NR548 Replacement Assignment for Week 03 Exam 01

For this assignment, you need to answer all 9 questions. The point value is listed for each question. The question/ question content was taken from Exam 1- so you should be somewhat familiar with the topics. This is open book, so you can use whatever resources you choose. You may not provide a quote or excerpt from a text or journal. This must be written in your own words, so we can assess your understanding. If it is not written in your own words, you will lose points for the question.

Answers should be brief short answers. The response should be no more than 150 words (5-6 sentences) for each question.

Please make sure you submit this by the posted due date. Late entries will not be accepted.

Question 1: (10 points)

Robert is a healthy 37-year-old male who was involved in a skiing accident suffering a complex fracture requiring an external fixation of his femur. Describe why Robert is at a higher risk of a surgical site infections. Explain how surgical site infections impair wound healing?

ANSWER:

Because Robert suffered a complex fracture, an external fixation was required, which has a high likeliness to develop a pin site infection (which is typically a superficial incisional SSI). Pin sites are susceptible to infection because the skin barrier has been disrupted. In addition, it requires a specific technique for pin insertion and meticulous pin tract care which if done incorrectly, increases the likelihood of infection. SSI's impair healing mainly by creating new symptoms to be treated such as swelling, fevers, pain, redness, and secretion. All in all, it prolongs recovery, and can cause morbidity and mortality.

Question 2: (10 points)

Describe the acute inflammatory response associated with infection or injury. What clinical manifestations may the Advanced Nurse Practitioner expect to see in the acute-phase response?

ANSWER:

Acute inflammation begins after a specific injury that will cause soluble mediators like cytokines, acute phase proteins, and chemokines to promote the movement of neutrophils and macrophages to the area of inflammation. The clinical manifestations observed in the acute-phase response may include redness, heat, pain, swelling, and loss of function. This is due to the increase of blood movement in typically cool extremities and an increase of erythrocytes and pain mediators. There is also an increase of permeability and dilation of blood vessels. Loss of function can result from pain or swelling, among other factors.