



NAP-007-001404

Seat No. \_\_\_\_\_

Second Year B. Sc. (Home Sci.) (Sem. IV)

(CBCS) Examination

March / April - 2017

Basic & Applied Chemistry : Paper - 4

(Core) (New Course)

Faculty Code : 007

Subject Code : 001404

Time : 2 Hours]

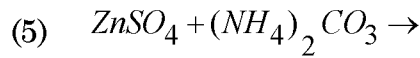
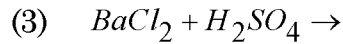
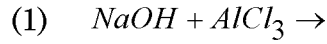
[Total Marks : 50

સૂચના : દરેક પ્રશ્નના જવાબ મુખ્ય ઉત્તરવહીમાંજ આપવાના છે.

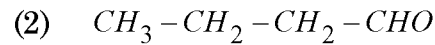
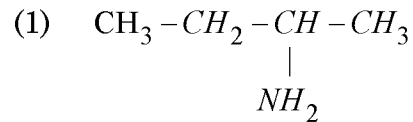
1 ડીટરજન્ટ પાઉડર અને ગોટી બનાવવા માટેના જરૂરી પદાર્થો વર્ણવો. 10

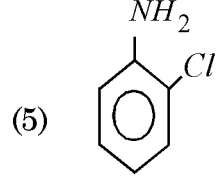
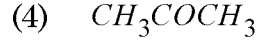
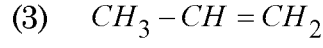
અથવા

1 (a) નીચેનાં સમીકરણો પૂરા કરો : 5



(b) નીચેનાના IUPAC નામ આપો : 5

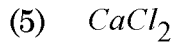
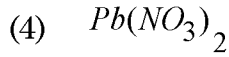
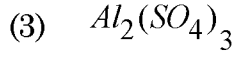
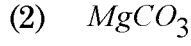




2 એસિડ અને બેઈઝની જુદી-જુદી વ્યાખ્યા આપી સમજાવો. 10

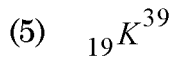
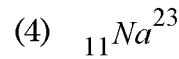
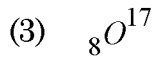
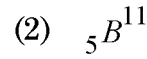
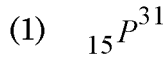
અથવા

2 (a) નીચેના સંયોજનના અણુભાર ગણો : 5



[પરમાણુ ભાર :  $H = 1$ ;  $C = 12$ ;  $N = 14$ ;  $O = 16$ ;  $Mg = 24$ ;  $Al = 27$ ;  
 $S = 32$ ;  $Cl = 35.5$ ;  $Ca = 40$ ;  $Pb = 207$ ]

(b) નીચેના તત્ત્વોની ઈલેક્ટ્રોન રચના આપો : 5



3 તટસ્થીકરણ પ્રયોગ વર્ણવો. 10

અથવા

3 વર્ણવો : નોન-નાર્કોટીક એનાલ્જેસીક. 10

4 સાબુ બનાવવા માટેની રીતો વર્ણવો. 10

અથવા

4 વર્ણવો : પ્રતિજૈવિક પેનિસિલીન. 10

- 5 નીચેનામાં કોઈપણ બે પ્રશ્નોના જવાબ આપો : 10
- (1) મૂળભૂત કણો
  - (2) સમઘટકતા
  - (3) તફાવત : કાર્બનિક-અકાર્બનિક સંયોજનો
  - (4) તફાવત : મિશ્રણ-સંયોજન.

### ENGLISH VERSION

**Instruction :** Write all answer in main answer sheet.

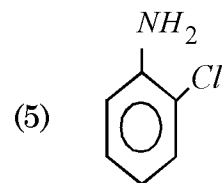
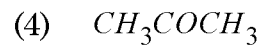
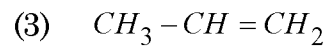
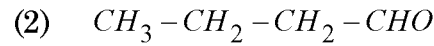
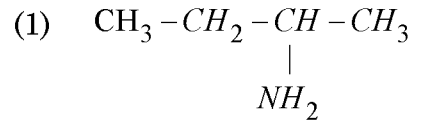
- 1 Discuss ingredients necessary for detergent powder and cake. 10

OR

- 1 (a) Complete the following equations : 5

- (1)  $NaOH + AlCl_3 \rightarrow$
- (2)  $AgNO_3 + KI \rightarrow$
- (3)  $BaCl_2 + H_2SO_4 \rightarrow$
- (4)  $MgCO_3 \xrightarrow{\Delta}$
- (5)  $ZnSO_4 + (NH_4)_2CO_3 \rightarrow$

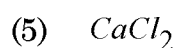
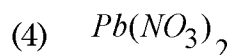
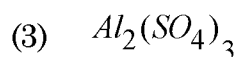
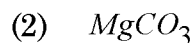
- (b) Give IUPAC name of the following : 5



2 Explain acid and base with different definition. 10

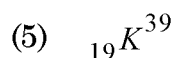
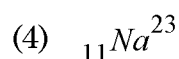
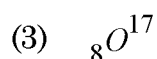
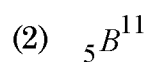
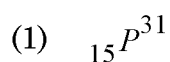
OR

2 (a) Calculate the molecular weight of following : 5



[ Atomic weight :  $H = 1$ ;  $C = 12$ ;  $N = 14$ ;  $O = 16$ ;  $Mg = 24$ ;  $Al = 27$ ;  
 $S = 32$ ;  $Cl = 35.5$ ;  $Ca = 40$ ;  $Pb = 207$  ]

(b) Give electronic configuration of the following : 5



3 Explain Neutralization experiment. 10

OR

3 Explain : Non-narcotic analgesic. 10

4 Explain manufacturing process of soap. 10

OR

4 Explain : Antibiotic Penicillin. 10

5 Answer any **two** questions of the following : 10

(1) Fundamental particles

(2) Isomerism

(3) Differentiate : Organic-inorganic compound

(4) Differentiate : Mixture-Compound.