its complications. (3) [Supple 2016]
- 3. A person tried to commit suicide by ingesting a poison. He was rushed to the hospital where the duty doctor tried to remove still unabsorbed poison. Briefly describe the rationale, procedure, and contraindications of gastric lavage. **[Annual 2012]**
- 4. Give the indications, contraindications and hazards for performing gastric lavage. [Annual 2005]

Antidotes

- Define and classify antidotes giving examples of each variety. (5) [Supple 2017 held in 2018]
- 2.
- a) Define antidotes. (1)

- b) What are the various types of antidotes? Explain each with examples. (4)
 [Annual 2016, Annual 2011]
- A 20-year-old was brought to emergency room with history of intake of some 'Kushta' from a hakeem. He was given an antidote and the boy recovered. [Annual 2015]
 - a) Define and classify antidotes. (3)
 - b) What do you mean by atropinisation? (2)
- 4. What is activated charcoal? How is it commercially prepared? What is its therapeutic use, MOA, dose regimen? [Annual 2013]
- 5.
- a) Name different types of antidotes.
- b) What is dispositional antidote?
- c) What are the disadvantages & limitations of activated charcoal?[Supple 2011]
- 6. Write a short note on activated charcoal. [Annual 2010]
- 7. List types of antidotes. [Annual 2009]

Chelating Agents

- 1. What are chelating agents? Give examples. (2.5) [Supple 2016 held in 2017]
- 2. Write mechanism of action and use of chelators. [Annual 2009]

SPECIAL TOXICOLOGY

CORROSIVES

Mineral Acids

- What is vitriolage and its nature of hurt according to Qisas & Diyat act,1991? (2.5) [Supple 2016 held in 2017]
- Give postmortem appearance in death due to sulfuric acid poisoning. (5) [Annual 2015]

Organic Acids

- 1. A 20-year-old girl was rushed to emergency room after suicidal attempt by taking bleaching agent, with complaints of burning pain throat and stomach followed by coffee ground colored vomiting, muscular twitching and tinging sensation. Later on, she developed oliguria.
 - a) What is most probably diagnosis? (1)
 - b) Give its fatal dose and fatal period. (2)
 - c) How will you manage this patient? (2)[Supple 2016 held in 2017]
- 2. What is Christison's saying? (2.5) [Annual 2016]
- 3. Classify corrosive poisons and give Christison's saying. [Annual 2007]

Vegetable Acid

1. Briefly explain mechanism of cyanide poisoning & its management. [Annual 2013]

IRRITANTS

Inorganic (Non-metallic)

1. Write a short note on Phossy jaw. [Supple 2004]

Inorganic (Metallic)

- 1. A patient presented with pain in abdomen, constipation and ataxia. Peripheral blood film examination shows basophilic stippling of RBCs.
 - a) What is your diagnosis? (1)
 - b) How would you manage the acute poisoning by this poison? (4)[Supple 2018 held in 2019]
- 2. In the medical outpatient department, a person was diagnosed as a case of chronic mercury poisoning. Highlight the clinical findings which convince the medical specialist to make this diagnosis. **[Annual 2018]**
- 3. Write a note on skin manifestations in chronic arsenic poisoning. (2.5) [Supple 2017 held in 2018, Annual 2009]

- 4. A middle-aged man presented with paresthesia of hands and feet. Examination reveals presence of Mee's lines in the nails and dew drop pigmentation in the moist area of body. Which metallic irritant is responsible for the above presentation? What is the skin response in its chronic poisoning? (2.5) [Annual 2016]
- 5. A 40-year-old painter came to OPD with complaints of general weakness, abdominal colic and anorexia. On examination, he was anemic and having wrist drop.
 - a) What is your diagnosis? (1)
 - b) How can you confirm your diagnosis on laboratory investigation? (4)
 [Supple 2016]
- 6. Describe dermatological findings for chronic arsenic poisoning. [Supple 2014]
- 7. Describe laboratory investigations for Plumbism. [Supple 2014]
- 8. What are the signs and symptoms of acute arsenic poisoning? [Supple 2013]
- 9. Write down the manifestations of chronic lead poisoning. Name the screening test for early detection of condition. **[Annual 2011]**
- 10. Describe briefly the features of chronic lead poisoning. [Annual 2010]
- 11. What are the manifestations of chronic lead poisoning? [Annual 2006]
- 12. What are dermal manifestations of chronic arsenic poisoning? [Annual 2005]

Organic (Animal)

- 1.
- a) Classify snakes on the basis of mechanism of toxicity. (2)
- b) What are the principles of management of a victim of snake bite? (3)
 [Supple 2018 held in 2019]
- 2.
- a) How will you differentiate a poisonous from non-poisonous snake by its bite mark?
- b) Briefly discuss the steps of management of snake bite. [Supple 2014]
- 3. Write down the clinical manifestations of viper bite. [Supple 2011]

4. What are the characteristics of snake venom? [Annual 2006]

NEUROTICS

Cerebral (Somniferous)

1.

- a) Name any four important alkaloids of opium. (2)
- b) Enlist the steps of treatment of opium poisoning. (3)
 [Annual 2017]
- 2. A patient is brought to A&E department in a semi-comatose condition. He is gasping, pupils are constricted, his body is deeply cyanosed and flesh like smelling is emitting from him. [Supple 2014]
 - a) What is the diagnosis?
 - b) On what receptors the drug acts?
 - c) What are antidotes for this poisoning?
 - d) How will you manage the case if withdrawal from poisoning occurs?
- 3. A 15-year-old male was brought to emergency room. He was in deep coma. On examination, muscles were relaxed, pupils constricted to pinpoint and nonreactive to light. Pulse was rapid and feeble. Temperature was subnormal. Raw flesh like smell from mouth. [Annual 2008]
 - a) What is your provisional diagnosis?
 - b) What specific antidote will be given and how?
 - c) What is the specimen of choice for chemical analysis?
- 4. If you are working in emergency department of tertiary care hospital, how would you recognize, on clinical examination, a case of opium coma? [Annual 2007]

Cerebral (Inebriants)

- 1. A patient was received in the accident and emergency department of tertiary care hospital. There is excessive urination, defecation bronchospasm and the body were wet with sweat. [Annual 2018]
 - a) Give the clinical diagnosis. (1)
 - b) How will you manage this case? (4)
- 2. Write a short note on SLUD syndrome. [Supple 2017 held in 2018]

- 3. A 30 years old farmer is brought to A&E department. He is unconscious. On examination, pupils are constricted, the pulse is slow and thready. Both hyperventilation and hyperlacrimation are present. Give:
 - a) The most like agent to have caused the poisoning. (1)
 - b) Differential diagnoses. (1)
 - c) Mode of action of the poison. (1)
 - d) Its management. (2) [Annual 2016]
- 4. Give a brief account of kerosene poisoning. [Supple 2014]
- 5. Write a note on Korsakoff's syndrome. [Supple 2013]
- 6. A farmer brought in emergency department in the month of August having excessive salivation, voiding urine, stools in clothes, chest exhibits bronchospasm, pupils are constricted, frothy fluid coming from nose and mouth with garlic odor.
 - a) What is possible diagnosis?
 - b) How history contributes to diagnosis?
 - c) Name the single medicine to treat the case.
 - d) What is the specific treatment to treat the case?
 - e) Name two immediate remedies upon arrival. [Annual 2011]
- 7. Briefly give an account of various stages a person with acute alcohol intoxication passes through. **[Annual 2010]**
- 8. A 16-year-old unmarried girl was brought to emergency department of hospital. According to parents, she was found unconscious in here room in the morning. On examination, she was responding to painful stimulus only, having pinpoint pupils and her lungs were full of crepitations. She had voided urine in her shalwar.
 - a) What is your diagnosis?
 - b) List two differential diagnoses.
 - c) What is the mode of action of poison?
 - d) What is its management? [Annual 2009]
- 9. What is delirium tremens? [Annual 2006]

Cerebral (Deliriants)

- 1. What is Run Amok? (2.5) [Supple 2016 held in 2017]
- 2. A 25 years old powder sniffer was brought to the emergency room in maniac state. He had flushed face, dilated pupils, blurred vision, tachycardia and increased respiratory rate followed by incoordination and convulsions.
 - a) What is the most likely diagnosis? (1)
 - b) Give its fatal dose. (1)
 - c) Give clinical features of its chronic poisoning. (3) [Annual 2015]
- A railway police picked a 50-year-old unconscious man from platform. He was responding to stimulus and arousable but had incoherent speech. Pulse was 120/min, BP was 150/90 mm Hg. Abdomen was distended with occasional bowel sounds.
 - a) What is your clinical diagnosis?
 - b) Give two differential diagnosis.
 - c) How will you manage the case?
 - d) List 2 chemical tests to diagnosis the poisoning. [Supple 2009]
- 4. What are the manifestations of chronic cocaine addiction? [Annual 2006]
- 5. Write down the criteria of WHO to label a person as addict. [Annual 2006]
- 6. What are the signs and symptoms, treatment and medicolegal importance of acute dhatura poisoning? [Annual 2005]

Spinal

- 1. What is the mode of action, signs and symptoms and differential diagnosis of strychnine poisoning? [Supple 2016 held in 2017]
- 2. A 30-year-old man was brought to emergency department. Patient was conscious and having starring look, fever, convulsions after every 15 minutes. **[Supple 2011]**
 - a) What is your clinical diagnosis?
 - b) Write three differential diagnoses.
 - c) How will you manage such a case?
- 3. What are the signs and symptoms of strychnine poisoning? [Annual 2006]

CARIDAC POISONS

- 1. Write down signs and symptoms of poisoning by foxglove (digitalis)? [Annual 2012]
- 2. Write down medicolegal importance of nicotine. [Annual 2012]

ASPHYXIANTS

- 1. In a case of carbon monoxide poisoning, write the expected symptoms relevant to various carboxyhemoglobin concentrations in victim. **[Supple 2015]**
- 2. Mr. Maseeh is brought to A&E department for severe headache, confusion, nausea, vomiting and syncope in the month of December. On examination, his pulse is 110 beats per min and his respiratory rate is high. There is a cherry red discoloration on his lips and finger nails. Patches of same color are present all over his body.
 - a) What is the most likely diagnosis?
 - b) How will you manage him?
 - c) What blood level of agent can cause death?
 - d) If he dies, what will be the findings in blood, brain and lungs on autopsy?
 [Annual 2014]

MISCELLANEOUS

Analgesics/Antipyretics

- A young boy took 20 tablets of an analgesic/antipyretic drug. He was taken to Emergency department with complaints of malaise, nausea, vomiting which were followed by anorexia, epigastric pain and jaundice. [Annual 2017]
 - a) Name the drug used. (1)
 - b) What type of treatment you will suggest in this case? (4)
- 2. Write down treatment of acute paracetamol poisoning. [Supple 2013, Annual 2012]
- 3. A patient after toxic dose of very commonly available analgesic/antipyretic reports to emergency department of hospital with complaints of malaise, nausea, vomiting followed by epigastric pain, anorexia and jaundice. What is the drug? How will you treat the case? [Annual 2008]