***Assignment ≠ 1***

A 44 female patient with severe arthritis will be placed on long term therapy with indomethacin. The clinician recognizes the risk of NSAID induced gastrointestinal ulceration and wants to prescribe a drug as ulcer prophylaxis.

1. What are / is the drug would the clinician prescribed for the patient in this case?
2. How does the drug (s) act to produce its protective effects?
3. Why does indomethacin induce gastrointestinal ulceration? Explain the reason

***Assignment ≠ 2***

A 10 years child requires multiple surgical procedures in the nasopharynx.

1-Which drug has high surface local anesthetic activity and intrinsic vasoconstrictor action:

\**Benzocaine \*Bupivacaine \*Cocaine \*Lidocaine*

2- What is the mechanism of action of the selected drug?

3- Why does vasoconstrictor (epinephrine ) is co-administered with local anesthetics?

***Assignment ≠ 3***

An 8-year-old boy had who was referred to the psychiatrist 3 months ago. His mother states that she has always noticed that he has more energy compared to most of the kid in his age, disruptive classroom behavior and difficulty concentrating at school and home. The psychiatrist diagnosed his condition as ADHD.

1- What is first-line therapy for children with ADHD? Give examples.

2- What is the mechanism of action of above mention drugs?

3- What are the most important monitoring parameters for the patient?

***Assignment ≠ 4***

A 32-year-old woman has a sporadic attack of anxiety with physical symptoms including tachycardia and sweating and she is diagnosed with panic disorder.

1. What is the most appropriate medication for her case?
2. What is the mechanism of the action of the selected drug?
3. What is the most frequent type of drug interaction occurs in patients using above medication? Give an example

***Assignment ≠ 5***

A 68-year-old male had a procedure for infected knee prosthesis 4 days ago. Since then, he has been complaining of severe pain and is currently treated with oxycodone and morphine sulfate. The patient is increasingly somnolent, and his SpO2 drops down to 85% when he falls asleep.

1- What is the mechanism of action of above mention pain killers?

2- Why do you think the patient developed sleep apnea? Explain the reason.

3- How you can overcome this problem?