

## Parishram (2025)

Chemistry  
Solutions

DPP: 3

- Q1** Fishes feel uncomfortable in warm water due to;  
(A) fishes do not like warmness  
(B) higher amount of impurities  
(C) low solubility of oxygen at higher temperature  
(D) greater population of fishes
- Q2** The gas for which Henry's law is not applicable in aqueous solution is;  
(A) HCl (B) N<sub>2</sub>  
(C) Xe (D) He
- Q3** A person feels more fatigue at high altitudes due to;  
(A) low pressure of oxygen  
(B) low temperature  
(C) nausea  
(D) contraction of body
- Q4** The factor which decreases the solubility of gas in liquid is;  
(A) low temperature  
(B) interaction between molecules of gas & liquid  
(C) high temperature  
(D) high pressure
- Q5** Gases with their Henry's constant values are given. The gas having maximum solubility will be  
Gas A  $K_H = 21.2$  k bar  
Gas B  $K_H = 11.2$  k bar  
Gas C  $K_H = 5.6$  k bar  
Gas D  $K_H = 2.4$  k bar  
(A) A (B) B  
(C) C (D) D
- Q6** H<sub>2</sub>S, a toxic gas with rotten egg like smell, is used for the qualitative analysis. If the solubility of H<sub>2</sub>S in water at STP is 0.195 m, calculate Henry's law constant.



## Answer Key

Q1 (C)

Q2 (A)

Q3 (A)

Q4 (C)

Q5 (D)

Q6 (285.6 to 285.9)

