

2406000103010501
EXAMINATION DECEMBER 2024
BACHELOR OF MEDICINE AND BACHELOR OF SURGERY
(THIRD PART-1)
FORENSIC MEDICINE & TOXICOLOGY (NEW)
(EFFECTIVE FROM 2023-24) - LEVEL 1

[Time: As Per Schedule]

[Max. Marks: 100]

Instructions:

1. Fill up strictly the following details on your answer book
 - a. Name of the Examination : **BACHELOR OF MEDICINE AND BACHELOR OF SURGERY (THIRD PART-1)**
 - b. Name of the Subject : **FORENSIC MEDICINE & TOXICOLOGY (NEW) (EFFECTIVE FROM 2023-24) - LEVEL 1**
 - c. Subject Code No : **2406000103010501**
2. Sketch neat and labelled diagram wherever necessary.
3. Figures to the right indicate full marks of the question.
4. All questions are compulsory.
5. There are two sections in this question paper. Each section carries 50 marks.
6. Answer both the sections in separate answer sheets.
7. Right side numbers denotes maximum marks of the questions.
8. Write answers according to the question only. Writing anything which is not asked won't be counted for marks.

Seat No:

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Student's Signature

Section 1

Q.1 Define Injury. Classify Mechanical Injuries. Write in detail about the type, characteristics and medico-legal importance of Contusions. **10**

Q.2 Case based scenario/ Applied Questions. (Write any 2 out of 3) **12**

1) A 35 yrs old female admitted in Casualty following head injury due to accidental fall from height. After 5 days of treatments, she was declared brainstem dead. The Patient's next of kin were counseled about her organ donations and body donation. In present scenario,

- a. Define Somatic Death, Molecular Death & Brainstem Death. **3**
- b. Who can certify a patient as brainstem dead? **1**
- c. Write in brief about 'Cadaveric Donor' and 'Beating Heart Donor'. **2**

- 2) Dead body of 25 yrs old male recovered from a farm and brought by police for post mortem examination. Autopsy examination reveals that a complete transverse near round shaped ligature mark was there in neck with cyanosis, facial congestions and petechial hemorrhages. No salivary stains over cloths. Internally there was a fracture of the hyoid bone and thyroid cartilage in the neck.
- Mention most probable diagnosis in this case. Give justifications for your answer. 2
 - What samples would you like to preserve in this case and for which tests? 2
 - Classify deaths due to mechanical asphyxia? 2
- 3) Dead body a new born baby, with intact umbilical cord and placenta attached, covered in a newspaper was found in a roadside garbage bin. It has been forwarded to you for postmortem examination. In this case,
- What are the objectives of post mortem examination in this case? 2
 - What findings over the body would suggest live birth? 4

Q.3 Short notes (Write any 4 out of 5) 16

- Early Putrefaction
- Medicolegal importance of 18yrs of age
- Defense Wounds
- Dying Declaration
- Medicolegal Importance of Blood Grouping

Q.4 Give answer in two or three sentences. (Write any 6 out of 7) 12

- Types of Gun Powder
- Conduct Money
- Quickening in pregnancy
- Emasculation
- Rule of Nine
- Catamite
- Virtual autopsy

Section 2

- Q.1 Classify Poisons with examples. Describe about clinical features, fatal dose-fatal period and treatment of Methanol Poisoning. 10**

Q.2 Case based scenario/ Applied Questions. (Write any 2 out of 3)

12

- 1) A surgeon was called for an emergency appendectomy surgery by a nurse on duty. The surgeon was in middle of a drinking party and refused. But the nurse on call insisted that no other surgeon nearby is available and the patient was getting bad. The surgeon attends the patient and performs laparoscopic surgery under influence of alcohol. The surgery gone well but patient and relatives shocked to know about it later.
- a. Is this Medical Negligence or Professional Misconduct? Give other 4 examples of both. **4+1**
- b. Describe Penal Erasure. **1**
- 2) A 55yrs old farmer brought to a Primary Health Centre with alleged history of a snake bite 30 mins ago. On examination, the patient was drowsy, breathlessness, cyanosis, ataxic gait, difficulty in speech and swallowing. Two tiny puncture wounds 1cm apart noted on back of left knee with minimal local reactions.
- a. Mention most probable diagnosis. Give reasons for your answer. **1+2**
- b. Describe primary treatment on field for such case. **2**
- c. Describe investigations to monitor at hospital in this case. **1**
- 3) A 52 yrs old female brought by her husband to psychiatric OPD with c/o insomnia & having constant doubts of infidelity over her husband even though he has no any such affairs. She also has doubts that her neighbor lady is influencing her thoughts constantly with some electronic device even when she is out of station.
- a. Diagnose this mental illness and describe various types of it. **4**
- b. If this patient attacks her neighbor lady under unsound mind condition, which law will decide criminal liability of the patient for the offence? Describe it. **2**

Q.3 Short notes (Write any 4 out of 5)

16

- 1) Treatment of Strychnos Nux Vomica poisoning
- 2) Describe 'Res Ipsa Loquitor' with examples
- 3) Signs & Symptoms of Cannabis Intoxication
- 4) Viscera Preservation in poisoning cases
- 5) NDPS Act 1985

Q.4 Answer in two or three sentences (Write any 6 out of 7)

12

- 1) Lead Palsy
- 2) Body Packer Syndrome
- 3) Chromolachryorrhoea
- 4) Lucid Interval
- 5) Sewer Gas
- 6) Automatism
- 7) Implied Consent

2206000103010101
EXAMINATION DECEMBER 2024
BACHELOR OF MEDICINE AND BACHELOR OF SURGERY
(THIRD PART-1)
OPHTHALMOLOGY (NEW) - LEVEL 1

[Time: As Per Schedule]

[Max. Marks: 100]

Instructions:

- 1. Fill up strictly the following details on your answer book**
 - a. Name of the Examination : **BACHELOR OF MEDICINE AND BACHELOR OF SURGERY (THIRD PART-1)**
 - b. Name of the Subject : **OPHTHALMOLOGY (NEW) - LEVEL 1**
 - c. Subject Code No : **2206000103010101**
2. Sketch neat and labelled diagram wherever necessary.
3. Figures to the right indicate full marks of the question.
4. All questions are compulsory.
5. Write legibly and draw diagrams with black pencil wherever indicated.
6. Use a separate answer book for each section.
7. Question having parts should be answered as a whole, at one place only.

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Student's Signature

SECTION 1

- Q.1** Describe the etiology, clinical features & Management of Fungal Corneal ulcer **10**
- Q.2** Answer any one of the following case histories **10**

1. A 15 year old male came to Ophthalmic OPD with complaint of swelling on upper lid of right eye since 2 days. Swelling is red, tender and situated at lid margin.
 - i. What is a probable diagnosis? What are the predisposing factors for The same.
 - ii. Describe the management for the same.
 - iii. Write the differential diagnosis of the condition.

OR

2. A 65 year old male presents to Ophthalmology clinic with markedly defective vision for near and far in left eye. Clinical examination revealed a wide and deep anterior chamber, iridodonesis and jet black pupillary reflex in left eye and senile immature cataract in right eye.

- i. What is the probable diagnosis for left eye?
- ii. Mention 3 causes which can lead to this condition.
- iii. Describe the treatment modality.

Q.3 Write short notes on any four of the following: 20

1. Modes of transmission and management of acute bacterial Conjunctivitis
2. Describe the pathogenesis and clinical features of senile ectropion.
3. Modalities of management of Myopia.
4. Write in short about types of staphyloma.
5. Rehabilitation of the blind.

Q.4 Answer any five of the following: 10

1. Schirmer's test for Dry eye
2. Enumerate all the glands present in Eye lids.
3. Enumerate four causes of watering of eyes.
4. Clinical features of pterygium.
5. Enumerate two corneal signs of Keratoconus.
6. Draw a neatly labeled diagram of Sturm's conoid for Astigmatism.

SECTION 2

Q.1 Define cataract. Write morphological classification of cataract. Describe stages of maturation and modalities of management of senile cataract. 10

Q.2 Answer any one of the following case histories: 10

1. A 40 year old female presents to the eye OPD with bilateral Proptosis from 2 months associated with weight loss, palpitation and an excessive sweating.

- i. What is the probable diagnosis?
- ii. Enumerate four causes of Unilateral Proptosis.
- iii. What other associated Eye signs can be seen in such condition?

OR

2. A 48 year old diabetic male patient presented to eye OPD with complaints of sudden painless dimness of vision in Right eye since 1 day. His vision in RE is - finger counting at 1 meter, with perception of light and projection of rays present in all quadrants. Vision in LE is 6/36 not improved with pinhole. Ophthalmoscopic examination is suggestive of vitreous hemorrhage in RE and proliferative diabetic retinopathy in LE.

- i. Enumerate two causes of vitreous hemorrhage?
- ii. Write ETDRS classification for diabetic retinopathy.
- iii. Which other eye diseases are associated with Diabetes?

Q.3 Write short notes on any four of the following:

20

1. How will you counsel a 50 years old patient with both eyes primary open angle Glaucoma regarding method of putting eye drops, progression of disease and required follow ups?
2. How will you counsel a 35 years old patient who has been presented with dimness of vision in both eyes and diagnosed with Retinitis pigmentosa just now?
3. Signs of Anterior Uveitis.
4. Clinical features of acute congestive glaucoma.
5. Maddox Rod Test.

Q.4 Answer any 5 of the following:

10

1. Enumerate four causes of Optic Neuritis.
2. Enumerate types of intra ocular lenses- Based on method of fixation in the eye.
3. Mention the functions of Superior oblique muscle.
4. Enumerate four causes of retinal detachment.
5. Mention merits and limitations of phacoemulsification.
6. Enumerate four ophthalmoscopic signs of Hypertensive retinopathy.

2406000103020601
EXAMINATION DECEMBER 2024
BACHELOR OF MEDICINE AND BACHELOR OF SURGERY
(THIRD PART-1)
COMMUNITY MEDICINE (PAPER - I) (NEW) (EFFECTIVE
FROM 2023-24) - LEVEL 2 (OMR)

[Time: As Per Schedule]

[Max. Marks:100]

Instructions:

1. Fill up strictly the following details on your answer book
 - a. Name of the Examination : **BACHELOR OF MEDICINE AND BACHELOR OF SURGERY (THIRD PART-1)**
 - b. Name of the Subject : **COMMUNITY MEDICINE (PAPER - I) (NEW) (EFFECTIVE FROM 2023-24) - LEVEL 2 (OMR)**
 - c. Subject Code No : **2406000103020601**
2. Sketch neat and labelled diagram wherever necessary.
3. Figures to the right indicate full marks of the question.
4. All questions are compulsory.

Seat No:

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Student's Signature

Section-I

Q.1 Multiple Choice Questions (MCQ) (Each Carry 1 Marks)

20

1. Circle the Correct Answer
2. No Negative Marking
3. Multiple Selection/Cancelling selected answers will not be counted for marking

1. At which TDS level, palatability of water is considered to be good?
(A) < 100 mg/liter (B) <200 mg/liter
(C) <500 mg/liter (D) <600 mg/liter
2. In an outbreak of cholera in a village of 2,000 populations, 20 cases have occurred and 5 die Case fatality rate is:
(A) 1% (B) 10%
(C) 25% (D) 40%
3. Public Policies in Gujarat aim at avoiding the underlying reasons for the development of environmental and atmospheric concentration of SO₂ to protect the health of people It is an example of

- (A) Primordial (B) Primary
(C) Secondary (D) Tertiary

4. A researcher was studying maternal mortality in Rawalpindi District. He observed more deaths in women who were brought to hospital and without taking other factors into account concluded that hospital managed cases have more mortality as compared to home deliveries. This is an example of:
- (A) Temporal association (B) Spurious association
(C) Direct association (D) Causal association
5. Which state can be considered as yardstick for judging health status in country?
- (A) Gujarat (B) Bihar
(C) Delhi (D) Kerala
6. In the post-disaster phase the most important point in order of preference is:
- (A) Vaccination against infectious diseases
(B) Provision of safe water, food & clothing
(C) Disposal of dead bodies
(D) Disposal of solid wastes
7. Acceptable noise level (dBA) in hospital wards:
- (A) 20-35 (B) 30-45
(C) 10-25 (D) 40-55
8. A woman travelled a long way from a remote village & came to a population welfare centre/family planning centre. She had enough money but was very tired on account of traveling. When she went inside, she found a male doctor dealing with the clients. She decided to go back. The most likely reason for this decision is lack of:
- (A) Acceptability (B) Affordability
(C) Accessibility (D) Efficacy
9. People of a village reported a high prevalence of bacterial gastroenteritis even after proper chlorination of water supply for the recommended duration. On water analysis, level of chlorine in water was 0.01 mg/L and pH of water was 6.5. The likely reason of increased bacterial gastroenteritis even after chlorination is:

- (A) Low residual chlorine
- (B) High pH leading to chlorination failure
- (C) Presence of sulphides
- (D) Inadequate contact time

10. Demographic Processes' does not include:

- (A) Fertility
- (B) Morbidity
- (C) Mortality
- (D) Social mobility

11. The spindle-shaped Age pyramid denotes?

- (A) Developing country
- (B) Developed country
- (C) Underdeveloped country
- (D) Middle east country

12. Indoor air pollution does not cause:

- (A) Chronic lung disease
- (B) Adverse Pregnancy outcomes
- (C) Childhood pneumonia
- (D) Neuro-developmental problems

13. A survey on air pollution was conducted in an urban area to determine the major contaminant in air. The major contaminant estimated in all air pollution is:

- (A) Grit and dust
- (B) Sulphur dioxide
- (C) Carbon monoxide
- (D) Nitrogen dioxide

14. A woman came with antepartal bleeding. She was to be transfused with blood her blood was sent for blood grouping and HBV screening. She was found to be HB positive This screening is;

- (A) Targeted
- (B) Research
- (C) Mass
- (D) Opportunistic

15. True about composition of Indian hospital waste products:

- (A) Metal 5%
- (B) Paper 25%
- (C) Glass 55%
- (D) Infectious waste 1.5 %

16. A village has total of 100 under-five children. The coverage with measles vaccine in this age group is 60%. Following the occurrence of a measles case in a child after a visit outside, twenty-six children developed measles. The secondary attack rate of measles is:

- (A) 25% (B) 26%
(C) 66% (D) 5%

17. When the number of educated females is expressed as a percentage of total females present in a village. It is known as:

- (A) Proportion (B) Rate
(C) Ratio (D) Frequency

18. Which of the following is used to denote a continuous variable?

- (A) Simple bar (B) Histogram
(C) Pie diagram (D) Multiple bar

19. Study was undertaken to assess the effect of a drug in lowering serum cholesterol levels. 15 obese women and 10 non-obese women formed the 2 limbs of the study. Which test would be useful to correlate the results obtained?

- (A) ANOVA test (B) Student's t-test
(C) Chi square test (D) Fischer test

20. In the WHO recommended EPI Cluster sampling for assessing primary immunization coverage, the age group of children to be surveyed is

- (A) 0-12 months (B) 6-12 months
(C) 9-12 months (D) 12-23 months

Section-II

Q.2 Write the full Question on following: (any 1 out of 2) 10

- A. Explain web of causation with myocardial infarction as example.
B. Describe health aspects of family planning.

Q.3 Write one or two line short questions (2 marks each) 20

- (A) Define public health.
(B) Differentiate disease elimination and eradication.
(C) Justify "epidemiology is diagnostic tool of community diagnosis".
(D) Enlist four health care delivery indicators.
(E) Define net reproduction rate and write its importance.
(F) What is effective literacy rate?
(G) Enlist four criteria for adopting terminal method of family planning.
(H) Enlist four national health programmes run at sub center level.
(I) Mention five categories of adverse event following immunization.

(J) Write two important characteristics of cross sectional study.

Q.4 Write Short notes/ Comments on the following: (any 2 out of 3) 10

- (A) Prepare checklist before prescription of oral contraceptive pills.
- (B) Enlist five steps to prevent disease outbreak after disaster as medical officer.
- (C) Briefly describe five health hazards of biomedical waste.

Section-III

Q.5 Write the full Question on following: (any 1 out of 2) 10

- (A) Explain the importance of incubation period for epidemiologist.
- (B) Classify epidemics and explain in brief "continuous exposure epidemic" with relevant diagram, (4 +6)

Q.6 Write Short notes on the following: (any 5 out of 6) 20

- A. Classify the water related diseases.
- B. Differentiate qualitative and quantitative data.
- C. Mention four differences between cohort and case control.
- D. Write four control measures of scabies
- E. Mention the period of isolation for chicken pox, measles, mumps and Diphtheria.
- F. Write down four key health advice to travellers.

Q.7 Write Short notes on the following: (any 2 out of 3) 10

- A. Write five preventive measures to reduce effects of heat stress.
- B. Explain the concept of "Lead time" for screening.
- C. Enlist five main duties of MPH (male) at primary health center.

*****END*****

2406000103020602
EXAMINATION DECEMBER 2024
BACHELOR OF MEDICINE AND BACHELOR OF
SURGERY (THIRD PART-1)
COMMUNITY MEDICINE (PAPER - II) (NEW)
(EFFECTIVE FROM 2023-24) - LEVEL 2 (OMR)

[Time: As Per Schedule]

[Max. Marks: 100]

Instructions:

1. Fill up strictly the following details on your answer book
 - a. Name of the Examination : **BACHELOR OF MEDICINE AND BACHELOR OF SURGERY (THIRD PART-1)**
 - b. Name of the Subject : **COMMUNITY MEDICINE (PAPER - II) (NEW) (EFFECTIVE FROM 2023-24) - LEVEL 2 (OMR)**
 - c. Subject Code No : **2406000103020602**
2. Sketch neat and labelled diagram wherever necessary.
3. Figures to the right indicate full marks of the question.
4. All questions are compulsory.

Seat No:

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Student's Signature

SECTION-I

Q.1 Multiple choice questions each carry 1 mark

20

1. Most serious complication of measles is
 - a) Koplik spots
 - b) Parotitis
 - c) Meningoencephalitis
 - d) Nephritis
2. Man is dead end for
 - a) Chickenpox
 - b) Yellow fever
 - c) Measles
 - d) Rabies
3. Pentavalent vaccine does not protect against
 - a) Diphtheria
 - b) Whooping cough
 - c) Haemophilus Influenza type B
 - d) H1N1 Influenza
4. Tracking of blood pressure implies
 - a) Blood pressure increase with age
 - b) Blood pressure decrease with age

- c) Blood pressure of hypotensive become hypertensive
d) Blood pressure of hypotensive remains hypotensive
5. The most common cause of blindness in India is
a) Cataract
b) Vitamin A deficiency
c) Glaucoma
d) Trachoma
6. Which index of obesity does not require height in calculation
a) Quetelet's index
b) Corpulence index
c) Ponderal index
d) Brocca index
7. Which among the following is cardio-protective fatty acid?
a) Palmitic acid
b) Stearic acid
c) Omega-3 fatty acid
d) Oleic acid
8. Which of the following is promoter of iron absorption?
a) Ascorbic acid
b) Tannin
c) Phytates
d) Calcium
9. Shakir's tape is used to measure
a) Head circumference
b) Mid arm circumference
c) Chest circumference
d) Length of an infant
10. Janani Suraksha Yojana (JSY) aims at reducing maternal mortality rate by
a) Providing health education
b) Supplementary nutrition
c) Promoting institutional delivery
d) All of the above
11. Under IMNCI, an eighteen months old child has general danger sign present if s/he has
a) Chest indrawing
b) Neck stiffness
c) High grade fever
d) Vomits out everything
12. Sickness absenteeism is a useful index to assess
a) State of health of workers
b) Worker-management relationship
c) Working environment
d) Sincerity of workers
13. Per capita income per month of a family is calculated in
a) Kuppuswamy scale
b) BJ Prasad scale
c) Pareek socio economic scale
d) All of the above

14. Haemophilia is which type of genetic disorder?
a) Autosomal recessive b) Autosomal dominant
c) X-linked recessive d) X-linked dominant
15. According to Cigarettes and Other Tobacco Products Act (COTPA) tobacco products cannot be sold within how many meters of an educational institution?
a) 50 meters b) 100 meters
c) 200 meters d) 500 meters
16. Which was the first health committee formed in India post-independence?
a) Bhore Committee b) Mudaliar Committee
c) Kartar Singh Committee d) Jungalwalla Committee
17. The method which is generally more effective in changing human behaviour is
a) Lecture b) Focus group discussion
c) Role play d) Counselling
18. Mission "Indradhanush" focuses on
a) Basic obstetric care b) Water supply and sanitation
c) Nutrition supplementation d) Immunization
19. When is World Health Day observed each year?
a) 7th February b) 7th March
c) 7th April d) 7th May
20. For tribal, hilly and difficult to access areas, one PHC should be available for every:
a) 20,000 population b) 30,000 population
c) 50,000 population d) 80,000 population

SECTION-II

Q.2 LAQ (any 1 out of 2)

10

- a) Enumerate four arboviral diseases. Write epidemiology of chikungunya fever in detail. Describe the public health measures for prevention and control of chikungunya fever (1+4+5)
- b) India is referred to as "Diabetes capita of the world". Give your comments the statement. Describe epidemiology of Diabetes Mellitus. Write preventive measures for Type 2 Diabetes Mellitus (2+4+4)

Q.3 One or Two line short questions (2 marks each)

20

- a) Write route of administration and schedule for fractional dose of Inactivated Polio Vaccine
- b) Write modifiable risk factors of coronary heart disease
- c) Write treatment of falciparum malaria in pregnant woman
- d) Difference in rashes of measles and chicken pox
- e) Enumerate three most common cancers among male and female in Gujarat
- f) What is window period in HIV and write its significance.
- g) What is rule of halves in hypertension?
- h) Write definition of blindness given by World Health Organization
- i) Write preventive measures for cervical cancer
- j) Write mode of transmission of leptospirosis

Q.4 Write short answers for the following (any 2 out of 3) (5 marks each)

10

- a) Describe diagnostic algorithm for pulmonary tuberculosis according to National Tuberculosis Elimination Programme
- b) Cancer registries
- c) Epidemiology of Monkey pox virus infection

SECTION-III

Q.5 LAQ (any 1 out of 2)

10

- a) Define primary health care. Describe the principles of primary health care with examples (2+8)
- b) Define neonatal mortality rate. Describe causes of neonatal deaths in India. Write various measures and strategies of government for prevention of neonatal mortality (1+4+5)

Q.6 Write short answers for the following (any 5 out of 6) (4 marks each)

20

- a) High risk conditions in antenatal women
- b) Health problems of the aged in India
- c) Food fortification
- d) Low birth weight and its implications
- e) Iodine deficiency disorders
- f) Dietary recommendations for pregnant woman

Q.7 Write short answers for the following (any 2 out of 3) (5 marks each)

10

- a) Anemia Mukht Bharat
- b) Engineering measures for prevention of occupational diseases
- c) Management of Severe Acute Malnutrition
