

Model Question of SSC Examination 2016

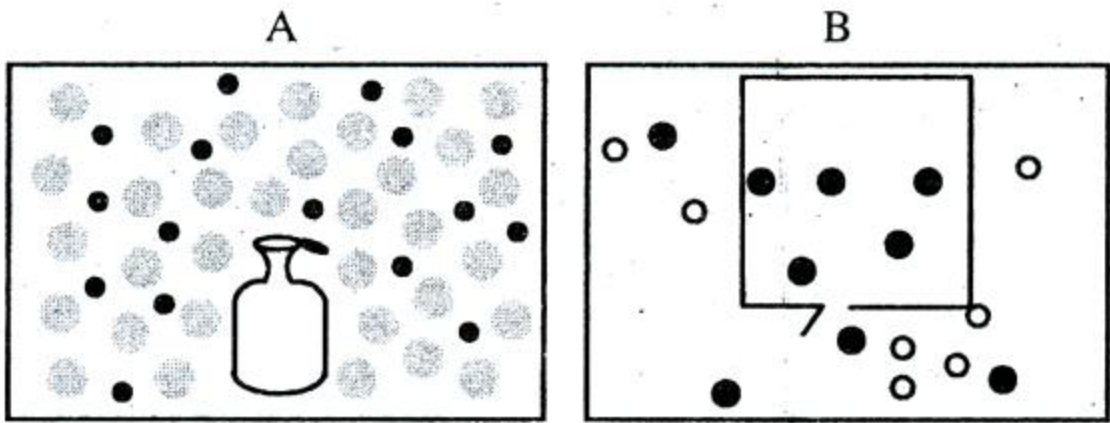
Sub: Chemistry (Creative)

Time: 2 Hours 10 minutes

Total Marks-40

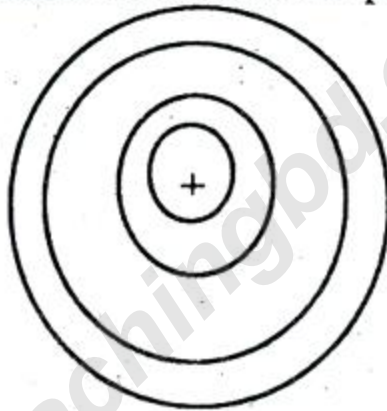
(Answer any four of the following Questions)

1. ►



- What is the colour of pH paper if solution $\text{pH} = 7$? 1
- What is the role of water in chemical properties of acid? 2
- In stem smell spread out process A & B same or different? Explain. 3
- Analyze the hazards of stem two process with causes. 4

2. ►



- What is the percentage of copper present in Duralumin? 1
- What is the spot removing technique of bleaching powder? 2
- How many elements denoted by stem atomic structure? Explain. 3
- Arrange the orbital according to the order of energy which is possible for stem atomic structure with logic. 4

3. ►

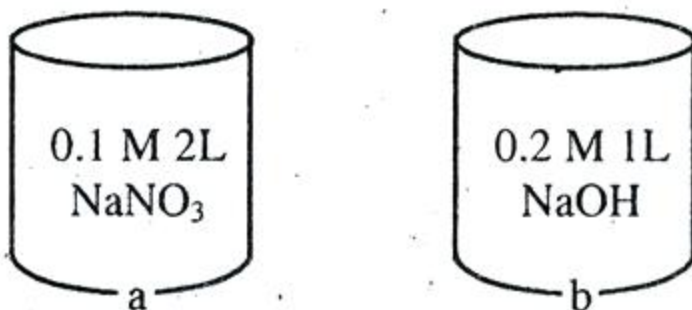
Periodic Table of the Elements

	IA											IIIA	IVA	VA	VIA	VIIA	VIIIA
1	X														A	B	
2																	
3			IIIB	IVB	VB	VIB	VII B	VIII			IB	II B				C	
4	Y																
5																	
6																	
7																	

- What are the monomer for melamine polymer? 1
- Why people use Lime at the bee affected place on body? 2

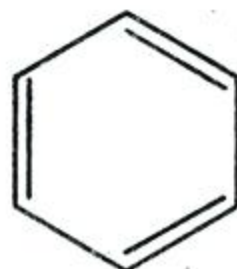
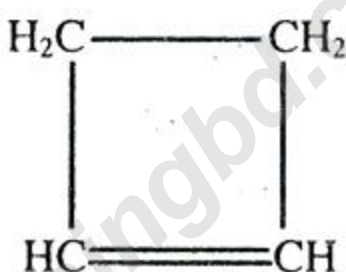
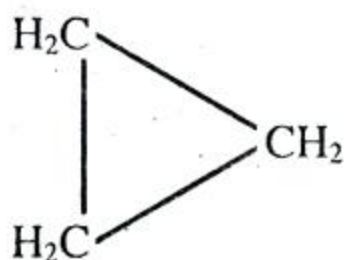
- c. What type of bond form in compound YB? Explain bond formation diagram. 3
- d. In stem X, A and C which form double bond in their molecule? Analyze with logic. 4

4. ►

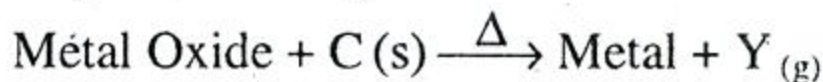
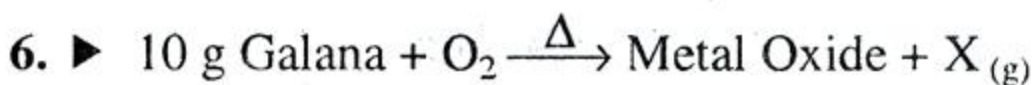


- a. Has the ammonia gas any colour or smell? 1
- b. What are the importance of pH in Health care? 2
- c. How many gram of NaNO₃ Present in stem a vessel? 3
- d. In stem which vessel compound less sodium present? Analyze with related calculation. 4

5. ►



- a. What are the main constituent of soap? 1
- b. In dry cell why MnO₂ is used? Explain? 2
- c. In stem which compound is a saturated compound and why? Explain. 3
- d. In stem which compound contain more carbon percentage? Analyze with related calculation. 4



- a. What is the colour of dry copper sulphate? 1
- b. Why periodic number and Oxidation Number are not same? 2
- c. How many Metal found calculate using stem reaction? 3
- d. It stem X & Y gas related with Acid rain or not? Analyze with related recation. 4

Model Question of SSC Examination 2016

Sub: Chemistry (MCQ)

Time: 35 minutes

Total Marks- 35

[Darken the circle (O) of the correct option from the following alternatives]

1. Which pure substances has strongest intermolecular forces?

- (a) Ar (b) $\text{H}_2\text{C} - \text{OH}$
(c) CO_2 (d) CaO

2. What element is in Group 5A and in the third period?

- (a) N (b) Cl
(c) Al (d) P

3. Which element with the electron configuration $1s^2 2s^2 2p^6 3s^2 3p^4$?

- (a) Si (b) S
(c) O (d) P

4. Gasohol—

- i. One kind of fuel
ii. Petrol mixed with 10-20% Ethanol
iii. Aqueous solution of $\text{CH}_3 - \text{CH}_2 - \text{OH}$

Which one is correct?

- (a) i (b) iii
(c) i & ii (d) i, ii & iii

5. Which bears the unique identity of an atom?

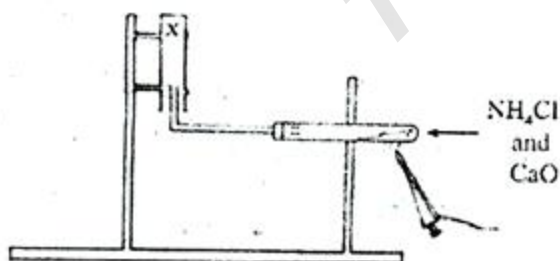
- i. Mass Number
ii. Atomic Number
iii. Nucleon Number

Which one is correct?

- (a) i (b) ii
(c) ii & iii (d) i, ii & iii

6. Which of the following Metal Extract heat reduction of Sulfide or Carbonate ores?

- (a) Cu (b) Fe
(c) Al (d) Ca



Answer the question 7 & 8 according to stem

7. What colour of precipitate found if "X" gas is passed through the aqueous solution of iron salt?

- i. White
ii. Green
iii. Reddish Brown

Which one is correct?

- (a) i (b) i & ii
(c) ii & iii (d) i, ii & iii

8. What is the pH of X gas aqueous solution may be possible—

- i. 10 ii. 9
iii. 6

Which one is correct?

- (a) i (b) i & ii
(c) ii & iii (d) i, ii & iii

9. Which of the following is base?

- (a) Soft drinks (b) Lemon juice
(c) Vinegar (d) Washing soda

10. For the presence of which one of the following aqueous solution is basic?

- (a) NO_3^- ion (b) OH^- ion
(c) NO_2^- (d) H_3O^+

11. $\text{C}_{12}\text{H}_{22}\text{O}_{11} + \text{H}_2\text{SO}_4 = 12\text{C} + 11\text{H}_2\text{O} + \text{H}_2\text{SO}_4$

Which one is dehydrating agent?

- (a) $\text{C}_{12}\text{H}_{22}\text{O}_{11}$ (b) H_2SO_4
(c) C (d) H_2O

12. The formula of barium molybdate is BaMoO_4 . What is the formula of sodium molybdate?

- (a) Na_4MoO_4 (b) Na_2MoO_4
(c) NaMoO_4 (d) $\text{Na}_2\text{Mo}_2\text{O}_7$

13. How many electrons are there in a copper (II) ion (Cu^{2+})?

- (a) 29 (b) 26
(c) 27 (d) 30

 $\text{CH}_2 = \text{CH} - \text{CH}_3$ $\text{CH}_2 = \text{CH} - \text{Cl}$ $\text{CF}_2 = \text{CF}_2$

[A]

[B]

[C]

Answer the question 14 & 15 according to stem

14. In stem—

- i. Compound A formed Not to cut easily polymer
ii. Compound B formed thermoplastic polymer
iii. Compounds C change colour of Bromine solution

Which one is correct?

- (a) i (b) i & ii
(c) ii & iii (d) i, ii & iii

15. In stem compound formed polymer—

- i. PTFE
ii. PVC
iii. melamine

Which one is correct?

- (a) i (b) i & ii
(c) ii & iii (d) i, ii & iii

16. What is ratio of carbon and oxygen in carbon-di oxide?

- (a) 3:8 (b) 8:3
(c) 1:9 (d) 1:2



17. Which group of ions contains only ions you would predict as "Stable"?

- (a) Li^{2+} , Fe^{2+} , Ca^{2+} (b) Ca^{2+} , Fe^{3+} , Al^{3+}
 (c) Mg^{3+} , Cr^{3+} , O^{2-} (d) F^{2-} , Al^{4+} , Na^+

18. An organic acid, which has the formula $\text{C}_6\text{H}_{12}\text{O}_2$. What's its empirical formula?

- (a) $\text{C}_6\text{H}_{12}\text{O}_2$ (b) $\text{C}_2\text{H}_{12}\text{O}$
 (c) $\text{C}_3\text{H}_6\text{O}$ (d) $\text{C}_{10}\text{H}_{20}$

19. Water molecules associated with magnesium sulfate. Its formula is $\text{MgSO}_4 \cdot x \text{H}_2\text{O}$. Using the experimental data below, decide on the value of x. Mass of $\text{MgSO}_4 \cdot x \text{H}_2\text{O}$ used - 1.687g. Mass of MgSO_4 after heating to drive off the water = 0.824 g, Molar mass of $\text{MgSO}_4 = 120.4 \text{ g/mol}$.

- (a) $x = 7$ (b) $x = 2$
 (c) $x = 4$ (d) $x = 6$

20. What is the relative mass of electron is equal of a proton or neutron?

- (a) 1/1840 (b) 1/1871
 (c) 1/1850 (d) 1/2050

21. How many electron do calcium and Oxygen gain or lose during the formation of Calcium Oxide?

- (a) 4 (b) 2
 (c) 3 (d) 1

22. $\text{CO}_{2(g)} + 2\text{NH}_{3(g)} \rightarrow \text{CO}(\text{NH}_2)_{2(s)} + \text{H}_2\text{O}_{(l)}$
 What quantity of urea can be obtained from 679g of CO_2 ?

- (a) $2.00 \times 10^3 \text{ g urea}$
 (b) $1.85 \times 10^3 \text{ g urea}$
 (c) $1.00 \times 10^3 \text{ g urea}$
 (d) $9.25 \times 10^2 \text{ g urea}$

Answer question 23 & 24 according to following stem

Carbon has three isotopes and in respect of percent abundance the amount of ^{13}C , ^{14}C and ^{12}C is 20%, 10% and 70% respectively.

23. What is the relative atomic mass of carbon?

- (a) 12.4 (b) 12.5
 (c) 12.3 (d) 12.6

24. In stem ^{14}C isotope use —

- i. Calculated the age of universe
 ii. To determine the presence of tumor and its position
 iii. In treatment of blood leukemia
 Which one is correct?

- (a) i & ii (b) i
 (c) ii & iii (d) i, ii & iii

25. In periodic table which group element Coinage metal?

- (a) 15 (b) 17
 (c) 18 (d) 11

26. This sign used for what type substance?

- (a) Highly poisonous
 (b) Explosive
 (c) Oxidizing
 (d) Sensitive to respiratory system

27. What will happen to the particles, When water vapour is condensed?

- (a) size will reduce
 (b) will remain in movement
 (c) will vibrate at the same position
 (d) energy will evolve to surroundings

28. What type of reaction does occur when taking medicines like antacid?

- (a) Neutralisation (b) Combustion
 (c) Addition (d) Replacement

29. Which one will reduced first?

- (a) Pb^{2+} (b) Ca^{2+}
 (c) Na^+ (d) Zn^{2+}

30. Which of the following factor doesn't control the equilibrium?

- (a) Pressure (b) temp
 (c) Concentration (d) catalyst

Answer the question No 30 & 31 using the table.

Li	Be	B	C	N	O	F
2, 1	2, 2	2, 3	2, 4	2, 5	2, 6	2, 7

31. Mention the period number of above elements.

- (a) 2nd period (b) 3rd period
 (c) 4th period (d) 5th period

32. If we go from left to right in the mentioned period then—

- i. electron number increases
 ii. size of atom decreases
 iii. atomic radius increases
 Which one is correct?

- (a) i & ii (b) ii & iii
 (c) i & iii (d) i, ii & iii

33. What is the formula of baking powder?

- (a) CaO (b) CaCO_3
 (c) Na_2CO_3 (d) NaHCO_3

34. Which is applicable in the production of NaOH by electrolysis?

- (a) diluted solution of NaCl
 (b) Melted NaCl
 (c) Platinum electrode
 (d) mercury electrode

35. What is the ratio of hydrogen and nitrogen in ammonia gas production?

- (a) 1:2 (b) 1:3
 (c) 2:1 (d) 3:1

উত্তর	1	(d)	2	(d)	3	(b)	4	(c)	5	(b)	6	(a)	7	(c)	8	(c)	9	(d)	10	(b)	11	(b)	12	(d)	13	(c)	14	(d)	15	(b)	16	(a)	17	(b)	18	(c)	19	(a)	20	(a)
	21	(b)	22	(d)	23	(a)	24	(b)	25	(d)	26	(a)	27	(d)	28	(a)	29	(a)	30	(d)	31	(a)	32	(a)	33	(d)	34	(d)	35	(d)										