

DEPARTMENT OF COMMUNITY MEDICINE AND FAMILY MEDICINE

FINAL PROFESSIONAL EXAMINATION-Batch 2014

Epidemiological and biostatistics exercises-Set 3

December 2018

Maximum Marks = 30

Duration = 40 minutes

1. The following data has been observed in India for TB patients under RNTCP. (Marks=10)

Total registered cases under RNTCP: 120000

Cured: 96000

Treatment complete: 4000

Patients died during treatment: 5400

Failure of treatment: 3600

No. of defaulters: 11000

Calculate

- a) Cure rate ✓
- b) Death rate ✓
- c) Failure rate ✓
- d) Defaulter rate ✓
- e) Success rate

$$\frac{96000}{120000}$$

$$\frac{5400}{120000}$$

2. The case control study was conducted to study the association between smoking and lung cancer. Of the 260 cases of lung cancer 75 were smoker whereas out of the 300 controls 45 were smokers. (Marks = 5)

- a) Construct a 2x2 table
- b) Calculate the Odds ratio
- c) Interpret your findings in terms of strength of association and its statistical significance

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All India Institute of Medical Sciences, Bhubaneswar
3rd Professional MBBS Final Examination 2016

Time: 3 Hrs

Community Medicine (Paper-I)

Max. Marks: 75

Instructions

Answer all the questions. Draw diagram wherever necessary. Use separate answer sheets for Section-A & B.

Section - A

Q1. Enlist method of nutritional assessment in community. How will you assess nutritional status in a primary school? Describe in detail. **(5+8=13)**

Q2. Write short notes:

(5x5=25)

- a. Systematic random sampling
- b. Principles of health education
- c. Isolation vs. Quarantine
- d. Fertility indicators
- e. Role of NGOs in care of elderly

Section - B

Q3. A pregnant woman in her second trimester presents with a haemoglobin level of 8.5 gm/dl. How is anaemia in pregnancy graded according to WHO classification and what is her grade of anemia? What are the measures to prevent and control nutritional anaemia in India? **(4+8=12)**

Q4. Write short notes:

(5x5=25)

- a. Byssinosis
- b. Principles of Primary Health care
- c. Sustainable Development Goals for improving health and nutrition
- d. Arsenic contamination of water
- e. Causes and health effects of air pollution in urban India

***** The End *****



All India Institute of Medical Sciences, Bhubaneswar
3rd Professional MBBS Final Examination 2017

Time: 3 Hours

Community Medicine (Paper - I)

Max. Marks: 75

Instructions

Answer all the questions. Draw diagram wherever necessary. Use separate answer sheets for Section A and B.

Section - A

Q1. Illustrate various types observational studies? Explain the advantages of analytical cross-sectional design. (10 + 3 = 13)

Q2. Write short notes on: (5 x 5 = 25)

- a. Role of social determinants of health in disease control.
- b. Discuss different approaches to health education
- c. Public Health Emergency of International Concern
- d. Levels of Prevention
- e. Demographic cycle

Section - B

Q3. Discuss different tiers of health care delivery system in India and functionaries involved at each level. Describe the role of ASHA in providing maternal and child health care services in the village. (6 + 6 = 12)

Q4. Write short notes on: (5 x 5 = 25)

- a. Nutritional status indicators in a child
- b. Common air pollutants used in calculating air quality index and its source.
- c. Occupational hazards of a Health Worker
- d. Role of Vitamin D in health and disease
- e. Planning Cycle



All India Institute of Medical Sciences, Bhubaneswar
3rd Professional MBBS Final Examination 2018

Time: 3 Hours

Community Medicine (Paper - I)

Max. Marks: 75

Instructions

Answer all the questions. Draw diagram wherever necessary. Use separate answer sheets for Section A and B.

Section - A

1. Classify the different types of epidemiological studies and describe in detail the design of a Randomised Control Trial and its ~~advantages~~. (9+4 = 13)
2. Write short notes on: (5 x 5 = 25)
 - a) Bias in case-control studies
 - ~~b) Instrumental Activities of Daily Living~~
 - c) Barriers of communication
 - d) Human Development Index
 - e) Measures of dispersion

Section - B

3. What is a balanced diet? Which are the common nutritional disorders prevalent in India? What are the measures being taken to bring down such disorders? (2+5+5 = 12)
4. Write short notes on: (5 x 5 = 25)
 - a) Principles of chlorination.
 - b) Occupational hazards faced by a doctor in India
 - c) Methods of Excreta disposal
 - d) Network Analysis
 - e) Ideal IUCD candidate



All India Institute of Medical Sciences, Bhubaneswar

3rd Professional MBBS Final Examination 2019

Time: 3 Hours Community Medicine (Paper - I) Max. Marks: 75

Instructions

Answer all the questions. Draw diagram wherever necessary. Use separate answer sheets for Section A and B.

SECTION - A

1) Define Epidemiology and its uses in disease control. How will you investigate an outbreak of Measles epidemic in the community? (3+4+6 = 13)

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- Syndrome
- PCR
- common
- NR*

2) Write short notes on:

(5 x 5 = 25)

- a) Theory of disease causation ✓
- b) Sullivan's Index ✓
- c) ✱ Sanitation Barrier ✓
- d) Total Fertility Rate and its significance in population control ✓
- e) Public health emergencies of international concern. ✓

SECTION - B

3) Define Severe Acute Malnutrition (SAM). How will you manage a male child of four years with SAM in a rural community? (4+8 = 12)

4) Write short notes on:

(5 x 5 = 25)

- a) Recent changes in Biomedical waste management.
- b) Silicosis - Silica .
- c) Greenhouse effect and its health impact .
- d) VED Analysis at Community Health Centre
- e) ✱ Focus Group Discussion

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**DEPARTMENT OF COMMUNITY MEDICINE AND FAMILY MEDICINE
FINAL PRE-PROFESSIONAL EXAMINATION
EPIDEMIOLOGICAL AND BIostatISTICS EXERCISES**

Maximum Marks = 30

Duration = 40 minutes

1. A study was done to evaluate the performance of new diagnostic test for diabetes. Among the 80 study participants found positive by the new test, it was found that 40 actually had diabetes. Among 9920 participants found negative by the new test, it was found that 9840 actually didn't have diabetes. **(Marks = 10)**

- a) Prepare 2*2 table to depict the results of the above study
b) Calculate sensitivity, specificity and comment on the usefulness of this test as a screening test for diabetes.

2. In a city with a population of 60,000; six thousand (6000) deaths occurred during the year 2011. These included 3000 deaths from cholera among 40,000 people who were sick with cholera.

(Marks = 5) Calculate: a. The cause specific mortality rate for cholera in year 2011

b. Case fatality rate for cholera in year 2011

3. Attack rate among the vaccinated and unvaccinated against measles are given below. Suggest if vaccination is protective against measles infection using appropriate statistical tests.

(Marks = 10)

Group	Results		Total
	Attacked	Not attacked	
Vaccinated	10	90	100
Unvaccinated	26	74	100
Total	36	164	200

4. 1950 blood slides were collected by health worker in the field, in a primary health center with a population of 38,500. Another 750 slides were collected at the PHC for Malaria. Of the total slides Collected, 180 slides were positive for malaria parasites. **(Marks = 5)**

Calculate:

- a. Annual Parasite Incidence
b. Annual Blood Examination Rate
c. Slide Positivity Rate

ALL INDIA INSTITUTE OF MEDICAL SCIENCES
BHUBANESWAR
Pre-professional Exam- 2012 Batch

Community & Family Medicine-Paper I

Time: 10:00-13:00

Date: 13.10.2016

Max marks: 75

Attempt all the questions
Answer each section in a different sheet.
Answer all questions of a section together.

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Section A

1. What should be the characteristics of a health indicator? Enumerate the various health indicators. Write in detail about the disability indicators. [3+3+4]
2. Which is the most appropriate study design to find risk factors for a rare disease? Describe the steps in conducting such a study. What could be the biases involved in such a study? [2+4+4]

Section B

3. What are the levels of health care? What are the objectives of Indian Public Health Standards (IPHS) for Primary Health Centres (PHC)? What are the services provided at a PHC? [3+3+4]
4. Write short notes on: [5x9]
 - a. Sustainable Development Goals
 - b. Iodine deficiency disorders
 - c. Demographic cycle
 - d. Sampling techniques
 - e. Breakpoint chlorination
 - f. Classification of biomedical waste
 - g. Responsibilities of World Health Organization
 - h. Differences between family medicine and other specialties
 - i. Genetic counselling

NPCDCS

ALL INDIA INSTITUTE OF MEDICAL SCIENCES
BHUBANESWAR

Pre-professional Exam- 2013 Batch

Community & Family Medicine-Paper I

Time: 14.00-17.00

Date: 06.10.2017

Max marks: 75

Attempt all the questions
Answer each section on a different sheet
Answer all questions of a section together.

Section A

1. What is a 'cohort'? What are the types of cohort (studies)? Write down the steps in conducting a cohort study. [1+3+9=13]

2. Write short notes on

- a. Sampling techniques
- b. Health problems of the elderly
- c. Dependency ratio
- d. UNICEF
- e. Barriers of communication

[5x5=25]

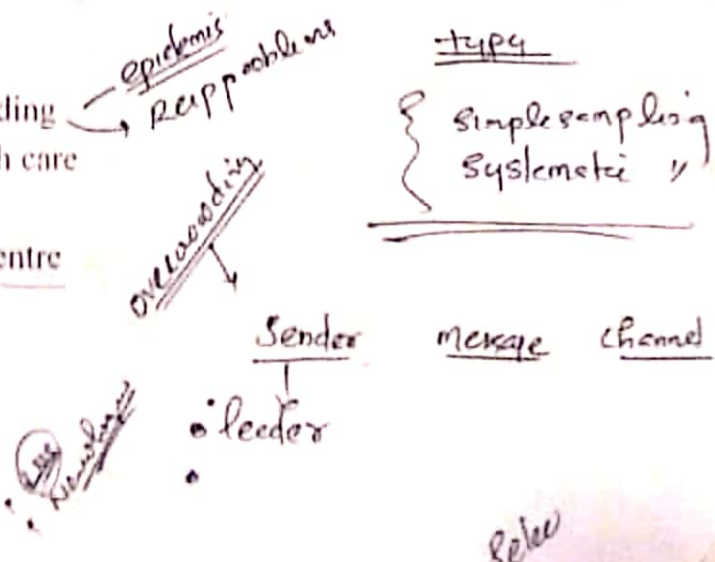
Section B

3. Define anaemia. What are its causes? What are its clinical symptoms? What are the strategies to control iron deficiency anaemia under the national programme? [1+2+2+7=12]

4. Write short notes on:

[5x5=25]

- a. Silliness
- b. Health effects of overcrowding
- c. Principles of primary health care
- d. Network analysis
- e. Nutritional rehabilitation centre



DEPARTMENT OF COMMUNITY MEDICINE & FAMILY MEDICINE
ALL INDIA INSTITUTE OF MEDICAL SCIENCES
BHUBANESWAR

3rd Pre-professional MBBS Examination-2018

Community Medicine

Paper - I

1. Which study design will you use to compare efficacy of two drugs? Elaborate the steps in conducting such a study. How do you ensure that bias from participants & investigators is not introduced in such a study? [1+8+4=13]

 2. Write short notes on: [5x5=25]
 - a. Types of variables with examples
 - b. Fertility Indices
 - c. Qualities of a good health indicator
 - d. Barriers of communication
 - e. Battered baby syndrome

 3. What are the objectives of Indian Public Health Standards for Primary Health centres? What are the minimum requirements in a PHC according to IPHS? Mention the internal and external mechanisms for monitoring of PHCs. [2+8+2=12]

 4. Write short notes on: [5x5=25]
 - a. Occupational hazards faced by a sulabh worker in AIIMS hospital
 - b. Triage commonly used during disaster
 - c. Purification of water at household level
 - d. Network Analysis
 - e. Works of WHO
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All India Institute of Medical Sciences, Bhubaneswar
3rd Pre-Professional MBBS Examination 2019

Time: 3 Hours

Community Medicine (Paper - I)

Max. Marks: 75

Instructions

Answer all the questions. Draw diagram wherever necessary. Use separate answer sheets for Section A and B.

Section - A

1. Describe the basic framework of a case-control study. What are the steps in conducting a case-control study? Describe in brief the biases encountered in case-control studies. (3+6+4=13)

2. Write short notes on:

(5 x 5 = 25)

- a) Sources of health information in India
- b) Normal distribution
- c) Demographic cycle
- d) Physical Quality of Life Index
- e) Activities of Daily Living

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Section – B

- 3) What are the agencies providing health care in India? Describe the Indian Public Health Standards for an ideal community health centre. (5+7 = 12)
- 4) **Write short notes on:** (5 x 5 = 25)
- a) Services provided in Nutritional Rehabilitation Centre.
 - b) Occupational cancers
 - c) Methods of solid waste disposal,
 - d) Ayushman Bharat
 - e) Water borne diseases .