

## **KPK Class 10 Biology Short Questions – Chapter 18**

### **Pharmacology**

**Q1:** What Is drug addiction and what are the effects of addiction?

**Drug addiction** is a compulsive need to use a drug despite its harmful consequences. It can lead to severe physical and psychological problems, including damage to organs, impaired judgment, and increased risk of mental health disorders.

**Q2. Differentiate between antibiotics and vaccines.**

- **Antibiotics:** Substances that kill or inhibit the growth of bacteria.
- **Vaccines:** Weakened or killed pathogens used to stimulate the immune system to produce antibodies against diseases.

**Q3. Enlist the bad effects of nicotine, caffeine, and cocaine. Are these addictive?**

- **Nicotine:** Addiction, respiratory problems, heart disease, cancer
- **Caffeine:** Insomnia, anxiety, increased heart rate, addiction
- **Cocaine:** Addiction, heart problems, stroke, psychosis

**All of these substances are highly addictive.**

**Q4. What are the responsibilities of society to deal with drug addicts?**

- **Education:** Awareness campaigns about the dangers of drugs
- **Treatment:** Availability of rehabilitation centers
- **Support:** Social and psychological support for addicts and their families
- **Prevention:** Strict laws and enforcement to curb drug trafficking

**Q5. How are vaccines prepared?**

- **Inactivation:** Killing the pathogen with heat or chemicals
- **Attenuation:** Weakening the pathogen to reduce its virulence
- **Recombinant technology:** Creating a vaccine using genetic engineering

**Q6. Give two examples of drugs, which are extracted from plants.**

- **Morphine:** Extracted from opium poppy (pain reliever)
- **Quinine:** Extracted from cinchona tree (antimalarial)

**Q7. Define drug addiction. What are the three major categories of drugs, which cause addiction?**

- **Drug addiction:** A compulsive, uncontrollable need to seek and use a particular drug despite its harmful consequences.
- **Three major categories of addictive drugs:**
  - **Stimulants:** (e.g., cocaine, nicotine, caffeine)
  - **Depressants:** (e.g., alcohol, barbiturates)
  - **Opiates:** (e.g., heroin, morphine)

**Q8. Define analgesic, antibiotics, and sedatives.**

- **Analgesic:** A drug that relieves pain.
- **Antibiotic:** A drug that kills or inhibits the growth of bacteria.
- **Sedative:** A drug that produces a calming or sleep-inducing effect.

**Q9. Differentiate between bactericidal and bacteriostatic antibiotics.**

- **Bactericidal antibiotics:** Kill bacteria directly.
- **Bacteriostatic antibiotics:** Inhibit the growth of bacteria, allowing the immune system to eliminate them.

**Q10. Define narcotics and give examples.**

- **Narcotics:** A class of drugs that produce a state of euphoria or analgesia.
- **Examples:** Morphine, heroin, codeine



**EXAM KHANI**