



الفصل: الأول

العام الدراسي 2010-2011

الامتحان النهائي

مادة : علم الصحة العامة والوبائيات

نموذج (A)

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الوقت (صباحا)

إسم الطالب: التوقيع:

الرقم الجامعي-----

تعليمات :

- (1) عدد الأسئلة (40) سوالا 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 منعاً باتاً 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 الكمبيوتر ولن ينظر في الإجابات الموضوعة على ورقة الإسنلة
- (6) على كل طالب التأكد من كتابة اسمه ورقمه الجامعي في اعلى ورقة الكمبيوتر و تظليل اسمه ورقمه الجامعي باغلاق كامل للدائرة ويمنع وضع علامة X على الجواب الصحيح

1. **Conditions that must be fulfilled before a country is certified as polio free include:**
 - A. Adequate surveillance system for AFP
 - B. Reporting Zero Polio cases for at least three past years.
 - C. Adequate strategy to detect, report and respond to any discovered case of polio.
 - D. Any of the above
 - E. **A and B and C**

2. **All the following are reservoirs of polio myelitis EXCEPT:**
 - A. Clinical cases.
 - B. Subclinical cases
 - C. Fecal temporary carriers.
 - D. **Chronic carrier.**
 - E. A and B

3. **All the following are true statements regarding viral hepatitis EXCEPT:**
 - A. HAV infection does not result in chronic infection or chronic liver disease
 - B. The case fatality of all types of viral hepatitis is higher among persons older than four years of age
 - C. Immunity after infection lasts for life.
 - D. **Food handlers are at high risk of HAV infection due to their occupation**
 - E. The major route in modes of transmission is the feco-oral route.

4. **All the following persons are at increased risk of hepatitis A EXCEPT:**
 - A. Young children.
 - B. Military personnel.
 - C. **Travelers from developing to developed countries.**
 - D. Persons with chronic liver disease are at risk of fulminate hepatitis.
 - E. All persons of hemophilia (factor VIII, Factor IX) who receive replacement therapy.

5. **The reservoir of infection in meningococcal meningitis is man in the form of:**
 - A. Cases
 - B. Sub clinical cases.
 - C. **Carriers.**
 - D. All of the above.
 - E. Non of the above.

6. **The most important mode of transmission of meningococcal meningitis is:**
 - A. **direct contact through droplet infection**
 - B. indirect contact with contaminated articles
 - C. air born transmission
 - D. all of the above
 - E. non of the above

7. In approximately ? % of persons, initial infection may progress directly to active pulmonary disease or disseminated leading to milliary TB, tuberculosis meningitis or extra-pulmonary lesions.
- A. 2 %
 - B. 5 %
 - C. 10 %
 - D. 15 %
 - E. 20 %
8. TB is re-emerging as a major public health problem for all the following reasons: EXCEPT
- A. The neglect of the disease by governments has allowed tuberculosis control systems to deteriorate or even disappear in many parts of the world.
 - B. The growing problem of HIV/AIDS led to a decrease in emphasis of tuberculosis cases in HIV/AIDS endemic areas
 - C. Emergence of multi-drug resistant tuberculosis and the difficulty and the high expenses of its treatment.
 - D. The rapid population growth and its consequences have contributed to the increase in number of tuberculosis cases.
 - E. Increase in life expectancy of the population which led to increasing opportunity for the conversion of a latent TB infection into clinically evident cases.
9. The duration of clinical course of rabies is ? and death is often due to respiratory paralysis.
- A. 3-5 days
 - B. 3-6days
 - C. 2-5 days
 - D. 2-6 days
 - E. 2-7 days
10. The case fatality rate of rabies is:
- A. 80 %
 - B. 85 %
 - C. 90 %
 - D. 95 %
 - E. 100%
11. Indications of vaccination with HA vaccine include all the following EXCEPT:
- A. Persons traveling or working in high endemic area of HAV infection.
 - B. Children (< 2 years) living in communities with high rates of HAV infection.
 - C. All persons of clotting factors disorders (factor VIII, factor IX) who receive replacement therapy.
 - D. Persons with chronic liver diseases.
 - E. In out-break, for persons who receive immune globulin (IG)

12. All the following statements are true regarding HA vaccine EXCEPT:

- A. Hepatitis A vaccine is highly immunogenic.
- B. Data concerning the persistence of antibodies are limited because the current vaccine has been evaluated < 10 years.
- C. It is recommended to be given to persons traveling to endemic areas at least two weeks prior to travel.
- D. If not vaccinated prior to travel, give IG in addition to the vaccine.
- E. 95 % of adults having protective levels of antibody within one month after vaccination.

13. Exit of infection in Anthrax include all the following EXCEPT;

- A. Skin,
- B. gastrointestinal tract
- C. respiratory tract
- D. A and B
- E. Non of the above

14. Mode of transmission of anthrax include all the following EXCEPT;

- A. Direct or indirect contact with products of infected animals
- B. Direct or indirect contact with soil containing spores.
- C. Common vehicle through ingestion of inadequately cooked meat.
- D. Common vehicle through milk of infected animals
- E. Air borne through inhalation of spores in dust or during wool sorting or from dried skin or hair

15. All the following statements are true regarding prophylaxis against neonatal tetanus EXCEPT:

- F. Immunization schedule for pregnant women has been recommended and it consists of five doses of tetanus toxoid (TT), respecting the minimum interval between doses.
- G. There is no evidence for contraindications of TT immunization of pregnant woman at any time during pregnancy.
- H. Any subsequent dose administered after the first dose counts as a dose towards the five dose schedule even if administered at a longer interval than the recommended minimum interval.
- I. If young woman have documentation of having received three doses of DPT in infancy, those doses counts as one doses of TT towards the five dose TT schedule.
- J. Protection of the woman and her newborn starts two weeks after the administration of the second dose.

16. The case fatality rate of adult tetanus varies between - % .

- A. 30 - 40 %
- B. 30 - 50 %
- C. 30 - 60 %
- D. 30 - 80 %
- E. 30 - 90 %

- 17. All the following measures are recommended to contacts of hepatitis A patient EXCEPT:**
- A. Enlistment
 - B. Surveillance for the incubation period
 - C. Passive immunization with IG (IM) 0.02 ml/kg IM injection in deltoid before exposure or within 2 weeks after exposure
 - D. Active immunization with hepatitis A vaccine should be given as soon as possible after exposure, and not later than one week after exposure.
 - E. Investigation for source of infection and missed cases.
- 18. All the following measures applied to cases of hepatitis A EXCEPT:**
- A. Report to local health authority.
 - B. Isolation of cases.
 - C. Precautions during the first two weeks of illness to prevent transmission of infection, but no more than two weeks after onset of jaundice.
 - D. Concurrent and terminal disinfection: sanitary disposal of feces, urine and blood (by using disinfectants 'sodium hypo chlorite 0.5 %')
 - E. No specific treatment is available.
- 19. The following statements regarding Hepatitis B viral infection are true EXCEPT:**
- A. Most acute HBV infections in adults result in complete recovery.
 - B. A small proportion of acute hepatitis B virus infection may be clinically recognized,
 - C. less than 10 % of children and 30-50% of adults with acute hepatitis B infection show icteric disease
 - D. The pre-icteric or prodromal phase from initial symptoms to onset of jaundice usually lasts from 3-10 days.
 - E. The icteric phase is variable, lasts from 2-3 weeks.
- 20. All the following are modes of transmission of polio myelitis EXCEPT:**
- A. Feco-oral in areas with lack of personal hygiene.
 - B. Droplet during the acute phase of the disease
 - C. Direct contact: with respiratory discharge.
 - D. Common vehicle through ingestion of food or drink contaminated with feces or indirect contact with articles contaminated with pharyngeal discharge of infected person.
 - E. Non of the above.
- 21. Risk factors that precipitate paralytic polio in an individual include all the following EXCEPT:**
- A. Stress,
 - B. Fatigue,
 - C. Young age
 - D. Intramuscular injection,
 - E. Operative procedures such as tonsillectomy.

22. Isolation at home (if home is suitable) is a measure of prevention directed to the cases (reservoirs) in all the following diseases EXCEPT:

- a. Meningitis,
- b. Tuberculosis
- c. Poliomyelitis and
- d. Hepatitis A.
- e. Cholera

Questions from (23 -25) for each numbered disease, select the appropriate preventive measure directed to the animal reservoir of infection from the lettered options:

23. Rabies C

24. Bovine TB D

25. Anthrax E

- A. Reservoir eradication
- B. immunization
- C. killing the infected animals
- D. Slaughtering
- E. Sterilization of animal products

26. All the following are true statements regarding complications of hepatitis B infection EXCEPT:

- A. Acute fulminate HBV infection may occur in pregnancy and among newborns of infected mothers.
- B. About 90% of infants who acquire acute HB infection from their mothers become chronic carriers.
- C. Infants who become chronic carriers are at risk to develop chronic hepatitis, cirrhosis and hepatocellular carcinoma.
- D. Chronic HBV infection is found in 10% of cases of acute HBV infection.
- E. The risk of chronic hepatitis increases with age.

Questions from 27 -31:For each numbered hepatitis marker below, select from the lettered options the one that matches it

27. HBeAg: (D)

28. HBcAG (B)

29. HBIGM (C)

30. HBsAg (A)

31. Anti –HBsAg: (E)

- A. It is detected in acute illness and chronic carriers.
- B. Can be only detected in the liver tissues in person with acute or chronic HB infection.
- C. Class antibody to HBcAg
- D. It is contained also in the core of HBV
- E. It develops during convalescence.

32. All the following statements are true regarding the H marker Anti-Hbe EXCEPT:

- A. It appears when HBeAg is lost.
- B. It is an antibody to HBeAg,

- C. **it develops during convalescence.**
- D. It indicates low infectivity.
- E. It indicates good prognosis.

33. There are three areas regarding Endemicity of HBV infection, all the following statements are true EXCEPT:

- A. In highly endemic area, most infections occur during infancy and early childhood.
- B. In intermediate Endemicity, infections occur commonly in all age groups.
- C. IN low Endemicity, most infections occur in young adults, especially those belonging to known risk groups.
- D. In highly endemic area, chronic infections is age dependent.
- E. **Non of the above.**

34. Source of infection of HBV include all the following EXCEPT:

- A. Human blood and blood products.
- B. Saliva, semen and vaginal secretion.
- C. **Tears, sweat, and urine.**
- D. Breast milk
- E. Contaminated needles , syringes and other intravenous equipment

35. All the following statements are true regarding the period of communicability of HBV infection EXCEPT:

- A. All persons who are HBsAg positive are potentially infectious.
- B. Blood is infective many weeks before the onset of first symptoms.
- C. Blood remains infective through the acute clinical course of the disease.
- D. Blood remains infective during the chronic carrier state which may persist for life.
- E. **Non of the above.**

36. All the following statements are true for Salk polio vaccine EXCEPT:

- A. Induces circulatory antibodies but not intestinal immunity.
- B. Prevent paralysis but not re infection with wild virus.
- C. No evidence of vaccine associated polio paralysis.
- D. **Very useful to control epidemic**
- E. Could be given to immune-compromised like HIV cases.

37. Polio cases are most infectious from:

- A. 10-14 days before and after the onset of symptoms and the virus is excreted in the feces for 3-6 weeks.
- B. 7-10 days before and after the onset of symptoms and the virus is excreted in the feces for 2-4 weeks.
- C. 10-14 days before and after the onset of symptoms and the virus is excreted in the feces for 2-4 weeks.
- D. **7-10 days before and after the onset of symptoms and the virus is excreted in the feces for 3-6 weeks.**
- E. Non of the above.

- 38. A suspected or confirmed case should be isolated in the hospital for:**
- A. Two weeks after onset of symptoms
 - B. Three weeks after onset of symptoms
 - C. Four weeks after onset of symptoms
 - D. Five weeks after onset of symptoms
 - E. Six weeks after onset of symptoms
- 39. Measures applied during Polio myelitis epidemics include all the following EXCEPT:**
- A. Disease notification
 - B. Mass vaccination
 - C. Postpone elective nose and throat surgery and avoid IM injections.
 - D. Identify the route of introduction of poliovirus into the community
 - E. Active surveillance for AFP cases should continue for at least the incubation period beyond the onset of the last case in an area.
- 40. Polio is suitable to be eradicated for all the following reasons EXCEPT:**
- A. Polio only affects humans; there are no known animal reservoirs
 - B. An effective, inexpensive vaccine is available: Oral Polio Vaccine
 - C. Immunity is life long
 - D. There are no chronic carriers
 - E. Non of the above.
- 41. Susceptibility to meningococcal infection is general but the most susceptible are:**
- A. Female sex
 - B. Older ages
 - C. Younger ages
 - D. Middle ages
 - E. Non of the above
- 42. Acquired immunity to meningococcal meningitis could be through:**
- A. Sub clinical infection
 - B. clinical disease,
 - C. vaccination
 - D. all of the above
 - E. non of the above
- 43. All the following statements are true regarding the available vaccine against meningococcal meningitis EXCEPT:**
- A. Post vaccination immunity starts after 10 days of vaccination
 - B. Post vaccination immunity lasts for about three years
 - C. Post vaccination immunity lasts for about five years
 - D. Booster dose is recommended in case of continuous exposure
 - E. It is administered by single subcutaneous injection for those above 2 years of age.
- 44. Indications of vaccination with meningococcal vaccine include all the following EXCEPT:**
- A. To young children as part of the expanded program of immunization

- B. Newly aggregated young persons as military recruits and school children
- C. Inter-national travelers to endemic areas.
- D. During pilgrimage.
- E. During community outbreaks.

45. All the following statements are true regarding control measures of meningococcal meningitis EXCEPT:

- A. Reporting to local health authority.
- B. Isolation for 7 days after the start of the specific treatment for the sake of community
- C. Specific treatment should begin immediately when the clinical diagnosis is made even before meningo-coccus have been identified.
- D. Treatment can save the lives of 95% of the patients provided that it is started during the first two days of illness.
- E. Disinfection; concurrent and terminal

46. A latent TB infection may flare up converted into a TB case after all the following cases EXCEPT:

- A. Uncontrolled diabetes,
- B. Cancer,
- C. Renal failure,
- D. Minor surgeries,
- E. AIDS and prolonged intake of immunosuppressive drugs.

47. From all the following modes of transmission of TB infection, one of them is not common:

- A. Droplet contact transmission
- B. Air- born transmission,
- C. Contact with contaminated articles
- D. Common vehicle by the ingestion of unpasteurized milk
- E. Common vehicle by the ingestion dairy products.

48. The method of choice for TB case finding is:

- A. Tuberculin testing
- B. Sputum culture.
- C. Direct smear examination
- D. Radiography
- E. Any of the above

49. Positive tuberculin test indicates sensitivity to tubercle bacilli resulting from all the following EXCEPT:

- A. Previous BCG vaccination,
- B. Old healed primary lesion
- C. Active pulmonary disease.
- D. Active extra-pulmonary disease
- E. Non of the above

50. Causes of false positive tuberculin testing include:

- A. Infection with atypical mycobacterium.

- B. Tuberculoid leprosy
- C. Cutaneous leishmaniasis.
- D. All of the above**
- E. Non of the above

51. Incubation period of rabies is ranging from 4 days up to one year depending on all the following except:

- A. Site of the bite and severity of the wound
- B. Age of the bitten person.**
- C. The amount of the virus
- D. Presence of clothes.
- E. Post exposure intervention

52. Rabies virus is present in all the following fluids of the infected animal EXCEPT:

- A. lymph,
- B. milk
- C. saliva,
- D. urine
- E. stool**

53. All the following statements are true regarding reservoirs for rabies EXCEPT:

- A. Urban cat, dog, horse and camel act as reservoirs of urban rabies.
- B. Healthy carriers are present among cats and horses.
- C. Fox, Jackals, raccoons and vampire bats act as reservoirs for wild rabies.
- D. No healthy carriers are present among the foxes and raccoons.**
- E. No healthy carriers are present among dogs.

54. If the person is bitten by a dog who died, all the following measures have to be done EXCEPT:

- A. Cleaning: wash with soap and water and apply antiseptic to the site of bite.
- B. Give immunoglobulin; half the dose locally and the other half IM injection.
- C. Penicillin and anti-tetanic measures should be applied according to severity of the wound and the history of tetanus immunization
- D. Start vaccination immediately.
- E. Examine the brain of the dog for Negri's bodies, if negative, complete vaccination.**

55. For those who come in frequent contact with animals the following measures have to be done for prevention and control of rabies EXCEPT:

- A. Health education for personal hygiene during handling them.
- B. HDCV vaccine is given IM injection in deltoid region,
- C. Three doses; first dose followed by two doses at 7th, 21st day.
- D. If the risk continues booster doses should be given every four years**
- E. B and C.

56. In all the following diseases second attack rate is not reported or is very rare EXCEPT:
- Meningococcal meningitis
 - Rabies
 - Anthrax
 - Plague
 - Yellow fever
57. In all the following diseases there are no chronic carrier state EXCEPT:
- Viral hepatitis A
 - Polio myelitis
 - Plague
 - Viral hepatitis B
 - Cholera
58. Normal placenta offers a barrier against the transmission (trans-placental in utero transmission) of all the following infections EXCEPT:
- Malaria
 - Hepatitis B
 - Tuberculosis
 - All of the above
 - Non of the above
59. Mass treatment is a critical factor in the interruption of disease transmission. It is used in the control of one of the following diseases.
- Meningitis
 - Tuberculosis
 - Malaria
 - All of the above
 - Non of the above
60. Isolation of contacts for the longest incubation period counted from the date of last exposure is a preventive measure applied to contacts of cases of:
- Hepatitis A
 - Pneumonic plague.
 - Meningococcal meningitis
 - TB
 - Polio myelitis
61. Some pathogens have one portal of entry to new host and two or more portals of exit from reservoir. From these is one of the following:
- Meningitis
 - Rabies
 - Poliomyelitis viruses.
 - Tetanus
 - Yellow fever

First

62. Causes of sex differences include all of the followings EXCEPT:

- A. Anatomical differences
- B. Sex linked genetic inheritance.
- C. Hormonal factors
- D. Differences in agent virulence**
- E. Differences in the defense mechanism of the body.

First

63. Distribution of diseases in human population included in the definition of epidemiology means which of the followings:

- a. Agent, host and person
- b. Host, time and place.
- c. Environment and host.
- d. Agent host and environment
- e. Person, place and time**

First

64. The difference in disease frequency among different age groups is explained by all of the followings EXCEPT:

- a. Stage of development
- b. Degree of exposure, susceptibility and immunity
- c. Hormonal changes
- d. Sex of the individual**
- e. Cumulative exposure to harmful environmental influences

First

65. Descriptive epidemiology includes all EXCEPT:

- a. what
- b. who
- c. when
- d. where
- e. Why**

66. Time course of a disease outbreak is usually displayed as a / an:

- a. Endemic curve
- b. Seasonal variation
- c. Epidemic curve.**
- d. Secular trend.
- e. Cyclic trend

First

67. The geographical differences in disease occurrence are important dimensions of descriptive epidemiology, general characteristics peculiar to place include all the following EXCEPT:

- a. High frequency rates are observed in all ethnic groups in the area.
- b. Healthy persons entering the area become ill with frequency similar to those who are living in this particular place.
- c. Inhabitants who left the area do not show high rates.
- d. High frequency rates are observed in persons of similar ethnic groups inhabiting other areas.
- e. In certain diseases other species than man inhabiting the same area show similar manifestations.

68. The ability of the organism to live outside the body is termed:

- A. Tropism
- B. Virulence
- C. Ease of communicability
- D. Antigenic power
- E. Viability

(69, 70 questions) A study was undertaken to evaluate the use of computed tomography (CT) in the diagnosis of lumbar disk herniation. Eighty patients with lumbar disk herniation confirmed by surgery were evaluated with CT, as were 50 patients without herniation. The CT results were positive in 56 of the patients with herniation and in 10 of the patients without herniation.

69. The sensitivity of CT for lumbar disk herniation in this study is:

- A. 20%
- B. 30%
- C. 70%
- D. 80%
- E. 85%

70. The specificity of CT in this study is:

- A. 85%
- B. 70%
- C. 20%
- D. 30%
- E. 80%

71. All the following are considered limitations of surveillance except:

- A. Time constraints
- B. Labor intensity
- C. Assessment difficulties
- D. Reporting inadequacies
- E. Dissemination problems

72. Second attack frequency can measure:

- A. Viability of the organism
- B. Period of and ease of communicability
- C. Pathogenicity and virulence of micro-organism.
- D. Antigenic power of micro-organism

E. Dose of infection (inoculums)

73. Colostrums contains plenty of antibodies and is considered a type of:

- A. Active artificial immunity
- B. Active natural immunity
- C. Passive artificial immunity
- D. Passive natural immunity**
- E. Chemoprophylaxis

74. In a community X the total population was 30, 000.000 persons in 2005. if 60, 000 deaths from TB occurred in the same year and total deaths equals 375, 000, then the specific death rate from TB equals:

- A. 20
- B. 2**
- C. 200
- D. 160
- E. 16

75. The total deaths in a village in 1980 were 100. Of these 16 were due to pneumonia. If the total population is 10, 000, then the proportionate mortality rate from pneumonia equals to:

- A. 160
- B. 10
- C. 1.6
- D. 16**
- E. 100

76. If there are 50 cases of puerperal sepsis out of 20 000 deliveries during the year 2005 in a community with total population of 1000 000, The attack rate of puerperal sepsis equals to:

- A. 200 /1000
- B. 200 /1000
- C. 2.5 / 1000**
- D. 0.05 /1000
- E. 1 /1000

77. 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

78. 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

79. 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.

80. Upon one of the following factors determining the ability of the Anopheline mosquito 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