

Objective questions for Practical Examination (CBCS scheme)

Subject: CHEMISTRY (CY-110)

Q1 Alkalinity is the presence of

- (a) OH^- (b) CO_3^{2-}
(c) HCO_3^- (d) All of the above

Q2 What are the indicators used in Alkalinity

- (a) Phenolphthalein (b) EBT
(c) Methyl orange (d) phenolphthalein and methyl orange

Q3 If $[\text{P}] > \frac{1}{2}[\text{M}]$ what is the type of alkalinity present

- (a) OH^- (b) CO_3^{2-}
(c) OH^- & CO_3^{2-} (d) HCO_3^- & OH^-

Q4 If $[\text{P}] < \frac{1}{2}[\text{M}]$ what is the type of alkalinity present

- (a) OH^- (b) CO_3^{2-}
(c) HCO_3^- & CO_3^{2-} (d) HCO_3^- & OH^-

Q5 100 ml of water sample is not alkaline to phenolphthalein; however same sample on titration with N/50 HCl required 16.9ml to obtain the end point, using methyl orange as indicator. What are the types and amount of alkalinity present in the sample?

- (a) 169 ppm (b) 152 ppm
(c) 96 ppm (d) 56 ppm

Q6 Lubricant is used to prevent

- (a) Corrosion of metals (b) oxidation of metals
(c) Reduction of metals (d) wearing out of rubbing metallic surface

Q7 A lubricant should possess high

- (a) Acidity (b) Oiliness
(c) Volatility (d) None of these

Q8 When graphite is dispersed in water, it is called

- (a) Grease (b) Oil dag
(c) Aquadag (d) Synthetic oil

Q9 When graphite is dispersed in oil, it is called

- (a) Grease (b) Oil dag
(c) Aquadag (d) Synthetic oil

Q10 Which of the following oils do not undergo saponification

- (a) Vegetable oil (b) Animal oils
(c) Mineral oils (d) None of these

Q11 Saponification is the alkaline hydrolysis of

- (a) Acid (b) Base
(c) Ester (d) Aniline

Q12 The iodine value is a measure of the degree of

- (a) Saturation (b) Unsaturation
(c) Polymerization (d) Hardness

Q13 In cold regions the lubricating oil must have

- (a) High flash point (b) High oiliness
(c) High pour point (d) Low pour point

Q14 The dimension of oil cup of Redwood viscometer No. 2

- (a) 1.92 X 20mm (b) 3.80 X 50 mm
(c) 1.62 X 20 mm (d) 20 X 50mm

- Q15 Fire point has been found higher than the flash point
 (a) 4-10°C (b) 4-20°C
 (c) 4-30°C (d) 4-40°C
- Q16 Calculate the viscosity index of unknown oil if L= 775S, H=414S, and U= 565S
 (a)66.6 (b) 58.33
 (c) 56.33 (d) 57.33
- Q17 A lubricating oil having high molecular weight possesses
 (a) Low viscosity, low boiling point
 (b) High viscosity, high boiling point
 (c) High viscosity, low boiling point
 (d) Low viscosity, high boiling point
- Q18 Vegetable oil possess great oiliness than mineral oils because they have
 (a) Alkyl group (b) Aryl group
 (c) Polar group (d) All of these
- Q19 Acid value of a good lubricant should be
 (a) Least (b) Moderate
 (c) High (d) None of these
- Q20 Viscosity of lubricating oil can be determined using
 (a) Redwood viscometer (b) Saybolt viscometer
 (c) Engler viscometer (d) All of these
- Q21 A semi solid lubricant obtained by combining lubricating oil with thickening agent is termed as
 (a) Graphite (b) Grease
 (c) Talc (d) All of these
- Q22 The property of fluid that determines its resistance to flow
 (a) Acid value (b) Viscosity
 (c) SEN No. (d) Iodine value
- Q23 For safe use, flash point and fire point of lubricating oil should be
 (a) Least (b) Moderate
 (c) High (d) None of these
- Q24 The lowest temperature of an oil at which the vapours of the oil burn continuously for at least 5 seconds when a small flame is brought near it
 (a) Flash point (b) Fire point
 (c) Cloud point (d) Pour point
- Q25 The Pennsylvania oil having viscosity index
 (a) 100 (b) 200
 (c) Zero (d) All of these
- Q26. The temperature at which oil becomes hazy called-
 (a). Pour point (b). Cloud point
 (c.) Flash point (d). Aniline point
- Q27. A good lubricating oil should possess cloud and pour point value -----than operating temperature.
 (a). more than operating temperature (b). less than operating temperature
 (c.) similar value (d). Not affected
- Q28. The temperature at which oil becomes ceases to flow called-
 (a). Flash point (b). Pour point
 (c.) SEN (d). Cloud point
- Q29. How can you lower the pour point of lubricating oil---
 (a). By adding pour point depressant (b). Dewax the lubricating oil
 (c.) Lower the viscosity of lubricating oil (d). All of these
- Q30. How the pour point of lubricating oil is increased---
 (a). By adding acetone (b.) by adding of alcohol

- (c). by adding paraffin wax (d). dewax the lubricating oil
- Q31. The time in second in which water and oil separate out in distinct layers-
- (a) SEN (b).Saponification No.
(c.) Pour point (d.) Aniline point
- Q32. SEN value is desirable
- (a). Higher (b). Lower
(c.) Moderate (d). All of the above
- Q33. For SEN value oil is heated upto—
- (a). 50^oC (b). 30^oC
(c.)90^oC (d) . 250^oC
- Q34. When water enter in oil solution is called
- (a). Emulsion (b.) colloidal Solution
(c.) True solution (d). Opaque solution
- Q35. The solution whose normality is known called as
- (a). Test Solution (b). Unknown Solution
(C.) Blank Solution (d). Standard Solution
- Q36. Argentometric titration is
- (a). Complex metric titration (b). Precipitation titration
(c). acid-base titration (d). None of the above
- Q37. In Mohrs titration the appearance of red color due to formation of
- (a). Silver Chromate (b). Lead Chromate
(c.) Sodium Chromate (d).Barium Chromate
- Q38. Argento metric titration was discovered by
- (a). Karl Friedrich Mohr (b). Chadwick
(c.) R.S. Mulliken(d). Slater
- Q39. Normality is defined as
- (a). no. of gram equivalent/litre (b). moles/litre
(c.) gram/litre (d). milligram/litre
- Q40. Indicator used in Argentometric titration is
- (a). Phenolphthalein (b). Methyl Orange
(c.) Potassium Chromate (d.) Silver Nitrate
- Q41. Argento metric titration is used for determination of
- (a). Chloride ions (b). Silver ions
(c.) Potassium ions (d). Sulphate ions
- Q42. Penetration number is a measure of grease is
- (a). Viscosity (b.) Saponification value
(c). Aniline value (d). Consistency
- Q43. The instrument used for determination of consistency of Semi-solid substances is called
- (a). Pensky-Martin apparatus (b). Abel apparatus
(c.) Viscometer (d). Penetrometer
- Q44. Higher the penetration number, the grease is
- (a.) Harder (b). Softer
(c.) no. effect (d). both
- Q45 Oil that separates readily from water has good
- (a). Emulsibility (b). Demulsibility
(c.) Colloidal Solution (d). Aniline point
- Q46. Lubrication oil causing abrasion and wearing out the lubricated parts of the machinery due to
- (a). Formation of Emulsion (b). Formation of precipitate
(c.) Increase in temperature (d). Decrease in temperature
- Q47. Aniline point is used for the deterioration due to-

- (a). Aromatic Hydrocarbon
- (c). Both

- (b.) Aliphatic Hydrocarbon
- (d). aniline in oil

Q48. Aniline point is desirable

- (a) Higher
- (b) lower
- (c) Moderate
- (d) all of the above.

Q49. The temperature at which oil & aniline phase separate out called

- (a) Aniline point
- (b) pour point
- (c) Cloud point
- (d) SEN

Q50. Lower the aniline point means

- (a) deterioration of oil take place
- (b) higher percentage of aromatic hydrocarbon
- (c) Both A & B
- (d) none of these.

ANSWER KEY

1-d	2-d	3- c	4-c	5-a
6- d	7- b	8- c	9- b	10- c
11- c	12- b	13- d	14-b	15- d
16- b	17- b	18- c	19- a	20- d
21- b	22- b	23- c	24- b	25- a
26- b	27-b	28-b	29-d	30-c
31- a	32- b	33- c	34- a	35-d
36- b	37- a	38- a	39- a	40- c
41- a	42- d	43- d	44- b	45-b
46- a	47- a	48- a	49- a	50- c