

**The West Bengal University of Health Sciences**  
**MBBS 3rd Professional Part-I Examination (New Regulation),**  
**August 2024**

**Subject: Forensic Medicine & Toxicology**

**Full Marks: 100**

**Time: 3 hours**

*Attempt all questions. The figures in the margin indicate full marks.*

1. a) A 30 year old male painter by occupation, presents to the Emergency Department with history of vomiting, headache, visual disturbances, restlessness and convulsion. On examination, patient is anemic with facial paleness, blue line on the gums and left wrist drop.

i) What is your provisional diagnosis?

ii) Explain the various clinical manifestations of the suspected poison.

iii) Discuss in detail about treatment protocol in a case of acute poisoning by the same.

iv) What are the samples you will preserve during autopsy in such a case? 5+5+2+3

b) Define Infamous Conduct in medical practice. Briefly describe any eight examples. Differentiate between Infamous Conduct and Professional Negligence. Define professional death sentence with mention of types. Outline the procedure of taking disciplinary action by State Medical Council against a registered medical practitioner. 2+4+3+2+4

2. a) Define abrasion. Mention four types of abrasions with example. Mention four medicolegal importances of abrasion which makes it medicolegally more informative than a bruise. 2+4+4

b) Classify injuries. How will you differentiate between Ante mortem wounds from Post mortem wounds during autopsy? Discuss the causes of death from wounds. 2+4+4

c) What is hallucination? Enumerate different types of hallucinations with examples. Write a brief note on the criminal responsibility of a person who is suffering from mental illness. 1+4+5

3. Write short notes on the following: 2 x 5

a) Criteria of declaring 'brain stem death' in India.

b) The roles of an Indian Medical Graduate (IMG).

4. Explain the following statements: 5 x 4

a) One gunshot wound of entrance may have multiple exit wounds.

b) Rape is not medical opinion.

c) All murders are culpable homicide but all culpable homicides are not murder.

d) Sigmoid shaped cooling curve is found in Algor mortis.

e) In death due to poisoning, the viscera analysis may be negative for detection of poison.

5. Choose the correct option for each of the following:

i) Erethism is a peculiar disturbance of personality found in:

- a) Chronic arsenic poisoning                      b) Chronic lead poisoning  
c) Chronic mercury poisoning                      d) Chronic thallium poisoning

ii) All are probable signs of Pregnancy except:

- a) Goodell's Sign                                      b) Hegar's Sign  
c) Chadwick's Sign                                      d) Uterine Souffle

iii) Enzyme responsible for spread of snake venom is:

- a) Serine Protease                                      b) Hyaluronidase  
c) Phospholipase A2                                      d) Fibrinolysin

iv) Wound gaping is more if:

- a) Incision is given at right angle to the lines of Langer.  
b) Incision is made parallel to lines of Langer.  
c) There is underlying bone fracture.  
d) There is superimposed infection of the wound.

v) A drunken bus driver ran over two people on road while driving at a high speed recklessly. He will be charged of IPC:

- a) Sec. 304    b) Sec. 304A  
c) Sec. 304B    d) Sec. 302

vi) Battle sign is ecchymosis:

- a) Around the eyes                                      b) Around genitalia  
c) Buttocks    d) Around mastoid

vii) The temperature ideally preferred to preserve the body for autopsy is:

- a)  $-10^{\circ}\text{C}$     b)  $0^{\circ}\text{C}$   
c)  $4^{\circ}\text{C}$     d)  $10^{\circ}\text{C}$

viii) Mugging is compression of neck by:

- a) Wooden sticks                                      b) Hand  
c) Bend of elbow                                      d) Rope

ix) Vineyard sprayer's lung disease is due to chronic inhalation of

- a) White phosphorus                      b) Mercurial fumes    c) Copper sulphate    d) Nitric acid

x) Pond fracture is common in:

- a) Child                      b) Infant                      c) Elderly                      d) Young females

**The West Bengal University of Health Sciences**  
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**Subject: Community Medicine**  
**Paper: I**

**Full Marks: 100**  
**Time: 3 hours**

*Attempt all questions. The figures in the margin indicate full marks.*

1. a) Describe "Ice berg phenomenon of disease". Enlist the significance of 'Submerged portion' of the 'Ice-berg'. Briefly outline the strategies to address the 'Submerged portion' under national programmes with suitable examples. 3+4+8

b) A 65 year old smoker has attended a hospital with c/o chest pain lasting for one hour, vomiting and sweating. What is the most probable diagnosis? What are risk factors of the disease? How the disease can be prevented? 1+7+7

2. Write on the following:

a) What are the uses of health information? Enumerate its sources and describe any one of them. 3+3+4

b) Write the title of an under graduate students project for assessing the knowledge and practice of addicting substance among high school children in a village. Write down the objectives of the study. Define population for this study. What will be inclusion and exclusion criteria? 3+3+1+3

c) Mention the parameters used for measurement of Malaria. Outline the control and management of uncomplicated malaria as per National Vector Borne Disease Control Program (NVBDCP). 2+5+3

3. Write short notes on the following: 2 x 5

a) Informed consent.

b) Modified Kuppuswamy socioeconomic status scale.

2. Explain the following statements: 5 x 4

a) Influenza vaccine must be taken yearly.

b) The word disability and handicap are not synonymous.

c) Recent changes in National Immunization schedule are rational.

d) Set back area is important for healthful housing.

e) Prevention is the main stay of treatment for Rabies.

5. Choose the correct option for each of the following: 10x1

i) True about citrate in ORS is:

a) Increased shelf life

c) Cheaper

b) Nutritious

d) Tastier

ii) Sentinel surveillance under NACP is done every:

- a) 2 years
- b) 3 years
- c) 4 years
- d) 5 years

iii) All of following are example of health promotion except:

- a) Installation of sanitary latrine
- b) Immunization
- c) Mosquito Control
- d) Nutrition education

iv) Time gap between primary and secondary case is called:

- a) Incubation period
- b) Serial interval
- c) Lead time
- d) Median incubation

v) In epidemic investigation 1<sup>st</sup> step is:

- a) Verification of diagnosis
- b) Notification
- c) Resource allocation
- d) Formulation of hypothesis

vi) The desirable HDL cholesterol level (mg/dl) in male is:

- a)  $\geq 30$
- b)  $\geq 60$
- c)  $\geq 50$
- d)  $\geq 40$

vii) Broken glass slides are discarded in:

- a) White container
- b) Yellow container
- c) Black container
- d) Red container

viii) Advantage gained by timely screening test is:

- a) Generation time
- b) Screening time
- c) Lead time
- d) Serial interval

ix) According to WHO, a medicine/drug will be termed as counterfeit in all except:

- a) Mislabeling
- b) Fudging expiry date
- c) Low cost
- d) Insufficient ingredient

x) Cumulative frequency curve is known as:

- a) Histogram
- b) Frequency Polygon
- c) Grouped Frequency
- d) Ogive

**The West Bengal University of Health Sciences**  
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**Subject: Community Medicine**  
**Paper: II**

**Full Marks: 100**  
**Time: 3 hours**

*Attempt all questions. The figures in the margin indicate full marks.*

1. a) During your family adoption program how will you assess the nutritional status of family members? What are the common nutritional problems in India? Mention briefly the objectives and strategies of any one National Nutritional program. 5+3+7
- b) Outline the services that are provided through a Health and Wellness centre (HWC) as per existing guidelines. Describe with example how inter-sectoral collaboration can contribute to successful health outcome at primary level. 10+5
2. Write on the following:
  - a) Enlist the contributory factors of Perinatal mortality. Outline the strategies for reduction in Perinatal Mortality Rate (PNMR) in your district. 3+7
  - b) What is planning? Enumerate different elements of a plan. Describe planning cycle in context to "Reported high contraceptive failure" in your block. 2+2+6
  - c) What is full form of ASHA? Write down the eligibility criteria for selecting ASHA. Give a brief outline of roles and responsibilities of ASHA. 1+2+7
3. Write short notes on the following: 2 x 5
  - a) Preventive measures of silicosis.
  - b) Mental health problems of Geriatric population.
4. Explain the following statements: 5 x 4
  - a) Culture and Custom are not same.
  - b) Parboiled rice is nutritionally superior to milled rice.
  - c) Breast feeding is beneficial to the mother.
  - d) India is in the 3<sup>rd</sup> stage of demographic cycle.
  - e) SWOT analysis and Network analysis are different.

5. Choose the correct option for each of the following:

10x1

i) Ujjwala scheme is for prevention of:

- a) Child abuse
- b) Child trafficking
- c) Child labor
- d) Child marriage

ii) The most sensitive indicator of MCH services is:

- a) Infant Mortality Rate
- b) Maternal Mortality Rate
- c) Perinatal Mortality Rate
- d) Life expectancy at birth

iii) Services not available in a sub-centre:

- a) Immunization
- b) Treatment of minor ailments
- c) Macro-nutrient supplementation
- d) Record births and deaths occurring in the area

iv) All are true about vasectomy except:

- a) Must not bathe for the next 24 hours.
- b) A negative sample of sperm test confirms the success of vasectomy.
- c) Vas is delivered through a puncture in Non Scalpel Vasectomy (NSV).
- d) Chance of complications is reduced from 2% to 0.3% by NSV.

v) Which is incorrect about COCP?

- a) Ethinyl oestradiol is <50 mcg in 21 pills.
- b) Levonorgestrel is 150 mcg in MALA-N.
- c) Pills should be taken from the 5<sup>th</sup> day of menstruation.
- d) Menstruation starts within 7 days of consumption of iron pills.

vi) All are true about the effects of heat except:

- a) Heat cramps occur after heavy muscular work.
- b) Heat Hyperpyrexia can lead to heat stroke which may be fatal in 40% cases.
- c) Electrolyte loss causes heat syncope.
- d) Rehydration and electrolyte replacement is the treatment for heat exhaustion.

vii) Anemia due to interference with heme synthesis is seen as a result of occupational exposure to:

- a) Chromium
- b) Lead
- c) Mercury
- d) Carbon materials

viii) Denominator age group for calculation of dependency ratio is:

- a) 0-5 years
- b) 5-15 years
- c) 15-65 years
- d) 65 years and above

ix) The statement 'to improve the overall nutritional status of children in a district of West Bengal' is an example of:

- a) Goal
- b) Objective
- c) Target
- d) Indicator

x) For effective group discussion, the group should comprise the following number of members:

- a) 2 - 4
- b) 6 - 12
- c) 15 - 20
- d) 25 - 30

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**Subject: Oto-Rhino-Laryngology (ENT)**

**Full Marks: 100**

**Time: 3 hours**

*Attempt all questions. The figures in the margin indicate full marks.*

1. a) Describe the anatomy and function of the Waldeyer's Ring with diagrams. 8+7
  - b) A 21 year old man presented to the ENT OPD with the chief complaint of foul smelling ear discharge from the left ear since childhood. It has become blood stained for past one month. He also complained of giddiness for past seven days. 2+4+4+5
    - i. What is your diagnosis?
    - ii. What are the investigations you would like to offer?
    - iii. What surgical treatment you would like to offer?
    - iv. Describe the extra cranial complications of this disease.
  
2. a) Enumerate the various Tuning Fork Tests. What is Rinne's false negative test? Draw a labeled diagram of right tympanic membrane. 3+2+5
  - b) What is the life cycle of rhinosporodiosis? Discuss the pathogenesis and clinical features of the condition. How do you treat in the case of recurrent rhinosporodiosis and why recurrence rate is high after removal of rhinosporodiosis? 5+5
  - c) Describe the etiology, clinical features, management and sequelae of Otitis Media Externa. 2+2+4+2
  
3. Write short notes on the following: 2 x 5
  - a) How will you counsel a parent who has come to you with a two-year-old child suspected to have deafness.
  - b) Danger area of face.
  
4. Explain the following statements: 5 x 4
  - a) Otagia may occur in dental caries.
  - b) Nose is the air conditioner of lung.
  - c) A patient may develop saddle deformity of the nose after SMR operation of the nasal septum.
  - d) Patient may suffer from sudden apnea following tracheostomy.
  - e) Pott's puffy tumor is not a tumor.

5. Choose the correct option for each of the following:

- i) What is the main cause of vocal cord nodule?  
 a) Professional singer    b) Teacher    c) Voice abuse    d) Faulty voice production
- ii) Paul-Bunnell test is diagnostic for:  
 a) Diphtheria    b) Vincent's angina    c) Infectious mononucleosis    d) Oral thrush
- iii) The following are lateral swellings in neck except:  
 a) Branchial cyst    b) Carotid body tumor    c) Lymph node enlargement    d) Thyroglossal cyst
- iv) Griesinger's sign is a feature of:  
 a) Acute mastoiditis    b) Petrositis  
 c) Lateral sinus thrombosis    d) Otosclerosis
- v) In Type III tympanoplasty, the graft is placed on:  
 a) The long process of incus    b) Malleus  
 c) Stapes footplate    d) Stapes superstructure
- vi) Laryngeal crepitus is seen in:  
 a) Normal persons    b) Fracture thyroid cartilage  
 c) Prevertebral abscess    d) Post cricoid carcinoma
- vii) Tongue depressor is required during:  
 a) Nasal endoscopy    b) Anterior rhinoscopy  
 c) Posterior rhinoscopy    d) Indirect laryngoscopy
- viii) All of the following are typical causes of submucous fibrosis except:  
 a) Persistent trauma by sharp tooth    b) Tobacco chewing  
 c) Nutritional deficiency    d) Areca nut chewing
- ix) All of the following are paired laryngeal cartilages except:  
 a) Tritiate    b) Thyroid  
 c) Cuneiform    d) Corniculate
- x) Which of these is not a branch of facial nerve?  
 a) Temporal    b) Buccal  
 c) Occipital    d) Cervical



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**August, 2024**

**Subject: Ophthalmology**

**Full Marks: 100**

**Time: 3 hours**

*Attempt all questions. The figures in the margin indicate full marks.*

1. a) A 67 year old man had cataract surgery 2 days back. He was all right. On 3rd post-operative day, the eye has become increasingly red and painful and the vision is severely reduced. 2+2+5+6
  - i. What is the probable diagnosis?
  - ii. What other benign condition may present in such a way without much pain?
  - iii. How will you differentiate the two conditions?
  - iv. Outline the management of the condition.
  
- b) A 4 year old male child came with his mother complaining of bilateral whitish triangular patch at the junction of black and white area of eyeball with nyctalopia. 2+4+6+3
  - i. What is the probable diagnosis?
  - ii. How will you approach in such a case?
  - iii. Write down the management of this condition.
  - iv. Enumerate the other causes with such a presentation of nyctalopia.
  
2. a) Write down the classification of diabetic retinopathy. Describe the fundus findings with a diagram. 5+5
  
- b) What is glaucoma? How will you classify it? What are the drugs used to treat primary open angle glaucoma? 2+3+5
  
- c) Describe the different layers of cornea with a neatly labeled diagram. 6+4
  
3. Write short notes on the following: 2 x 5
  - a) How will you counsel a patient about outcome of cataract surgery?
  - b) Colored or rainbow halo.
  
4. Explain the following statements: 5 x 4
  - a) Anisometropia cannot be corrected by accommodation.
  - b) Upper lid chalazion may present with dimness of vision.
  - c) There is no posterior epithelial layer in the lens.
  - d) Probing is done in infants with watering of eyes.
  - e) Exposure keratitis may occur in Bell's palsy.

5. Choose the correct option for each of the following:

i) Longest part of optic nerve:

- a) Intraocular
- b) Intracranial
- c) Intraorbital
- d) Intracanalicular

ii) Which of the following is not macular function test?

- a) Color vision test
- b) Amsler Grid test
- c) Maddox rod test
- d) Automated perimetry

iii) Upper lid retraction is typically a sign of:

- a) Entropion
- b) Ptosis
- c) Orbital fracture
- d) Thyroid eye disease

iv) Comotio retinae is seen in:

- a) Concussion injury
- b) Papilloedema
- c) Central retinal vein thrombosis
- d) Central Retinal artery thrombosis

v) The color of fluorescein staining in corneal ulcer is:

- a) Yellow
- b) Blue
- c) Green
- d) Red

vi) Extra row of eyelashes in Meibomian gland orifices is called:

- a) Trichiasis
- b) Dystichiasis
- c) Blepharitis
- d) Entropion

vii) Color vision is function of:

- a) Cone cells
- b) Rod cells
- c) Muller cells
- d) Retinal pigment epithelial cells

viii) Cornea is supplied by nerve fibres derived from:

- a) Trochlear nerve
- b) Trigeminal
- c) Optic nerve
- d) Occulomotor

ix) Average volume of adult orbit is:

- a) 10 ml
- b) 25 ml
- c) 30 ml
- d) 30 ml

x) The most common cause of optic neuritis is:

- a) Measles
- b) Syphilis
- c) Multiple sclerosis
- d) Leber's disease