AB-3131
Third Year B. Sc. (Sem. V) Examination
March/April – 2015
Petrochemicals (CAN)

Time : 2 Hours] [Total Marks : 50

সূচনা :

(১) নিচের ডাকটিক্যালের নিম্নের বিষয়ে উত্তর লিখুন।
Fill up strictly the details of signs on your answer book.
Name of the Examination :
T. Y. B. Sc. (SEM. V)
Name of the Subject :
PETROCHEMICALS (CAN)
Subject Code No. : 3 1 3 1
Section No. (1, 2,......) : B

(২) প্রশ্ন-৭ নং প্রশ্নে উত্তর দিন।
(৩) উক্ত প্রশ্নে অংক প্রশ্নে পূর্ণ জুড়ে দান দিন।
(৪) উক্ত প্রশ্নে উত্তর যোগ্য প্রচেষ্টা দিন।

১ নীচের প্রশ্নে জবাব দান করুন : ৮

(১) শুধু পেট্রোলিয়াম লবেল রসায়নিক ঘটনার নাম জবাব।
(২) কাঁচি গিল্ডে ব্যবহৃত সাউথার্ন মূল্য উপস্থাপন করুন।
(৩) সুচার্য প্রক্রিয়ায় ক্রান্তিকরণ সংযোগের মেনে যান।
(৪) কাঁচি গিল্ডে নীলকান্ত প্রক্রিয়ায় ক্রান্তিকরণ সংযোগের মেনে যান কি?
(৫) অব্যাহত চাঁদল ময়লা মূল্য পেন্ডো করুন।
(৬) কাঁচিসারি ভাণ্ডার নামে নেটিভের জবাব।
(৭) J - অসিনিয় অর্থাদির সূত্র জবাব।
(৮) অর্থনীতিবিদ্যায় ময়লার স্তায় প্রক্রিয়ার নাম জবাব।

২ (অ) বিশ্বাস অর্থাদি পেট্রোলিয়াম নুন শুধুমাত্র কোনে কিছু করে না? কোন রীতিতে শুধুমাত্র করুন? ৫

অংশগুলি
(অ) উদ্দিষ্ট বিশ্বাস অর্থাদির সমগ্র সংস্থার মতভাবে। তথ্য সংস্থার উদ্দিষ্টের দিকে যোগ্য হয়। ৫
(b) પેટ્રોલિયમ પરિક્રમા સાથે સંકળાયેલા નીચીના ટેંપેરાર પ્રક્રિયા ક્ષતિ આપી છે.
(1) સમચારનીય (2) સુખાયા (3) વિકાસ ક્રમિકતા.

અધ્યાય

(b) પેટ્રોલિયમના વિસ્તૃતતા મજા નીચેની જરૂરી આપો. તેમના ઉપયોગો આપો. નેશનલ વિવિધ પર કંપનીઓ કરો.
(4) પેટ્રોલિયમ ભીડ પર કંપનીઓ કરો.

(3) આધાર બજેતમાંથી બાળકિનતામાં જરૂરી ક્ષતિ આપી. ક્ષતિ બજેતમાંથી અસમાન આપો.

અધ્યાય

(4) પન્નું કોલ્સાના વિવિધ પ્રક્રિયા અને તેમની ઉપયોગીતા બદલો.
(5) C-1 પેટ્રોસ્યામિનો અહેવાલ આપી. નીચીના પેટ્રોસ્યામિનો ઉદ્યાનમાં રીતે અને ઉપયોગો જરૂરી છે.

અધ્યાય

(5) નેચરલ નેચરમાં દ્રાર અસિમાં વ્યવસ્�ા રીતે આપો. નેચરલ નેચરમાં દ્રાર વિવિધ અસિમાં વ્યવસ્થા રીતે અને ઉપયોગો કરો.
(6) (1) ઉપનોક્ત પ્રક્રિયાનું ક્રમ સંદેશામા આપો.
(7) સફકાનાં અર્થમાં સંદેશામા આપો.

(4) ભીડના આધારિત અસ્ત્રોસફ નીપતણો અહેવાલ આપો. ભીડના નેચરમાં નીચીના પેટ્રો સયામિનો ઉદ્યાનમાં રીતે અને ઉપયોગો બદલો:
(1) સ્પાર્ટીમ (2) હેծેલો અમાઈચ સ (3) H2SO4 પદાતિધી હેંબડ.

અધ્યાય

(3) નીચીના રેસયામો બનાવવામાં રીત તથા ઉપયોગો બદલો:
(1) અસિમાનલફર બનાવવામાં વેકર કેમુ પદાતિધી
(2) ભીડના વિસ્ત્રી.
(4) ભીડના રેસયામાં કાંદરશા અને વિસ્ત્રી અસિમાં બનાવવામાં રીત અને તેના ઉપયોગો બદલો.

અધ્યાય

(3) અસિમાનલફરના મજા પેટ્રોસ્યામિનો અહેવાલ આપો. કંપનીઓ આપી, અસિમાનલફરના અસિમાનલફરના બનાવવામાં પદાતિધી આપી. તેના વિનયોગ કરો.
(4) નીચીના રેસયામો બનાવવામાં રીત અને ઉપયોગો બદલો:
(1) ભીડનારના ભીડના ભીડનારના પ્રયુચન અમાઈચ રાખ અમાઈચ
(2) લોકી વિકસ્ત. AB-3131] 2 [Contd...
ENGLISH VERSION

Instructions: (1) As per the Instruction No. 1 of Page No. 1.
(2) All sub-questions of question no. 1 is compulsory.
(3) Figures to the right indicate full marks of the question.
(4) Write answer briefly and to the point.

1 Answer the following in brief: 8
   (1) Write the names of chemical constituents present in purified petrol.
   (2) Write important uses of hydrogen cyanide.
   (3) Which compounds can be obtained by reforming process?
   (4) Which compounds can be obtained by hydrogenation process?
   (5) State important products obtained from ammonia.
   (6) State disadvantages of coal as fuel.
   (7) Write structural formula of J-acid.
   (8) Write the names of chemicals obtained from acetylene.

2 (a) What is called refining of petroleum in broad meaning? Describe work method of refinery. 5

   OR

   (a) Explain catalytic cracking giving diagram. Discuss moving bed catalytic cracking process. 5
   (b) Explain giving illustrations, the following conversion processes involved in the refining of petroleum. Discuss their importance. (i) Isomerisation (ii) Reforming (iii) Dehydrocyclisation. 5

   OR

   (b) State the products obtained by refining of petroleum. Give their uses. Write short note on naphtha fraction. 5
   (c) Write short note on petroleum wax. 4

3 (a) State the characteristics of ideal fuel. Give an account of synthetic fuels. 5

   OR

AB-3131] 3 [Contd...
(a) Write the different types of coal and their uses.
(b) Giving account of C-1 petrochemicals give method of manufacture and uses of following petrochemicals:
   (i) Methanol  (ii) Urea (iii) Formaldehyde.

OR

(b) Give method of manufacture of Koch acid from naphthalene. Write method of manufacture and uses of Neville winther acid from napthol.
(c) (a) Give Skranp synthesis for preparation of quinoline.
     (b) Give synthesis of sulphanil amide.

4  (a) Give account of industrial products based on ethylene. Write method of manufacture and uses of following petrochemicals from ethylene:
     (a) Styrene
     (b) Ethanol amines
     (c) Ethanol by $\text{H}_2\text{SO}_4$ method.

OR

(a) Write the method of preparation and uses of following chemicals:
    (a) Acetaldehyde by Walker Chemie method.
    (b) Ethylene glycol.
(b) Write the method of preparation and uses of chloroprene and vinyl acetate from acetylene.

OR

(b) Give account of petrochemicals obtained from acetylene. Giving flow-sheet diagram, give method of preparation of acrylonitrile from acetylene. Write its applications.
(c) Write the method of preparation and uses of following chemicals:
    (a) Hexamethylene diamine from butadiene
    (b) Lauryl lactam.