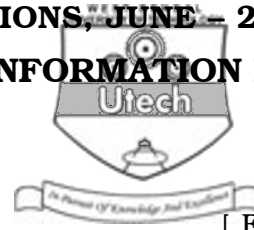




ENGINEERING & MANAGEMENT EXAMINATIONS, JUNE – 2009
EPIDEMIOLOGY & ANALYSIS OF HEALTH INFORMATION DATA
SEMESTER - 4



Time : 3 Hours]

[Full Marks : 70

GROUP – A

(Multiple Choice Type Questions)

1. Choose the correct alternatives for any *ten* of the following : 10 × 1 = 10
- i) Epidemiology can be defined as the study of
 - a) the aetiology of disease in human
 - b) the frequency of causes of death in human
 - c) the determinants of frequency of disease in human
 - d) the distribution and disease frequency in human.

 - ii) The relation between prevalence (*P*) and incidence (*I*) is
 - a) $P = \frac{I}{D}$ b) $D = I \times P$
 - c) $P = I \times D$ d) none of these.

 - iii) The name of the microfilarial agent that causes filaria is
 - a) *Wucheria bancrofti*
 - b) *Plasmodium vivax*
 - c) *Thermoactinomyces sachhari*
 - d) *Micropolyspora faeni.*

 - iv) A method for identifying the missing cases is known as
 - a) active surveillance b) passive surveillance
 - c) sentinel surveillance d) none of these.



v) The most abundant of the five classes of immunoglobulin is

- a) IgM
- b) IgG
- c) IgD
- d) IgA.



vi) Rheumatic fever generally occurs among the age group

- a) 5 – 15 years
- b) 15 – 30 years
- c) 30 – 45 years
- d) 45 – 60 years.

vii) Primordial prevention means

- a) prevention taken before biological onset of the disease
- b) prevention of development of risk factors
- c) desired action taken after disease detection
- d) immunization.

viii) True statement concerning cohort studies includes all the following, *except* :

- a) Cohort studies are necessary to estimate the prevalence of disease
- b) Cohort studies can be retrospective
- c) Cohort studies are longitudinal studies
- d) Subjects are selected on the basis of characteristics present before onset of the condition being studied.

ix) Which of the following diseases can be transmitted transplacentally ?

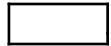
- a) Syphilis
- b) Diphtheria
- c) Tuberculosis
- d) None of these.

x) The incubation period of influenza is

- a) 18 to 72 hours
- b) 28 to 72 hours
- c) 18 to 24 hours
- d) 24 to 72 hours.



- xi) 'Puerperal tetanus' refers to
- a) tetanus resulting from unnoticed wounds
 - b) tetanus that occurs in newborn infants
 - c) tetanus after an abortion
 - d) both (a) and (b).



GROUP – B

(Short Answer Type Questions)

Write short notes on any *three* of the following.

3 × 5 = 15

- 2. Combined Vaccine.
- 3. Attributable Risk.
- 4. Disease Spectrum.
- 5. Cohort Study.
- 6. Immunization Hazards.
- 7. Sensitivity.

GROUP – C

(Long Answer Type Questions)

Answer any *three* of the following questions.

3 × 15 = 45

- 8. Define 'Cold Life'. Discuss any five types of cold chain equipment which are used today.
- 9. What is a Rheumatic heart disease ? State the epidemiological factors. What are the measures of prevention you can take ?
- 10. Define and classify vaccines. Discuss about the prevention of infectious diseases.
- 11. What is Food Poisoning ? State its type. How can it be prevented ?

END