#### ASSESSMENT OF 30 MCQs

### FPSC NO : 56 MCQs on EMERGENCY MEDICINE (RE-RUN) Submission DEADLINE : 8 APRIL 2014, 12 NOON

#### **INSTRUCTIONS**

- To submit answers to the following multiple choice questions, you are required to log on to the College On-line Portal (www.cfps2online.org).
- Attempt ALL the following multiple choice questions.
- There is only ONE correct answer for each question.
- The answers should be submitted to the College of Family Physicians Singapore via the College On-line Portal before the submission deadline stated above.
- General Practitioners and Family Physicians can play a crucial role by helping to take on a proportion of the P3 ambulatory cases and referring judiciously. What was the number of P3 patients seen in the A&E in 2011?
  - (A) One eighth of a million attendances.
  - (B) One seventh of a million attendances.
  - (C) One sixth of a million attendances.
  - (D) One quarter of a million attendances.
  - (E) Half a million attendances.
- 2. In Singapore, for a newly diagnosed ST elevation myocardial infarction, what is the upper limit of the "door to balloon time" that has been set?
  - (A) 100 minutes.
  - (B) 80 minutes.
  - (C) 90 minutes.
  - (D) 70 minutes.
  - (E) 60 minutes.
- 3. The appropriate use of the Emergency Medical Service ambulance is necessary. Which of the following patient has the LEAST need to be sent to the Emergency Department this way?
  - (A) 24-year-old patient with pregnancy, abdominal pain and syncope.
  - (B) 18-year-old patient with "worst ever headache".
  - (C) 20-year-old patient with isolated left facial numbress for 2 days.
  - (D) 48-year-old patient with chest pain and history of balloon angioplasty a year ago.
  - (E) 62-year-old patient with ischemic heart disease and fainting.
- 4. A paramedic arrives with Emergency Medical Service ambulance to pick up a patient with acute chest pain. She proceeds to perform a standard patient assessment with history taking, physical examination, the measurement of vital signs, and repeats the ECG

#### before instituting treatment and evacuation. Which of the following is the MOST IMPORTANT reason for doing this?

- (A) To perform a wireless ECG.
- (B) To ensure due diligence is performed for each patient.
- (C) To counter check on the need for referral.
- (D) To have a baseline of the clinical status of the patient.
- (E) To follow the protocol that has been set for the paramedic.
- 5. For a patient with respiratory distress, what is the therapeutic window between onset to treatment?
  - (A) 2 hours.
  - (B) The "Golden Hour".
  - (C) 30 minutes.
  - (D) 15 minutes.
  - (E) As soon as possible.
- 6. A 35-year-old patient is suspected to have acute coronary syndrome. Which of the following statement is INCORRECT?
  - (A) A normal 12-lead ECG rules out the diagnosis.
  - (B) Nausea can be present.
  - (C) Syncope can be present.
  - (D) Tiredness may be the only clinical feature.
  - (E) Epigastric pain can be a presentation.
- 7. A 41-year-old patient with acute chest pain is diagnosed to have acute coronary syndrome. Which of the following statement about initial treatment is INCORRECT?
  - (A) GTN may be given sublingually for relief of pain.
  - (B) GTN patch can be used for relief of pain.
  - (C) Aspirin 300 mg is given before arrival at the hospital.
  - (D) If aspirin is given, a written record should accompany the patient.
  - (E) Clopidogrel 75 mg can be given while waiting for the ambulance.

- 8. About the factors that may cause a delay of presentation of a patient with myocardial ischaemia to the emergency department, which of the following is the LEAST likely?
  - (A) A feeling of fatigue rather than chest pain.
  - (B) Decision by the patient to self-treat symptoms.
  - (C) Decision by the patient to see primary care facilities rather than call for emergency medical service ambulance.
  - (D) Diaphoresis as a presenting symptom.
  - (E) Epigastric discomfort instead of chest pain.
- 9. To minimise transfer times and maximise neurological outcomes, the American Stroke Association has described the stroke "Chain of Survival". Which of the following is NOT in this "Chain of Survival"?
  - (A) Aspirin is given before arrival at the hospital.
  - (B) Rapid emergency medical service ambulance dispatch.
  - (C) Pre-arrival notification to the receiving facility.
  - (D) Rapid diagnosis and treatment in hospital.
  - (E) Rapid recognition and reaction to stroke warning signs.
- 10. A 5-year-old boy is noted by his mother to be drooling since this morning. He insists on sitting up, and also has noisy breathing. Which of the following is the MOST likely diagnosis?
  - (A) Acute asthmatic attack.
  - (B) Acute bronchiolitis.
  - (C) Acute laryngitis
  - (D) Acute epiglottitis.
  - (E) Diabetic keto-acidosis.
- II. The chain of survival for cardiac arrest consists of 4 links: early access, early cardio-pulmonary resuscitation (CPR), early defibrillation, and early advanced life support. In this context, which of the following CORRECTLY describes what is included in basic cardiac life support?
  - (A) Early access.
  - (B) Early access, early CPR.
  - (C) Early CPR.
  - (D) Early defibrillation.
  - (E) Early access, early CPR, and early defibrillation.
- 12. In cardio pulmonary resuscitation (CPR), what is the desired rate of cardiac compressions per minute?
  - (A) 100.
  - (B) 90.
  - (C) 80.
  - (D) 70.
  - (E) 60.

- 13. With regards to training of cardiopulmonary resuscitation (CPR), which of the following is CORRECT?
  - (A) Teaching hands only CPR to lay rescuers is adequate.
  - (B) Mouth-to-mouth ventilation is more important than chest compression.
  - (C) Both chest compressions and mouth-to-mouth ventilation should be taught to lay rescuers.
  - (D) Pulse check is routinely included in teaching lay rescuers.
  - (E) Pulse check is mandatory to be taught to healthcare workers.
- 14. With regards to cardiac arrest, which of the following is the most common rhythm at onset of arrest?
  - (A) Rapid atrial fibrillation.
  - (B) Coarse ventricular fibrillation.
  - (C) Ventricular asystole.
  - (D) Complete heart block.
  - (E) Ventricular tachycardia.

## 15. In cardiopulmonary resuscitation, after defibrillation is done, what is the next step?

- (A) Check ECG for cardiac rhythm before more chest compression.
- (B) Continue uninterrupted CPR of I minute.
- (C) Continue uninterrupted CPR of I-2 minutes.
- (D) Continue uninterrupted CPR of 2-3 minutes.
- (E) Continue uninterrupted CPR of 3-4 minutes.
- 16. A 35-year-old man complains of acute breathlessness since 3 hours ago. Which of the following statement is INCORRECT?
  - (A) A patient with metabolic acidosis can present with breathlessness.
  - (B) Pulmonary embolism can present with chest pain and breathlessness.
  - (C) Anxiety should only be considered as the diagnosis after careful exclusion of other life threatening causes.
  - (D) A normal pulse oximeter reading rules out respiratory failure.
  - (E) Pneumothorax can present with chest pain and breathlessness.
- 17. A 36-year-old woman complains of headache lasting 3 hours. Which of the following statement is INCORRECT?
  - (A) There is a correlation between high blood pressure and headache.
  - (B) A change in headache pattern can be a clue to a life threatening cause.
  - (C) Pre-eclampsia can present as acute headache.
  - (D) Acute angle closure glaucoma can present as acute headache.
  - (E) Meningitis can be present even though the classical triad of fever, neck stiffness and altered mental state is not complete.





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- 18. A 75-year-old man presents with acute abdominal pain lasting for 4 hours. He has a history of atrial fibrillation for 10 years. Which of the following statement is INCORRECT?
  - (A) The possibility of acute coronary syndrome needs to be considered.
  - (B) Normal abdominal examination findings rules out mesenteric ischaemia as a cause for the pain.
  - (C) A leaking abdominal aortic aneurysm can be a cause for the pain.
  - (D) Acute appendicitis needs to be considered.
  - (E) A perforated gastric ulcer can present this way.
- 19. A 65-year-old man complains of backache lasting for four weeks. He now has urinary urgency for a week. A straight X-ray of the back is reported as normal apart from osteoarthritic changes. Which of the following statement is INCORRECT?
  - (A) Upper back pain can be the first symptom of acute coronary syndrome from posterior myocardial ischaemia.
  - (B) Leaking abdominal aortic aneurysm can present with low back pain.
  - (C) The normal X-ray of the back rules out myelopathy from cord compression.
  - (D) Abdominal aortic aneurysm can present with chest pain radiating to the back.
  - (E) Spinal stenosis causes back pain that is relieved by bending forward.
- 20. About wounds and injuries encountered in the ambulatory care setting, which of the following statement is CORRECT?
  - (A) Human bite sustained from a fight is more prone to infection than a cat bite.
  - (B) Surgical implants have normal risk of infection in people with diabetes.
  - (C) Glass fragments as retained foreign bodies will be picked up by plain X-rays as they are uniformly radio-opaque.
  - (D) A dog bite is more prone to infection than a cat bite.
  - (E) Wounds encountered in the diabetic patient are expected to have the same risk of infection as a person without diabetes.
- 21. A targeted systematic survey performed in a set order which searches for injuries that pose the most immediate threats to life is set out in the Advanced Trauma Life Support (ATLS) course can be remembered as A,B,C,D, and E. Which of the following is INCORRECT?
  - (A) A = Airway assessment.
  - (B) B = Breathing assessment.
  - (C) C = Circulation assessment.
  - (D) D = Danger assessment.
  - (E) E = Exposure and environmental control.

- 22. A 29-year-old driver is involved in head-on collision. Which of the following indicates that airway obstruction is present?
  - (A) Ability to answer and speak normally.
  - (B) Presence of stridor.
  - (C) Loss of consciousness.
  - (D) Facial trauma.
  - (E) Oral bleeding.
- 23. About airway management in the patient with major trauma, which of the following statement is CORRECT?
  - (A) Laryngeal masks (LMAs) prevent "hands-free" bagging.
  - (B) Oropharygeal airway is ineffective in securing a patent airway.
  - (C) Laryngeal masks (LMAs) prevent aspiration.
  - (D) If breathing is absent, bag mask ventilation (BMV) is the action to take.
  - (E) Intubation is superior in outcome compared to bag mask ventilation (BMV).
- 24. A 45-year-old construction worker sustained a blunt injury to the chest when he slipped on a slippery floor and fell onto a concrete slab. He is suspected to have a tension pneumothorax. Which of the following clinical feature is NOT consistent with such a diagnosis?
  - (A) Paradoxical chest movement.
  - (B) Unilateral decreased chest movement.
  - (C) Shifting of trachea contralateral to the side with decreased chest movement.
  - (D) Hypotension.
  - (E) Distended neck veins.
- 25. A 23-year-old construction worker falls from a height and lands on his feet. Which of the following is the most sensitive sign that he is suffering from an exsanguinating haemorrhage from a ruptured viscus?
  - (A) Tachycardia.
  - (B) Cool extremities.
  - (C) Confusion.
  - (D) Pallor.
  - (E) Delayed capillary refill more than 2 seconds.

# 26. About the practical anatomical and physiological characteristics of the paediatric airway, which of the following statement is CORRECT?

- (A) In the infant and young child, the lower airways are larger but the supporting cartilage are less well developed.
- (B) The tidal volume in the young child is more dependent on the intercostal muscle function than the diaphragmatic function.
- (C) The relatively large head flexes the neck and results in airway obstruction in the unconscious child.
- (D) Children have higher metabolic rates, with an oxygen consumption of 10-12 mil/kg/min compared to 3-4 ml/kg/ min in the adult.
- (E) The ribs are less pliable and complaint in the child compared to the adult.

- 27. The weight of a child can be estimated by a formula. Which of the following is the correct formula?
  - (A)  $2 \times (Age in years) + 4$ .
  - (B)  $3 \times (Age in years) + 2$ .
  - (C)  $2 \times (Age in years + 4)$ .
  - (D)  $4 \times (Age in years) 2$ .
  - (E) 5 x (Age in years) 6
- 28. Fever is a common presentation of the sick child. As a rule, which of following groups of children needs referral to the hospital routinely for further care and management?
  - (A) Less than 3 months old.
  - (B) Less than 6 months old.
  - (C) Less than 9 months old.
  - (D) Less than 12 months old.
  - (E) Less than 15 months old.

- 29. Kawasaki disease is a great mimic of many febrile conditions. What is the reason for admitting such a child with this condition to hospital?
  - (A) Treatment of dehydration.
  - (B) Treatment of renal complications.
  - (C) Monitoring of cardiac complications.
  - (D) Intravenous immunoglobulin therapy.
  - (E) Treatment of fever.
- 30. A 5-year-old girl presents with fever without source. The triage temperature is 39 degree Celsius. The total white count is 20,000. Based on the findings of a retrospective study, what is the likelihood she has an occult pneumonia?
  - (A) 12%.
  - (B) 16%.
  - (C) 22%.(D) 26%.
  - (E) 32%.