### ASSESSMENT OF 30 MCQs

### FPSC NO : 27 COMMUNICABLE DISEASES OF COMMUNITY IMPORTANCE SUBMISSION DEADLINE : 27 JUNE 2008

#### INSTRUCTIONS

With effect from 1st April 2008, the College is going paperless and has phased out the physical CME Answer Sheet forms.

- K To submit answers to the following multiple choice questions, you are required to log on to the College Online Portal (www.cfps2online.org).
- K Attempt ALL of the following multiple choice questions.
- K There is only ONE correct answer for each question. The answers should be submitted to the College of Family Physicians Singapore via College Online Portal (www.cfps2online.org) before the submission deadline stated above.

### I. Which of the following statements about Chikungunya fever in Singapore is CORRECT?

- A. Its mosquito vector for transmission is different from dengue fever.
- B. It has become endemic in Singapore.
- C. In 2007 ten locally acquired cases were reported.
- D. Fever and arthralgia were the most common presenting symptoms.
- E. All of the above.
- 2. Which of the following statements about malaria in Singapore is CORRECT?
  - A. WHO has declared that there is no risk of malaria transmission in Singapore.
  - B. The Anopheles mosquito vector thrives in the urban areas.
  - C. The majority (>90%) of malaria cases in Singapore were imported.
  - D. Among residents malaria incidence was highest among older adults aged 35-44 years.
  - E. The male to female ratio of malaria cases is 1:3.3.

## 3. Which of the following statements best describes chicken pox infection in Singapore?

- A. It is an air/droplet borne disease.
- B. It is highly contagious.
- C. The highest age specific incidence has been in children under age of 5.
- D. An average of 26,000 cases has been reported in the past 12 years.
- E. All of the above.

## 4. Which of the following statements about measles, mumps and rubella in Singapore is CORRECT?

- A. A vaccination coverage of 80% for the 2 dose regime is sufficient for measles to be eliminated in Singapore.
- B. Only 12% of women in the child bearing age have immunity against rubella.
- C. To prevent maternal rubella infection during pregnancy previously unvaccinated women should be offered rubella immunisation at least 3 months prior to conception.
- D. In 2006 three cases of congenital rubella were reported.
- E. The incidence of mumps decreased from 161.6 per 100,000 population in 1999 to 50.8 per 100,000 in 2006.

### 5. Which of the following statements best describes influenza infecton in Singapore?

- A. It causes an average of 300 deaths annually.
- B. There is a unimodal increase in influenza incidence in April-July each year.
- C. Influenza associated deaths were 11.3 times higher in those aged 65 years or more.
- D. The unimodal peaks correspond approximately to increased influenza activities in temperate countries in the Southern and Southern hemisphere.
- E. Influenza B is the most common human strain involved.
- 6. Which of the following statements is a feature of an outbreak of a communicable disease?
  - A. There is an occurrence of ten or more cases of a disease.
  - B. The disease usually occurs in many areas.
  - C. The disease occurs among a specific group of people.
  - D. The disease occurs over several periods of time.
  - E. It is generally caused by a new pathogen.
- 7. Which of the following statements about contact transmissible communicable disease is CORRECT?
  - A. The agent is carried from the source to the host through a healthy person.
  - B. The mechanism of infection is through touching.
  - C. There is a need for a portal of entry into the host.
  - D. Mosquito borne infections are excluded because it is not through touching.
  - E. Infections from ingestion of contaminated food or water are excluded because it is not through touching.

### 8. Which of the following statements best describes the work of a surveillance system for communicable disease? It:

- A. Takes note of alerts from doctors, healthcare providers, media and members of the public.
- B. Tracks emergent disease.
- C. Determines any abnormal increases in incidence of a disease.
- D. Conducts further investigation when there is a sustained increase over the usual background level of reported cases.
- E. All of the above.
- 9. An outbreak of public health importance has occurred. What would be the first step to take in an epidemiological approach?
  - A. Verify the diagnosis of reported cases.
  - B. Conduct active case finding and locate all cases.
  - C. Describe the outbreak in terms of time, place and persons.
    D. Institute control measures as soon as the source of infection and mode of tenemicien are leave.
  - and mode of transmission are known.
  - E. Start isolation of cases.

- 10. Which of the following statements about the feedback process between the authorities and the public in managing an outbreak is CORRECT?
  - A. Describing happenings in a scientifically objective manner will not be understood by the public.
  - B. Media conference or press release should be kept few and brief.
  - C. Rumours of something strange should be quashed and perpetuators reprimanded.
  - D. The professional recommendations should be logical and defensible.
  - E. Spending time to educate the public is not cost effective.

# 11. The following are components of influenza pandemic preparedness:

- A. Maintenance of essential services.
- B. Social distancing e.g. closing of schools and child care centres to be considered depending on severity.
- C. Optimisation of outpatient management.
- D. Optimisation of inpatient management.
- E. All of the above.

# 12. The case fatality rate of human cases of Influenza A (H5N1) to date is about:

- A. 10%
- B. 20%
- C. 40%
- D. 60%
- E. 90%

# 13. About the clustering framework for primary care during a flu pandemic, which of the following statements is CORRECT?

- A. Polyclinics will operate independently from GP clinics.
- B. Primary care clinics will be organised geographically.
- C. Large GP practices with 10 or more clinics will form their own clusters.
- D. There will be 50 clinics per clinic group.
- E. The GPs' regular patients will be pooled together and seen by whoever is available.

# 14. Which of the following is a component of the strategy in the Influenza Pandemic Readiness and Response Plan?

- A. Treatment of the illness.
- B. Infection control measures to contain spread.
- C. Social distancing measures to contain spread.
- D. Anti-viral prophylaxis.
- E. All of the above.

# 15. Which of the following statements regarding vaccines and antivirals is TRUE?

- A. Pandemic influenza vaccines can be stockpiled to reduce the impact of the first wave.
- B. Stockpiling of influenza A (H5N1) vaccine is a possibility because of cross clade protection.
- C. H5N1 vaccines are effective against all subtypes of the influenza strain.
- D. Oseltamivir is not effective in a pandemic influenza outbreak.
- E. The national stockpile of oseltamivir ensures at least one dose per person for the whole population.

- 16. Dengue has re-emerged in Singapore in the past decade because of:
  - A. Lowered herd immunity.
  - B. Absence of effective vaccine.
  - C. Transmission of virus outside the home.
  - D. Increase in adult cases.
  - E. All of the above.

#### 17. Which of the following regarding dengue fever is TRUE?

- A. Dengue can be caused by any of the 4 viral serotypes.
- B. The mosquito species that transmits the majority of dengue is Aedes albopictus.
- C. Getting dengue infection once confers protection against the other 3 serotypes.
- D. The risk of mortality in dengue can be as high as 50%.
- E. Personal hygiene is an important factor in dengue prevention.
- 18. Which of the following is an activity of the vector control system for dengue prevention in Singapore?
  - A. Notification of disease.
  - B. Reduction of aedes larval habitats.
  - C. Public education to sustain efforts in source reduction.
  - D. Law enforcement.
  - E. All of the above.
- 19. Which of the following about present-day dengue transmission is CORRECT?
  - A. The risk of being infected in a residential property is higher than in a non-residential property.
  - B. Preschool children have a higher risk of dengue infection than school aged children.
  - C. Vacant premises have the lowest risk of dengue transmission.
  - D. Residential properties have a lower premises index than non-residential places.
  - E. The residential premises index has increased since 1966.

# 20. Which of the following clinical perimeters is useful in diagnosing dengue?

- A. Body temperature.
- B. Platelet count.
- C. Anti-dengue IgG antibodies.
- D. Total white cell count.
- E. All of the above.
- 21. Which of the following is a priority disease that one needs to bear in mind when travelling to slum urban settings in the developing countries in South East Asia?
  - A. Roundworm infection.
  - B. Tuberculosis.
  - C. Malaria.
  - D. Hand Foot and Mouth Disease.
  - E. Gastro-enteritis.
- 22. HIV/AIDS is a major cause of morbidity and mortality worldwide. Which of the following is the most likely reason that puts travellers at risk of HIV infection?
  - A. Disinhibitions associated with travel.
  - B. Inferior quality of overseas condoms.
  - C. No access to STI clinics overseas.
  - D. Overseas organ transplantation.
  - E. Differences in culture and beliefs.

# 23. To decrease illness and death from disease in the developing world, which of the following innovations holds the greatest promise?

- A. Improving existing childhood vaccines to be easier and less expensive to use.
- B. Reduce the cost of new vaccines.
- C. Introduce bio-control strategies e.g. fish to control mosquito larvae.
- D. Improving food feeding programmes to the under-fives.
- E. Decrease drug resistance to antimicrobial agents.

# 24. Which of the following statements regarding Malaria is TRUE?

- A. Malaria parasites multiply in red blood cells and then infect the liver.
- B. Symptoms of malaria include fever, headache, and vomiting, appearing between 2 and 5 days after the mosquito bite.
- C. About 40% of the world's population, mostly those living in the poorest countries, are at risk of malaria.
- D. Malaria is a self limiting disease.
- E. Drug resistant Malaria is currently not a problem.

# 25. Which of these patients would you most likely recommend Japanese encephalitis vaccination?

- A. 65-year-old lady going to Hong Kong with family tour group for 5 days.
- B. 35-year-old male computer network specialist going for business trip in Beijing for 1 week.
- C. A group of missionaries going to India to visit orphanages in Kashmir state.
- D. A couple going for honeymoon in Hokkaido.
- E. A group of voluntary workers inspecting a Cambodian refugee camp for 1 week.

# 26. Which of the following statements about hepatitis B virus antigens is CORRECT?

- A. The presence of HBsAg signifies chronic hepatitis B infection.
- B. HBcAg is found in the sera of infectious patients.
- C. Free HBcAg undergoes autodigestion in the plasma to form HBV DNA.
- D. HBeAg in the serum denotes viral replication and indicates infectivity.
- E. All of the above.

# 27. Which of the following statements about antibodies to hepatitis B virus antigens is CORRECT?

- A. The presence of anti-HBclgG in the serum indicates acute infection.
- B. In the non-replicative (latent infection) phase of chronic hepatitis B infection anti-HBe is found in the serum.
- C. Concurrent presence of HBsAg and anti-HBs in a patient with chronic hepatitis B infection indicates protection.
- D. A serology of HBsAg –ve , anti-HBs +ve and anti-HBc +ve indicates immunity from previous vaccination.
- E. The anti-HBs concentration must be >100 IU/L to ensure protection against clinical infection.
- 28. Patients with chronic hepatitis B infection and known to have liver cirrhosis (diagnosed histologically or by radiological means) should be screened for primary hepatocellular carcinoma every:
  - A. 2-3 years.
  - B. 1-2 years.
  - C. 6-12 months.
  - D. 3-6 months.
  - E. 1-2 months.
- 29. Which of the following statements about hepatitis B vaccination is CORRECT?
  - A. The antibody response rate to the available vaccines given subcutaneously is 98%.
  - B. Combined active-passive immunisation (with HBIG) is recommended for needle prick injury and accidental exposure to infected blood.
  - C. Booster doses are required every 10 years even after a successful vaccination.
  - D. Hepatitis B vaccine should be given to protect children only when they are of school going age in HBV endemic regions.
  - E. Babies born to HBsAg +ve mother need be given only normal recommended doses of the vaccines.
- 30. Three months after the final vaccine dose of a primary course of hepatitis B vaccination the patient's anti-HBs level is <10 IU/L. Which of the following statements is CORRECT?
  - A. The patient is considered a non-responder.
  - B. The patient is among the 2-3% of subjects who respond as such to hepatitis B vaccination.
  - C. Use of improperly stored vaccine could be the cause.
  - D. The patient may respond to higher dosage regimes or repeated booster injections.
  - E. All of the above.