

Tanta University
Faculty of Medicine
Public Health Dept.
June 2021

2nd Part Master Public Health &
Community Medicine
Second paper
Number of Questions : 7
Time Allowed : 3 Hours
Total : 270 Marks



Question (1) : Discuss briefly (50 marks)

- a- Prematurity as public health problem.
- b- Occupational health hazards of health care personnel.
- c- Common nutritional problems among school children.
- d- Causes of nutritional problems among elderly.
- e- Specific preventive measures for iodine deficiency disorders.

Question (2) : Mention (40 marks)

- a- Indications of high & low protein diet
- b- Causes of postpartum maternal mortality.
- c- Nutritional requirements during lactation.
- d- Characteristics of good health educator.

Question (3) : Write on (30 marks)

Planning & evaluation of health programs, consider family planning program as an example

Question (4) : Analyze the relation between (20 marks)

- a- Diet and diabetes mellitus.
- b- School environment and health status of school children

Question (5) : write briefly on (30 marks)

- a. Anthropometric measurements used to assess nutritional status of infants.
- b. Bed occupancy rate
- c. Factors affecting priority of health problem in a community.

Question (6) : Write on how to (40 marks)

- a- Rapid assessment of nutritional status of hospitalized patient.
- b- Estimate calorie requirements of a healthy individual.

Question (7) : MCQs - Choose one correct answer (60 marks)

1- Prescribed occupational diseases :

- a. Are put in a list that should not be changed every now and then
- b. Are the only compensable diseases from known occupational diseases
- c. Exposures at workplace may accelerate its occurrence
- d. Includes hypertension

2- Substitution is :

- a. Rotating employees from high-exposure to low- exposure jobs
- b. Isolating high-exposure operations
- c. Enclosure of noisy machine or process
- d. Non of the above

3- Decompression sickness :

- a. Affects deep sea divers
- b. Manifestations occur within days following rapid decompression
- c. Oxygen bubbles in the blood may block arterioles
- d. All of the above.

4- Erythrim is a clinical manifestation due to intoxication with :

- a. Lead
- b. Mercury
- c. Manganese
- d. Nickel

5- Ammonia and chlorine gas are examples of :

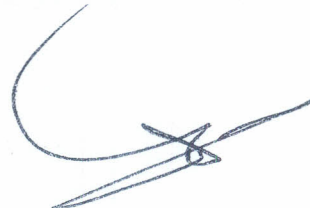
- a. Simple asphyxiants
- b. Chemical asphyxiants
- c. Respiratory irritants
- d. Systemic poisons

6- Which of the following statements is considered a defect of health education message :

- a. The included data is correct and scientifically based
- b. The content contradicts with traditions and ethics of the community
- c. The content is suitable to the mental abilities of the recipients
- d. The content must focus on good behaviour

7- Informal leaders in community health education includes :

- a. Nurses
- b. Physicians
- c. Health related personnel
- d. Popular people



8- Health equity refers to :

- a. Right to fair distribution of health services
- b. Disparities in health status among individuals
- c. Discrimination inherent in health care
- d. Statistical differences in health between groups

9- Programs priority is mostly determined by :

- a. Available supervisors
- b. Community needs are not obvious
- c. Prevalence and seriousness of the health problems
- d. Deficiency in resources

10- The respiration quotient (RQ) :

- a. Is defined as the ratio of VO_2 divided by VCO_2
- b. Decreases on a high carbohydrate diet
- c. Increases with fasting
- d. Goes beyond a value of 1.0 when exogenous carbohydrate is converted to endogenous fat

11- Which of the following is successful communication :

- a. Conveying message
- b. Just having opportunity to send and receive message
- c. Giving verbal pieces of information is quite enough
- d. The sender and the receiver understand the same information

12- Which of the following is in a high-risk pregnancy?

- a. Woman receiving treatment for epilepsy during pregnancy
- b. Woman had a history of surgical intervention
- c. Woman suffering from edema in lower limbs and moderate hypertension
- d. Pregnant woman receiving treatment for amoebic dysentery

13- Which of the following is unintentional injury?

- a. Domestic violence
- b. Sexual assault
- c. Car accidents
- d. Child abuse

14- Microminerals include :

- a. Calcium
- b. Potassium
- c. Iron
- d. All of the above

15- Which of the following methods is recommended to screen for malnutrition on admission to hospital?

- a. A 7- day food diary
- b. Malnutrition Universal Screening Tool (MUST)
- c. Serum albumin concentration
- d. Demi-span

16- In order to achieve optimal nutritional status, it is recommended that older adults consume :

- a. A high energy content diet.
- b. A high nutrient dense diet
- c. A low energy content diet.
- d. A daily antioxidant supplement.

17- Which of the following statements defines crippled children ?

- a. Children with poor health status from chronic illness making them physically impaired and need change of their environment
- b. Children suffering from some gross disabilities of muscles, bones or joints interfere with their mobility
- c. Children who have no sight or whose sight less than 6/60 with both eyes after correction
- d. Children their vision is less than 6/24 with both eyes after correction

18- What is the primary method of dietary assessment used in epidemiological studies?

- a. Weighed diary
- b. 24-hour recall
- c. Diet history
- d. Food frequency questionnaire

19- Attitudinal barriers to communication :

- a. Include cultural differences
- b. Include perceptions that prevent people from communicating effectively
- c. May result from personality conflicts
- d. All of the above

20- Inflection :

- a. Is unique to non verbal communication
- b. Inserts additional meaning to the definition of the word
- c. Is anything that distorts the message
- d. Is one of attitudinal barriers to effective communication

Good luck



Tanta Faculty of Medicine

Dept. of Public Health & Community Medicine

Final Exam. For the Master Degree in Family Medicine (1 June 2021)

1st paper (Internal Medicine, Neuropsychiatry, Pediatrics, Gynecology & Obstetrics)

All questions should be attempted / Time : 3 hours

Section I Internal Medicine [Total:90 marks]

I-Answer the following questions: (10 marks each)

- 1- Enumerate (10) manifestations of systemic lupus erythmatosus.
- 2- Enumerate (10) investigations for pyrexia of unknown origin.
- 3- Enumerate (5) lines of treatment of hyperkeleimia.
- 4- Enumerate (4) criteria of diagnosis of diabetes mellitus.
- 5- Enumerate (5) causes of liver cirrhosis.
- 6- Enumerate (5) drugs of tuberculosis with the most common side effect of each.
- 7- Enumerate (10) causes of secondary hypertension.

II-Problem solving (2 cases, 10 marks each)

Case 1:

A 42-year-old woman presented to the hospital with confusion and hypotension as well as petechiae and purpura all over her body. Laboratory data included the following values: hemoglobin, 11.5 g/dL; WBC count, 23,000/ mm³; platelet count, 35,000/mm³; partial thromboplastin time, 64 seconds (normal, 25-35 seconds); prothrombin time 20 seconds (normal, 11-14 seconds); fibrinogen, 90 mg/dL (normal, 160-360 mg/dL). Cultures of blood specimens yielded *Neisseria meningitidis*.

Questions

- a) **What's your likely diagnosis?** (4 marks)
- b) **Enumerate another 3 investigations for this case?** (3 marks)
- c) **Enumerate 3 lines of treatment this case?** (3 marks)

Case 2:

A 55-year-old male with history of HTN, and hyperlipidemia, presents to the ER complaining of severe acute epigastric pain that radiates to the back, with nausea and non-bloody emesis. This has never occurred before. Lately, his other medical conditions have been well controlled by his primary care physician. However, he has been urinating more after his doctor put him on a

hydrochlorothiazide about a week ago. On physical exam, you detect alcohol on his breath and tenderness to palpation in the epigastric area; otherwise the exam is within normal limits.

Questions:

- a) What's your likely diagnosis? (3 marks)
- b) Enumerate 3 risk factors in this case for your diagnosis? (3 marks)
- c) Enumerate 4 investigations for this case? (4 marks)

Section II Neurology & Psychiatry [Total:40 marks]

A- Short essay: (3 x10 = 30)

Give an account on each of the following questions:

- 1- Lines of treatment of major depressive disorder.
- 2- Etiology of schizophrenia
- 3- Clinical picture of Parkinson's disease.

B- Problem solving: (10)

Problem: Sixty years old man presented by dysarthria and right hemiparesis since 2 hours with history of diabetes and hypertension and CT brain is free:

A- What is the most probable pathology:

- a. Infective.
- b. Neoplastic
- c. Vascular
- d. Inflammatory

B- what is the first line of treatment:

- a. Antiplatelet
- b. Anticoagulants
- c. Vasodilators
- d. Actylase

Section III: Pediatrics [Total:70 marks]

A-Short essay: (5x13 = 65)

- Q 1) Discuss etiology, and clinical presentation of rickets in infants.**
- Q 2) Mention contraindications of breast feeding for both mother and infant.**
- Q 3) Discuss causes, pathogenesis, and diagnosis of favism in children.**
- Q 4) Mention types and causes of fever in infants and children.**
- Q 5) Give account on IMCI based classification and assessment of a child with diarrhea.**

A- Problem solving: (2 x 2.5 = 5)

P1) During the delivery room resuscitation of a vigorous term newborn, which of the following should be performed first?

- a)** Verify the airway is clear, dry, and stimulate the infant.
- b)** The heart rate should be auscultated.
- c)** Breath sounds should be auscultated.
- d)** The mouth and trachea should be suctioned.

P2) A 4 years old child presents to the emergency department with a 2-day history of high fever and sore throat. She suffers self- limiting convulsions and is admitted for observation. The next day pinpoint red papular rash develops allover her body with circum-oral pallor. What is the most likely diagnosis ?

- (a)** measles .
- (b)** rubella .
- (c)** scarlet fever .
- (d)** chickenpox

Section IV: Obs.& Gyna. [Total:70 marks]

All Questions should be answered:

1) A 19-year-old, Primigravida women is referred at 34 weeks with blood pressure 160/100 and 3+ proteinuria on dipstick.

- a) How will you investigate the situation? (6 marks)
- b) She has started fitting. Outline your initial management to control the fits. (6 marks)
- c) Outline your further management when the fits has been controlled. (8 marks)

2) A 31-year-old woman (para2+1) complains of secondary dysmenorrhea.

- a) Justify the investigations you would like to carry out. (6 marks)
- b) Critically evaluate the different non-surgical management options. (7 marks)
- c) Evaluate the surgical methods for treatment of her condition. (7 marks)

3) Answer the following: [6 marks for each question]

- a) Enumerate causes of postmenopausal bleeding.
- b) Counsel the appropriate methods of contraception.
- c) What are the stages of labor?
- d) What is needed to evaluate a woman who presents with bleeding in early pregnancy?
- e) How can tubal patency be evaluated?

(Good luck)

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2ed. Part Master Public Health
& Community Medicine
1st. paper
Number of Questions : 5
Time Allowed : 3 Hours
Total : 100 Marks



Question (1) : Discuss briefly : (60 marks, 15 marks each)

- a- Burden of non-communicable diseases on health care services.
- b- Prevention of HBV transmission from mother to her baby.
- c- Are cancers in general are preventable diseases?. Explain with examples.
- d- Public health emergencies of international concern. Covid-19 as an example.

**Question (2) : Mention reservoir of infection and mode/s of transmission of :
(30 marks)**

- a- Viral hemorrhagic fevers.
- b- Rabies.
- c- Tetanus.

**Question (3) : Define quality indicator. Mention quality indicators used to
assess the quality of health care outcome. (20 marks)**

Question (4) : Analyze the relation between : (20 marks)

- a- Severity of clinical case and infectivity.
- b- Incidence and prevalence indices.

Question (5) : Discuss briefly : (20 marks)

- a- Preventive measures for :
 - Cardiovascular diseases.
 - Measles.
- b- Criteria for good screening test. Give example.

Question 6 : Write short notes on : (60 marks, 15 marks each)

- a- Active surveillance.
- b- Bacterial food poisoning.
- c- The basic concept of association and causation.
- d- Vaccination of international travelers.

Question (7) : MCQs (60 marks) : Choose one correct answer from the followings :

- 1- **A 5 year old child comes to the immunization center without BCG scar on his arm ; what would you prefer?**
 - a. Give BCG vaccine
 - b. Perform mantoux if positive then give BCG
 - c. Chemoprophylaxis
 - d. Perform mantoux if negative then given BCG

- 2- **In a village population, among 20,000 exposed to smoking, 200 developed cancer, and among 40,000 people unexposed, 40 developed cancer. The relative risk of smoking in the development of cancer is :**
 - a. 20
 - b. 10
 - c. 15
 - d. 25

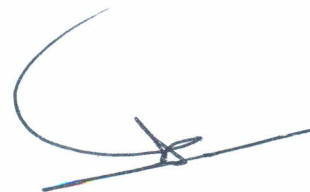
- 3- **The proportion of the disease in a population that would be eliminated if the risk factor is eliminated is determined by :**
 - a. Relative risk
 - b. Absolute risk
 - c. Attributable fraction
 - d. Odds ratio

- 4- **If the number of deaths from tuberculosis is expressed in relation to the total mid year population, it is :**
 - a. Case fatality rate
 - b. Proportionate mortality rate
 - c. Crude death rate
 - d. Cause specific death rate

- 5- **When total number of deaths due to measles is presented in relation to the total cases of measles, it is best labeled as :**
 - a. Cause specific death rate
 - b. Incidence rate
 - c. Case fatality rate
 - d. Proportional mortality rate

- 6- **An expert in the field of public health is required to estimate the magnitude of a health problem. Which rate would he calculate for this?**
 - a. Incidence rate
 - b. Prevalence rate
 - c. Case fatality rate
 - d. Proportionate mortality rate

- 7- Which of the following is not a correct statement?**
- a. A test can be reliable without being valid
 - b. A test cannot be valid without being reliable
 - c. A test can be reliable and valid both
 - d. A test can be valid without being reliable.
- 8- The probability of a person having the disease when the test is positive is :**
- a. Sensitivity
 - b. Specificity
 - c. Positive predictive value
 - d. Negative predictive value
- 9- The extent to which a test is measuring what it is intended to measure is :**
- a. Reliability
 - b. Validity
 - c. Sensitivity
 - d. Specificity
- 10-The extent to which a specific health care treatment, service, procedure, program, or other intervention produces a beneficial result under ideal controlled conditions is its :**
- a. Effectiveness
 - b. Efficacy
 - c. Efficiency
 - d. Effect modification
- 11-Prevention of emergence or development of risk factors is a type of :**
- a. Primary prevention
 - b. Secondary prevention
 - c. Tertiary prevention
 - d. Primordial prevention
- 12-Health education on early diagnosis and treatment is :**
- a. Primary prevention
 - b. Secondary prevention
 - c. Tertiary prevention
 - d. Primordial prevention
- 13-International notification is a must in all the following EXCEPT :**
- a. Plague
 - b. Cholera
 - c. Yellow fever
 - d. Paralytic polio



14-Infectious disease whose control is not solely based on ACTIVE

IMMUNIZATION is :

- a. Measles
- b. Diphtheria
- c. Polio
- d. Tuberculosis

15-Chronic carrier is not found in case of :

- a. Measles
- b. Typhoid
- c. Hepatitis B
- d. Gonorrhoea

16-With reference to mumps which of the following is true?

- a. Meningoencephalitis can precede parotitis
- b. Salivary gland involvement is limited to parotids
- c. The patient is not infectious prior to clinical enlargement of parotid.
- d. Mumps orchitis frequently leads to infertility.

17-Selective screening refers to screening tests applied to a :

- a. Volunteer group
- b. Randomly selected group
- c. High risk group
- d. Non-randomized group

18-The epidemic curve is drawn by plotting :

- a. The time of exposure by the number of cases
- b. The time of arrival of cases to health care settings by the number of cases.
- c. The time of recovery by the number of cases
- d. The time of disease onset by the number of cases

19-John Snow's investigation of cholera is considered a model for epidemiologic field investigations because it included a:

- a. Biologically plausible hypothesis
- b. Comparison of a health outcome among exposed and unexposed groups
- c. Spot map
- d. Recommendation for public health action

20-The random selection of participants from a population :

- a. Increases the external validity of the study.
- b. Increases the internal validity of the study.
- c. Enables the researcher to conclude confidently a cause-and-effect relationship.
- d. Non of the above.