

21. When the value of  $K_c$  is very small then

- A. reaction is at start                      B. product conc. Is maximum  
C. reactant conc. Is minimum           D. reaction is completed

**Answer:** Option B

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22. Catalyst used to speed up the reaction of ammonia synthesis is

- A.  $V_2O_5$     B.  $V_2O_5$  and Pt  
C. Fe    D. Pieces of Fe crystals are  
   embedded in fused mixture of  
    $MgO$   $Al_2O_3$  and  $SiO_2$

**Answer:** Option D

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23. Temperature for preparation of  $SO_3$  is

- A. 400-500°C                                      B. 400°C  
C. 600°C     D. 200°C

**Answer:** Option A

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24. By the addition of base in water pH will be

- A. more than 7                                      B. less than 7  
C. equal to 7                                        D. no effect

**Answer:** Option A

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25. Idea of pH and pOH was put forward by

- A. Gibbs    B. Einstein  
C. Sorenson                                        D. Chadwick

**Answer:** Option C

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26. Negative log of molar concentration of  $H^+$  ions is called

- [A.](#) pH [B.](#) pOH  
[C.](#) pKa [D.](#) pKw

**Answer:** Option A

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27.  $K_a < 10^{-3}$  means

- [A.](#) Very strong base [B.](#) Very weak acid  
[C.](#) Very strong acid [D.](#) Very strong salt

**Answer:** Option B

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28. Any substance which accepts  $H^+$  is base favours the concept

- [A.](#) Lowrys [B.](#) Lewis  
[C.](#) Arrhenius [D.](#) None of these

**Answer:** Option A

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29. Conjugated base of a weak acid is

- [A.](#) weak [B.](#) strong  
[C.](#) moderately weak [D.](#) unstable

**Answer:** Option B

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30. When sparingly soluble salt is in equilibrium with molar concentration of its oppositely charged ion when the product is called

- [A.](#) common ion effect [B.](#) solubility product  
[C.](#) dissociation constant [D.](#) dissociation constant for an acid

**Answer:** Option B