

Note:-Attempt all the questions from section A and B and two questions from section C.

Section A (10×2=20 Marks)

1.

- I. The formation of an action potential can be divided into five steps, which is not the correct step :
 - a. A stimulus from a sensory cell or another neuron causes the target cell to depolarize toward the threshold potential.
 - b. If the threshold of excitation is reached, all Na⁺ channels open and the membrane polarizes.
 - c. At the peak action potential, K⁺ channels open and K⁺ begins to leave the cell. At the same time, Na⁺ channels close.
 - d. The membrane becomes hyperpolarized as K⁺ ions continue to leave the cell. The hyperpolarized membrane is in a refractory period and cannot fire.
 - e. The K⁺ channels close and the Na⁺/K⁺ transporter restores the resting potential.
- II. In 2-person CPR, when the second rescuer arrives, what should be reassessed before CPR is resumed?
 - a. Pupils and skin colour
 - b. Breathing and signs of circulation
 - c. Hazards and pulse
 - d. Airway and medical conditions
- III. If a wound continues to bleed through a dressing bandage you should:
 - a. Remove the dressing and apply a clean one
 - b. Elevate the bleeding part further if possible
 - c. Apply another dressing on top of the old one
 - d. Do both a and b
- IV. Which of the following is not the first aid steps for primary burning :
 - I. Run cool water over burn area for 3-4 hr
 - II. Take off burnt cloth
 - III. Leave the burnt area dry
 - IV. If necessary, use anti pyretic
- V. The formation of an action potential can be divided into five steps, which is not the correct step :
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- VIII. Which of the following is not the first aid steps for primary burning :
- a) Run cool water over burn area for 3-4 hr
 - b) Take off burnt cloth
 - c) Leave the burnt area dry
 - d) If necessary, use anti pyretic
- IX. What is the best procedure for treating a known poisonous snake bite?
- i. Capture the snake. Place it in an ice chest and take the snake and victim to a hospital.
 - ii. Place a constricting bandage 4 inches above the head of the snake to slow the spread of venom
 - iii. Keep the victim calm, keep the bite location lower than the heart, get medical help immediately
 - iv. Treat the victim for shock and continue the planned activity
- X. A victim of a car accident has just vomited and now appears to be coughing up blood. He is breathing very quickly and his pulse is weak and fast. What is most likely wrong?
- i. He is having a seizure.
 - ii. He has internal bleeding.
 - iii. He is having a heart attack
 - iv. He is having a diabetic emergency.
- 2. Fill in the blanks:** **(5*2=10)**
- I. Secondary Burning is usually treated as minor burn unless it is no longer than mm in diameter.
 - II. Recovery period for first degree burn is to weeks.

- III.type of bandage can be used inside a plaster cast.
- IV. We should avoid during first degree burn for children or teenagers as a pain reliever.
- V. On these basis of.....fracture has been classified in 5 category like Avulsion ,depressed etc.

PART-B (40 Marks): All The questions are mandatory (10*4=40)

- 3. In the case of burns, it says if there is no running water then improvise. If the only source of water was a lake, which would be the priority- cooling the burn or preventing infection from the dirty water?
- 4. Defibrillation is a treatment for life-threatening cardiac dysrhythmias, specifically ventricular fibrillation (VF) and non-perfusing ventricular tachycardia (VT). Why silica gel is use for defibrillation
- 5. Differentiate between Dry thermal and wet thermal burning.
- 6. What is the afferent and efferent pathways? How are they different from each other?

Section: C Answer any 2 question. (20*2=40)

- 7. It is recommended that all university departments maintain adequate first aid kits in convenient and accessible locations. Occupational Safety and Health Administration (OSHA) Standard 29 CFR 1910.151 Appendix A states that first aid kits that meet National Standards Institute (NSI) Standard must be readily available at each location to maintain proper first aid procedure during emergency. Explain the procedure of first aid.
- 8. Differentiate the following:
 - a. Acute and chronic health disorder
 - b. Heat Stroke & Heat Exhaustion
 - c. First AID fir chemical burning and Electrical burning
 - d. First Aid for unconsciousness
- 9. Explain the following:
 - a. Ana phyletic shock
 - b. Syncope
 - c. Na-K Pump
 - d. Nissls granules

Roll No: -----



UNIVERSITY OF PETROLEUM AND ENERGY STUDIES

End Semester Examination, December 2017

**Program: B.Tech (FSE)
Subject (Course): First Aid & Emergency Procedure
Course Code: FSEG222**

**Semester – III
Max. Marks: 100
Duration: 3 Hrs**

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