



الفصل: الأول العام الدراسي<mark>2010- 2</mark>011 العام الامتحان الثاثي

مادة: علم الصحه العامه والوبائيات

نموذج (A) يوم الثلاثاء 30/11/2010 الوقت: الساعة (10 - 11) صباحا

التوقيع:	 الطالب:	إسم
	 الرقم الجامعي-	

تعليمات:

- (1) عدد الأسئلة (40) سؤالا لكل سؤال إجابة واحدة صحيحة فقط
- (2) مدة الإمتحان (60 دقيقة) ولن يعطى وقت إضافي لنقل الإجابات على ورقة الكمبيوتر
 - (3) على كل طالب تظليل الإجابة بشكل واضح وعدم ثني ورقة الكمبيوتر
- (4) يمنع منعا باتا إحضار الهاتف النقال الى قاعة الإمتحان وكل من يخالف ذلك يعرض نفسه للعقوبات التي نصت عليها أنظمة وقوانين الجامعة
- (5) ورقة الإجابة المعتمدة هي ورقة الكومبيوتر ولن ينظر في الإجابات الموضوعة على ورقة الإسئلة
- (6) على كل طالب التأكد من كتابة اسمه ورقمه الجامعي في اعلى ورقة الكومبيوتر و تظليل اسمه ورقمه الجامعي باغلاق كامل للدائرة ويمنع وضع علامة X على الجواب الصحيح

Second examination of epidemiology (form A)

<u>Questions from 1-5:</u> The 2×2 table below reveals screening test results for disease Y which are tabulated in relation to the true disease status of the population being tested. From the calculation results coming after, you are going to choose the required answers:

Screening test	Disease (Y) Yes	Disease (Y) no	Total
Positive	200	100	300
Negative	50	600	650
Total	250	700	950

- 1. Sensitivity of the screening test. (B)
- 2. Positive predictive value of the test. (C)
- 3. Specifity of the screening test. (D)
- 4. Negative predictive value of the test. (E)
- 5. Disease prevalence. (A)
 - A. 250/950 or 26 %
 - B. 200/250 or 80 %
 - C. 200/300 or 67 %
 - D. 600/700 or 86 %
 - E. 600/650 or 92 %

6. All the following are criteria for instituting a screening program EXCEPT:

- A. Serious disease with an understood natural history.
- B. Long period between first identification and overt disease.
- C. Low prevalence of preclinical stage.
- D. Facilities are adequate.
- E. Effective, acceptable and safe treatment is available.

7. Screening programs can be considered as which one of the following types of prevention:

- A. Primary prevention
- B. Tertiary prevention
- C. Primary and secondary prevention
- D. Secondary prevention
- E. Primary, secondary, and tertiary prevention

8. All the following are characteristics of screening tests EXCEPT:

- A. Done to those who are apparently healthy or asymptomatic
- B. Applied to a group of individuals
- C. Results are based on one criteria
- D. Results are conclusive

- E. Not a basis for treatment
- 9. All the following statements apply for eradication EXCEPT;
 - A. Infectious agents no longer exists in the laboratories
 - B. World-wide disappearance of a disease
 - C. Complete destruction of the agent
 - D. Permanent reduction of the disease to zero level
 - E. No need for interventions

10. Disappearance of transmission of infection from an area (region, country or continent) being free of the disease is termed:

- A. Elimination of the disease
- B. Eradication
- C. Extinction
- **D.** Elimination of infection
- E. Control

11. All the following are criteria for diseases suitable for elimination or eradication EXCEPT:

- A. Modes of transmission are limited and well defined)
- B. Disease has a short incubation period and non infectious during this phase
- C. Post infection immunity or immunization is strong and life lasting
- D. Availability of effective control measures
- E. Man is the only reservoir, no animal or soil reservoirs

12. The best effective intervention directed to break the cycle of infection is the one directed to:

- A. Reservoir
- B. Source of infection
- C. Mode of transmission
- D. Susceptible host
- E. Non of the above

13. In order to select a disease for eradication all of the following criteria must be present EXCEPT:

- A. Limited and known mode of transmission.
- B. Known effective potent vaccine with lifelong immunity.
- C. Carriers can be easily identified and treated.
- D. Non infectious in the incubation period.
- E. Antigenically stable causative agent.

14. All the following factors explain why measles is resistant to eradicated EXCEPT:

- A. Measles has very high secondary attack rate
- B. No chronic carrier state
- C. It seems necessary to attain and maintain nearly universal coverage with vaccine (100%)
- D. Measles patients are contagious four days before rash onset
- E. Measles is transmitted mainly by direct contact with infectious droplets or less commonly by air borne spread

15. From the factors that enabled Small Pox eradication were all the following EXCEPT:

- A. It is an evident disease and can be recognized easily by non medical personnel
- B. Short incubation period and the patient is not infectious during it
- C. Availability of a stable potent vaccine
- D. Absence of subclinical cases
- E. Rarity of second attacks of the disease (solid post infection immunity)

16. All the following are criteria that determine that an event constitutes a public health emergency of international concern (PHEIC) EXCEPT;

- A. Unexpected increase in the number of cases for the given place, time or population
- B. The event is caused by a known agent
- C. The event has the potential to spread internationally
- D. Unusual or unexpected nature of the event
- E. The risk that restrictions to travel or trade may result because of the event

17. All the following are events that if detected by national surveillance systems should be notified to the WHO under International Health Regulations (IHR) without applying decision Algorithm EXCEPT:

- A. A case of Smallpox
- B. A case of Poliomyelitis due to wild type of polio
- C. A case of Cholera
- D. Human influenza caused by a new subtype
- E. Severe acute respiratory syndrome

18. All of the following cases are not considered suspected Cholera cases EXCEPT:

- A. A three years old child from Somalia (endemic area) with acute watery diarrhea without vomiting.
- B. A four years old child from Somalia with acute watery diarrhea with vomiting.
- C. A Five years old child from Haiti (endemic area) with vomiting and mild dehydration.
- D. A ten years old child from Mexico with vomiting and severe dehydration.
- E. None of the above.

19. A case of cholera is diagnosed serologically, the following measures should be taken EXCEPT:

- A. Prompt fluid therapy for the case.
- B. Isolation of the case.
- C. Reporting to the local health authority and WHO.
- D. Tetracycline is given to the case to shorten the period of diarrhea
- E. Administration of tetracycline to the immediate contacts is not recommended.

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20. Endemicity of Cholera is maintained more in El-Tore type than in classic type because of all the following EXCEPT:

- A. The ratio of carriers to cases is less in El-Tore type
- B. The duration of carriage after infection is longer in El-Tore type
- C. The El-tore is more resistant
- D. The El-tore survives for longer periods in the extra- intestinal environment
- E. Combination of both B and D.

21. All the following statements are true for Cholera vaccines EXCEPT:

- A. The new oral cholera vaccines are preferred than the old classic one because of better immunity that lasts for 2 years
- B. The new oral cholera vaccines do not provide 100% protection
- C. The new oral cholera vaccines are now not indicated for use by travelers.
- D. Killed oral Cholera vaccine Stimulates both antibacterial and antitoxic antibodies
- E. Killed oral Cholera vaccine attempts to stimulate the intestinal mucosal immune response similar to that induced by natural infection.

22. The most effective preventive measure for Cholera from all the following preventive measures is:

- A. Environmental hygiene specially refuse disposal.
- B. Fly control
- C. Health education in personal hygiene.
- **D.** The protection of food and water supplies from fecal contamination.
- E. Vaccination.

23. International health regulations require that a person who has come from an infected area with Cholera within the incubation period and has symptoms indicative of cholera, may be required to have:

- A. Chemoprophylaxis
- B. Cholera vaccine
- C. Stool examination.
- D. Isolation for the rest of incubation period.
- E. Non of the above

24. The following statements regarding plague are correct EXCEPT:

- A. Rodents are a source of infection.
- B. Man can be a reservoir of plague.
- C. It may be communicable and non-communicable.
- D. It is a highly fatal with high case fatality rate.
- E. Skin is not the only inlet of the disease.

25. Chemoprophylaxis against Plague must be considered in the following situations EXCEPT:

- A. Persons travelling to areas endemic with plague.
- B. Close contacts of cases of pneumonic plague.
- C. Close contacts of cases of bubonic plague.
- D. Any person bitten by rodent flea during an outbreak of plague.
- E. None of the above.

26. The more effective reservoir of Malaria in endemic areas are:

- A. Chimps
- B. Man
- C. Infants and children
- D. Pregnant women
- E. Non of the above

27. Bubonic and primary septicemic plague is transmitted through the **bite of infected fleas. The type of transmission** is:

- A. Vector mechanical transmission
- B. Vector biological propagative transmission after the passage of the extrinsic incubation period-3 days
- C. Vector biological propagative transmission after the passage of the extrinsic incubation period-6 days
- D. Vector biological cyclo-propagative transmission after the passage of the extrinsic incubation period 3 days
- E. Vector biological cyclo-propagative transmission after the passage of the extrinsic incubation period 6 days

28. Primary preventive measures directed toward reducing the threat of Plague infection in humans in high risk areas are through all the following EXCEPT:

- A. Rodents: controlling rat populations in both urban and rural areas.
- B. Use of an effective insecticide to control rodent fleas
- C. Elimination of wild rodent plague
- D. Surveillance for human plague cases, and for plague in rodents
- E. Public health education for eliminating food and shelter for rodents in and around homes, work places, and recreation areas

29. All the following statements are true for contacts of Plague cases EXCEPT:

- A. Contacts of bubonic plague should be disinfected and isolated for six days.
- B. Tetracycline for contacts of pneumonic Plague for 7 days.
- C. Contacts of pneumonic plague should be isolated for 6 days.
- D. Investigation of the contacts for the source of infection
- E. Search for persons with house hold or face-to-face exposure to pneumonic plague..

30. Season of yellow fever is in the time of rain fall as well as the climatic conditions favoring the breeding of mosquitoes but periodic recurrences were observed to occur at:

- A. 2-3 years interval
- B. 3-5 years interval
- C. 5-10 years intervals.
- D. 10-15 years interval
- E. Non of the above

31. Control of yellow fever include all the following EXCEPT:

- A. Reporting to local health authority and WHO.
- B. Isolation of the patients to prevent access of mosquitoes to them for at least 5 days after onset
- C. Treatment of the patient by specific antibiotics.
- D. Regular spraying of the patients houses with effective insecticides.
- E. Screening the patient's room and spraying it with residual insecticides and the use of bed nets.

32. Transmission of yellow fever occurs by bite of infective mosquito. The type of transmission is:

- A. Vector biological propagative transmission after the passage of the extrinsic incubation period 9-12 days
- B. Vector biological cyclo-propagative transmission after the passage of the extrinsic incubation period 9-12 days
- C. Vector biological cyclo-propagative transmission after the passage of the extrinsic incubation period 3-5 days
- D. Vector biological cyclo-developmental transmission after the passage of the extrinsic incubation period 3-5 days
- E. Vector biological cyclo-developmental transmission after the passage of the extrinsic incubation period 9-12 days

33. In an infectable (receptive) zone of yellow fever, all the following measures are internationally required EXCEPT:

- A. All planes and ships coming from infected areas should be disinfected on arrival.
- B. Travelers carrying valid vaccination certificates are allowed to pass.
- C. Travelers not carrying valid vaccination certificates should be put in quarantine for six days.
- D. Yellow fever patients must be isolated under mosquito net for six days.
- E. Monkeys and apes should be kept in quarantine for seven days.

34. Sources of infection with Malaria include:

- A. Infected female anopheles mosquito
- B. Blood in case of transfusion
- C. Contaminated syringes and needles among drug addicts.
- D. Only A and B
- E. A and B and C

35. Upon one of the following factors determining the ability of the Anopheline mosqueto to transmit malaria parasites, the eradication program depends:

- A. Susceptibility of mosquitoes to plasmodium infection
- B. Choice of the host
- C. Resting habits
- D. Time of biting
- E. Life span

36. From the following indicators obtained from the malaria survey, one indicates Endemicity of Malaria.

- A. Mosquito density
- B. Anthropophilic index
- C. Climatic factors which favor the transmission of malaria.
- D. Spleen rate
- E. Parasitic rate

37. In the attack phase of Malaria eradication program, what are the measures performed?

- A. Spraying insecticides
- B. Spraying larvicides
- C. Mass treatment of population.
- D. A and B and C
- E. Only B and C
- 38. The consolidation phase of Malaria eradication program is mainly directed to:
 - A. Interrupting the chain of transmission
 - B. Case finding whether active or passive
 - C. Carry out periodic Malaria survey
 - D. Observing any imported case and treatment
 - E. Chemoprophylaxis for those visiting endemic area.

39. From the following indicators obtained from the malaria survey, one indicates recent infection:

- A. Climatic factors which favor the transmission of malaria.
- B. Spleen rate
- C. Parasitic rate
- D. Mosquito density
- E. Anthropophilic index

40. All the following are true for Chemoprophylaxis in case of travelling to a Malaria endemic area EXCEPT:

- A. Ant-malarial drugs are recommended for prophylaxis of non-immune travelers visiting malaria-endemic areas.
- B. Start one week before arriving in a malaria-endemic area
- C. Should be continued during travel
- D. Should be continued for 2 weeks after leaving the area
- E. Chloroquine is the drug of choice.

Good luck