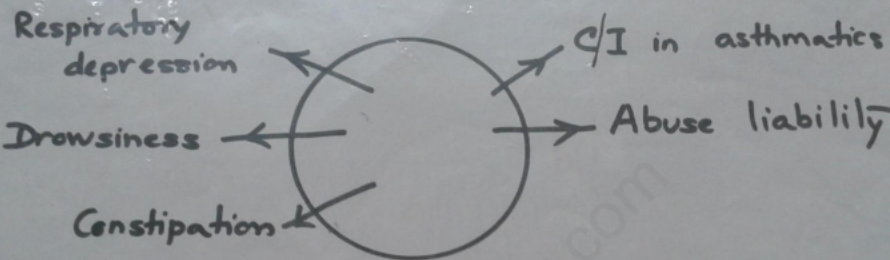


2

The following are the ADR's



Respiratory depression

Drowsiness

Constipation

C/I in asthmatics

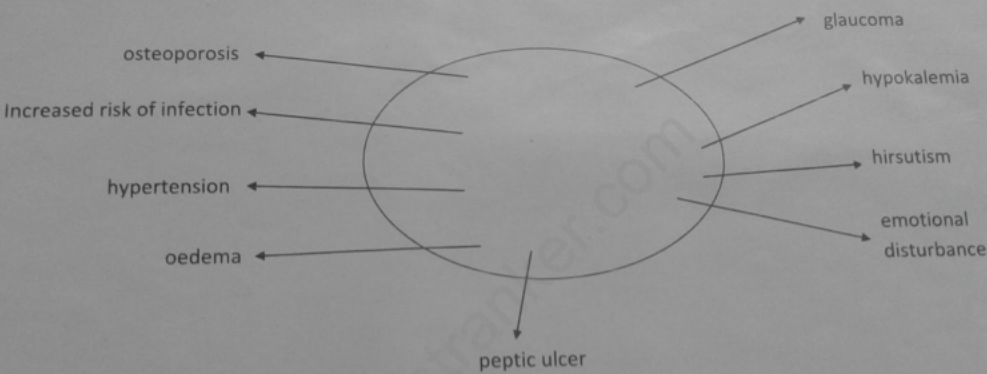
Abuse liability

Identify the drug and give its two indication.

OPIOIDS

Analgesics, cough, diarrhoea, pre-anaesthetic medication, acute left ventricular failure

Q. Following are the adverse effects:



Identify the given drug and give its 2 indications.

CORTICOSTEROIDS
acute adrenal insufficiency
Bronchial asthma
www.FirstRanker.com

Que: A bronchial asthma patient has been given some anticholinergic drug by inhalation. Name the drug and what adverse effects it can cause.

Ipratropium bromide, anticholinergic effect

• Following are the adverse drug reactions of a drug used in Hansen's Disease 2 marks



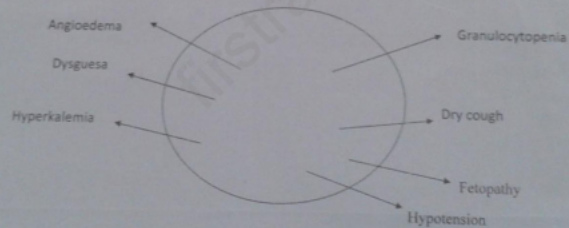
Identify the drug and write down two indications.

DAPSONE (DDS)

Antileprotic, in combination with pyrimethamine used in chloroquine resistant malaria, toxoplasmosis, p.jirovecii infection

Que: A patient has consumed some poison; he has pin point pupils, increased salivation. His clothes are wet because of diarrhea and urination. Which drug you will like to use and name one adverse effect of this drug.

Q. Following are the adverse effects:



Identify the given drug and give its two indications.

ACE INHIBITOR (CAPTOPRIL)

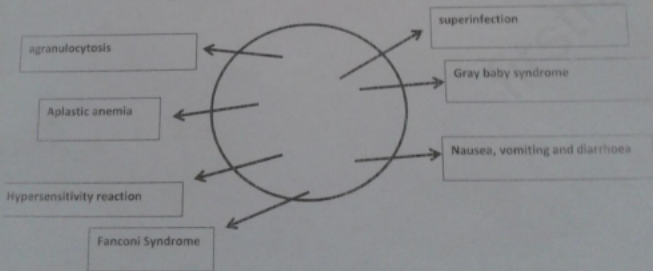
Hypertension, CHF, MI

Q. A male patient operated with general anesthetic halothane and given muscular relaxation, all of a sudden there is rise of body temperature to 105°

- a. Why is it so?
- b. What is the condition known as?
- c. How will you treat the condition?

- a. OPENS THE RyR1 Ca^{++} CHANNELS= VIGOROUS CONTRACTIONS OF MUSCLE
- b. MALIGNANT HYPERTHERMIA,
- c. DANTROLENE IV

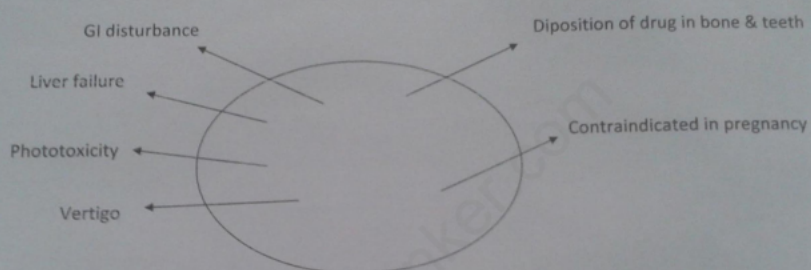
Following are the adverse drug reactions 2 marks



Identify the drug and write down two indication.

BROAD SPECTRUM ANTIBIOTICS
TETRACYCLINES, CHLORAMPHENICOL
RICKETTSIAL INFECTIONS, CHLAMYDIAL
INFECTIONS, TYPHOID FEVER

Q. Following are the adverse effects:



Identify the given drug and give its two indications.

TETRACYCLINES
VENEREAL DISEASE = CHLAMYDIAL INFECTIONS,
CHOLERA

4

The following are ADR's

Thirst & polyuria

Fine tremor

Giddiness

Ataxia

Nystagmus

Mental confusion

slurred speech

Hyper reflexia

Delerium

Convulsion

Coma

Narrow safety margin

Identify the drug and give its indications.

LITHIUM

ACUTE MANIA, PROPHYLAXIS OF BIPOLAR DISORDER, SYNDROME OF INAPPROPRIATE ADH

Following are the adverse drug reactions 2 marks

```
graph TD; C(( )) --> CD[Cochlear damage]; C --> VD[Vestibular damage]; C --> NMB[Neuromuscular blockade/paralysis]; C --> NT[nephrotoxicity];
```

Identify the drug and write down two indications.

AMINOGLYCOSIDES

GRAM NEGATIVE INFECTIONS, HEPATIC COMA,

4

16

The following are the ADR's

Weight gain

Headache

Swinging mood

Hypertension

↑ gallstone

Leg vein thrombosis

Break through bleeding or spotting

Glucose intolerance

Chloasma

Acne

Identify the drug and give its two indications.

ORAL CONTRACEPTIVE PILLS / ESTROGEN

CONTRACEPTION, POST MENOPAUSAL SYNDROME

Q: With chronic use in seizure states, the adverse effects of this drug include coarsening of facial features, hirsutism, gingival hyperplasia and ostomalacia. Identify the drug. Also write down the possible interaction of the drug with steroids

PHENYTOIN SOD.

DECREASE EFFICACY OF
STEROIDS(ENZ. INDUCER)

Q. Mr. Amit has been attending the psychiatry OPD for the treatment of Schizophrenia with Haloperidol for 6 months. His movements have slowly become sluggish, has tremors and saliva is dribbling down his mouth.

- What is the cause of his fresh complaints?
- How should he be managed?

DRUG INDUCED PARKINSONISM

STOP HALOPERIDOL, CENTRALLY ACTING ANTI ACH

peptic ulcer

MUSHROOM POISONING, T/T- ATROPINE

Q: In a dinner party, few guests took vegetable curry containing Mushroom and started abdominal pain, diarrhea, sweating and salivation. On examination pulse and respiration was slow and the patients were semi-conscious. Explain the signs and symptoms pharmacologically and its treatment.

Q: A patient having glaucoma was given eye drops containing timolol. All of a sudden he developed bronchial asthma. Explain.

TIMOLOL IS NON SELECTIVE BETA BLOCKER AND DUE TO ABSORPTION THRU NASOLACRIMAL DUCT

Q 3 Patient on anti leprosy & complains of reddish black discoloration of skin & discoloration of skin & body secretions. name the offending drugs and its adult dosage.

CLOFAZIMINE, 300MG ONCE A MONTH(SUPERVISED)AND 50MG DAILY(SELF)

Q. Write the adverse drug reactions of Streptokinase.

ANAPHYLACTIC SHOCK, BLEEDING

Q 4 Patient having akathisia, acute muscular dystonia, tardive dyskinesia. Name the offending group of drugs and its indication.

EXTRA PYRAMIDAL S/E C/BY- TYPICAL ANTIPSYCHOTICS (NEUROLEPTICS), INDICATION- SCHIZOPHRENIA

Write the adverse effects of
Warfarin.

BLEEDING, SKIN NECROSIS, FETAL WARFARIN SYNDROME

4
16
Q. An epileptic patient on prolonged therapy with phenytoin has now developed anaemia. What type of anaemia is it likely to be and what is the cause of anaemia?

MEGALOBLASTIC, INHIBITS ENZYME NEEDED FOR FOLIC ACID ABSORPTION IN GIT AND ENHANCES ITS EXCRETION

Q. A case of whooping cough was prescribed Tetracycline 250 mg 4 times a day. On 2nd day patient came back with burning pain in abdomen. He was advised to take antacid Aluminium Hydroxide gel 1 tsf 4 times a day along with tetracycline capsule. But pain persisted. Comment on the cause of persistent pain.

TETRACYCLINE HAS A CHELATING PROPERTY, FORMS INSOLUBLE COMPLEX WITH ANACIDS

Q. A farmer with history of handling insecticides is brought to the emergency department with convulsion, sweating, and labored breathing. On examination:

Pupils: pin point

Salivtion: ++

Respiration: rales and ronchi all over the lung fields.

Pulse: 50/min.

- a. What is the probable diagnosis?
- b. Outline the drug management.

OP POISONING

ATROPINE, PRALIDOXIME

Q. What is the drug interaction of Cefoperazone with alcohol. Also write two Cephalosporins, indicated for use in pseudomonas infection.

DISULFIRAM LIKE REACTION

Q: A 25 yr old man presents to the emergency Department with a small lacerated wound. For stitching the wound he is injected with Lignocaine. What kind of drug is added to lignocaine and why?

ADRENALINE TO MINIMIZE BLEEDING BY VASOCONSTRICTION

- Write down the drug interaction between Losartan (angiotensin receptor blocker) and Lithium. 2 marks

Li and Diuretics

Oral Hypoglycaemics

LITHIUM TOXICITY

- Write down the drug interaction between theophylline and ciprofloxacin. 2 marks

THEOPHYLLINE TOXICITY DUE TO ENZ INHIBITION BY CIPROFLOXACIN

What will happen if Aspirin is
Combined with Warfarin. ?

ASPIRIN DISPLACES WARFARIN- WARFARIN TOXICITY

What will happen if Probenecid
is co-prescribed with Penicillin ?

PROBENECID INCREASES TUBULAR SECRETION OF URIC ACID AND DECREASES THAT OF
PENICILLIN(ENHANCE EFFECT OF PENICILLIN)

Q. A 65 yr old male Parkinsonian patient was stable on Levodopa for last 1 yr. He was prescribed multi vitamins containing Pyridoxine following complaints of weakness. After 1 month his condition deteriorated. Comment.

Pyridoxine decreases the effect of levodopa bcz pyridoxine enhances the peripheral decarboxylation of levodopa.

Q. Comment on drug interaction
between Aspirin & Valproate.

ASPIRIN DISPLACES VALPROATE FROM PLASMA PROTIEN BINDING-
VALPROATE TOXICITY

- Comment on the rationale of combining isoniazid and vitamin B6. 2 marks

Isoniazid causes peripheral neuritis (more common in slow acetylators) this is due to interference with production of active coenzyme pyridoxal phosphate from pyridoxine and increased its excretion in urine. so Vit B6 (Pyridoxine) is given .

Q.9. A patient who develops amoebic dysentery has been prescribed metronidazole. One day he goes to a party and takes alcohol, suddenly he develops reaction and falls down. What is this reaction called? Explain why he develops this reaction.

Disulfiram LIKE reaction.

SPOT 2

What is the possible effect of combining
Loop diuretics & digoxine.

Diuretics causes hypokalaemia which increases the risk of digitalis INDUCED arrhythmias.

Q. A patient who is on anti-epileptic phenytoin sodium develops DVT for which Warfarin is started. What drug interaction are anticipated ?

It leads to the warfarin toxicity . Becz phenytoin sodium displace the warfarin from plasma protein (Displacement interaction).

Q. A patient having parkinsonism has been prescribed a combination drug containing levodopa and carbidopa. Is this combination beneficial or deleterious? Comment.

Beneficial bcz carbidopa is an peripheral DOPA decarboxylase enzyme inhibitor so it prevent peripheral conversion of levodopa so that levodopa effect is enhanced in brain.

- Write down the drug interaction between oral iron preparation and antacid. 2 marks

Iron and antacids forms insoluble unabsorbable complex ,so absorption of iron is impaired. For absorption of iron Acidic(low) pH is required so that Fe^{+3} is reduced to Fe^{+2} .

Q. What will happen if chloramphenicol is prescribed to a patient on warfarin therapy.

Chloramphenicol Antibiotic and Warfarin

Warfarin toxicity, because Chloramphenicol is enzyme inhibitor.

Q: A patient suffering from HIV has been started on Anti Retroviral Drugs which include a Protease Inhibitor. Later on he developed Pulmonary TB for which he is started on Isoniazide, Rifampin, Pyrazinamide and Ethambutol. Comment on likely Drug Interaction. Which anti tubercular drug should be changed?

Rifampicin is enzyme inducer, leads to metabolism of protease inhibitor, so effect of protease inhibitor is reduced. So rifampicin should be substituted by rifabutin (less potent enzyme inducer)

Q: A manic patient who was on Lithium was prescribed Furosemide. Comment on interaction.

Diuretics by causing sodium loss promote compensatory tubular reabsorption of sodium as well as Lithium = plasma level of lithium rises (Li toxicity).

Q. A 45 yr old male diabetic patient was stable on glibenclamide for the last 6 months. He was prescribed propranolol for migraine. After one week he was admitted in ICU in unconscious state. Comment.

Masking effect OF HYPOGLYCEMIC SYMPTOMS , DELAYS THE RECOVERY FROM HYPOGLYCEMIA BY INHIBITING GLYCOGENOLYSIS.

~~Q10~~ Q
What is the danger in prescribing ACE inhibitors
& K^+ sparing diuretics together.

Hyperkalaemia, ARRHYTHMIA

Q. A patient suffering from HIV has been started on anti retroviral drug which contains protease inhibitor also. Later on patient suffers from Tuberculosis for which he is started on H,R,Z,E . What drug interaction is likely to occur. Which ATT drug should be changed.

Rifampicin is enzyme inducer, leads to metabolism of protease inhibitor, so effect of protease inhibitor is reduced. So rifampicin should be substituted by rifabutin (less potent enzyme inducer)

What will happen when Amoxycillin
with Clavulanic acid given together?

Clavulanic acid is beta lactamase inhibitor, so it binds with beta lactamase and inhibits reversibly, so potentiate effect of amoxicillin.

Q. A patient suffering from HIV has been started on
anti retroviral drug which contains protease inhibitor
from Tuberculosis for

What is the possible drug interaction between aminoglycoside and d-tubocurarine

Amino glycosides Potentiate effect of d-Tubocurarine because it reduce Ach release from motor nerve endings

- A 25 yr. old married female is receiving rifampicin and isoniazid for TB. She started taking oral contraceptives since her marriage 2 months ago. Comment. 2 marks

Since rifampicin is microsomal enzyme inducer, it enhances the metabolism of ocp, leads to ocp failure, but isoniazid is microsomal enzyme inhibitor, it retards the metabolism of ocp

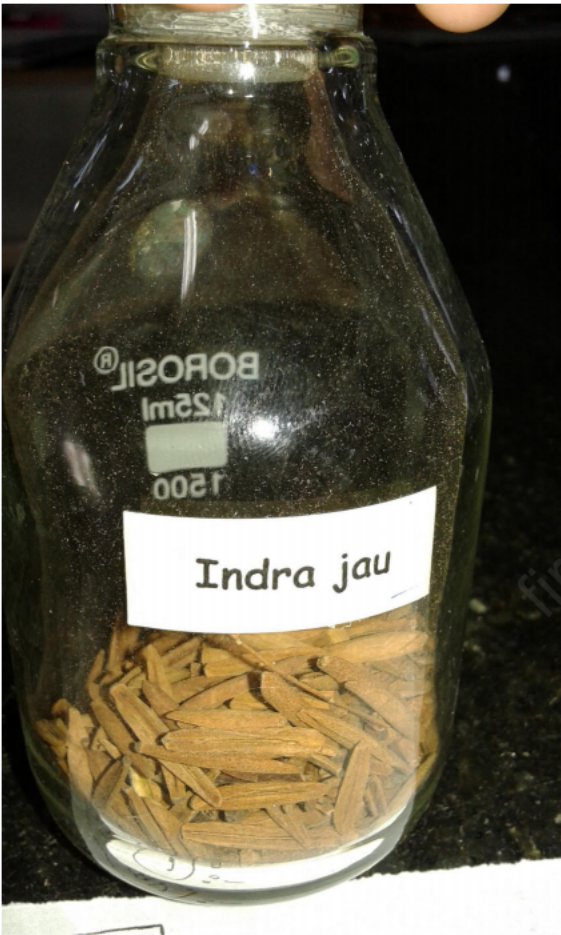
Q. A 35 yr. old male was taking MAO inhibitor, Clorgyline for his depression. He consumed cheese tomato during a wedding party of his friend. Next day he was admitted in casualty with a BP of 190/110 mm Hg.

- a) Why his B.P. increased?
- b) How this can be prevented?
- c) How can this be treated?

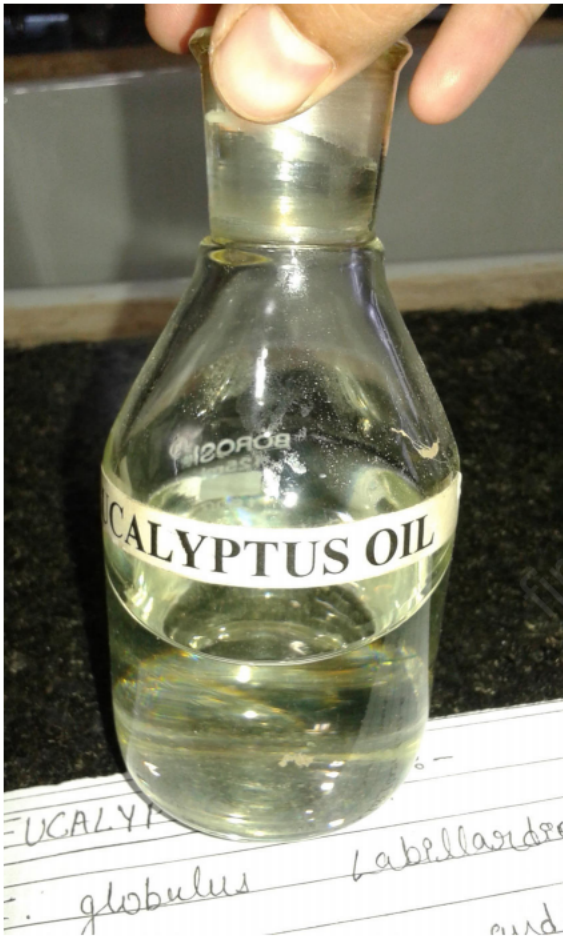
a. Cheese reaction

b. preventn giving him cheese, beer, wine, meat, fish, milk product

c. i.v phentolamine

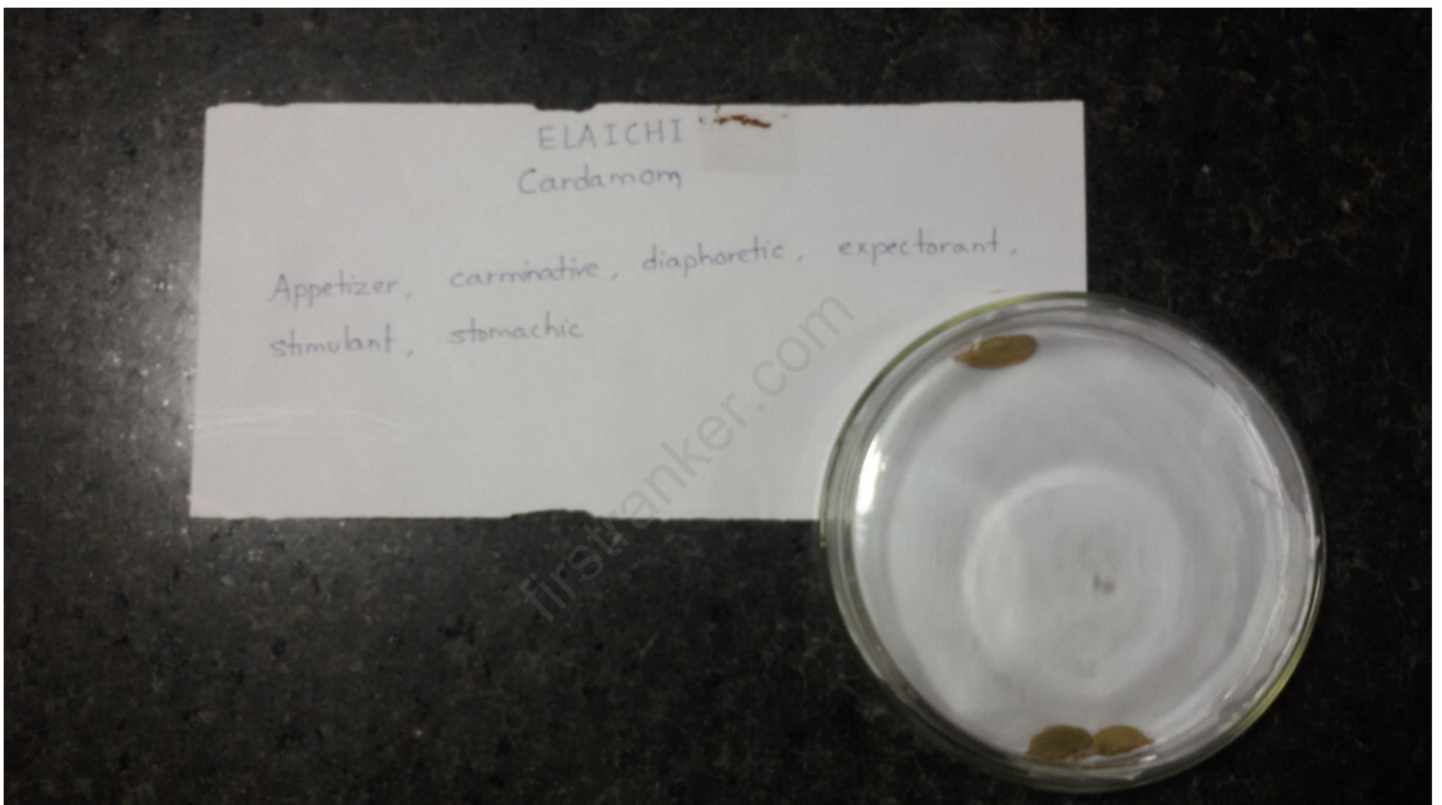




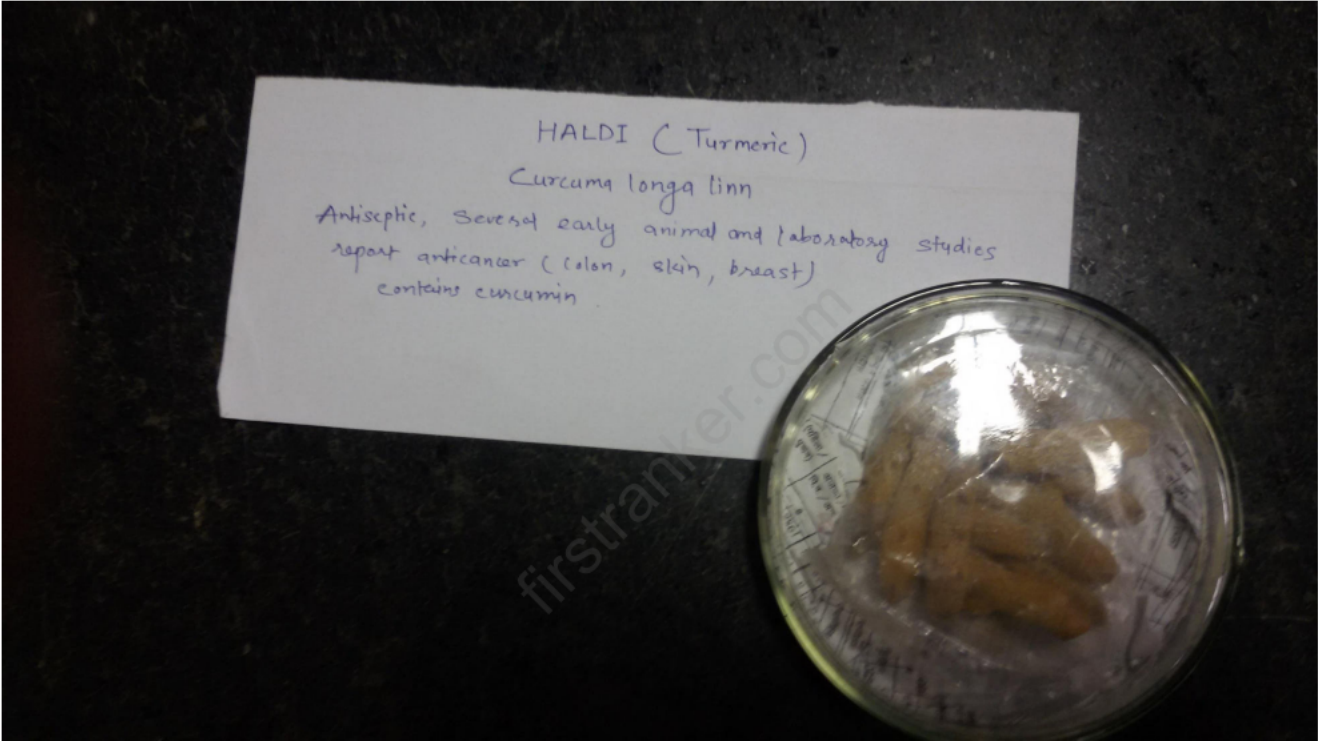


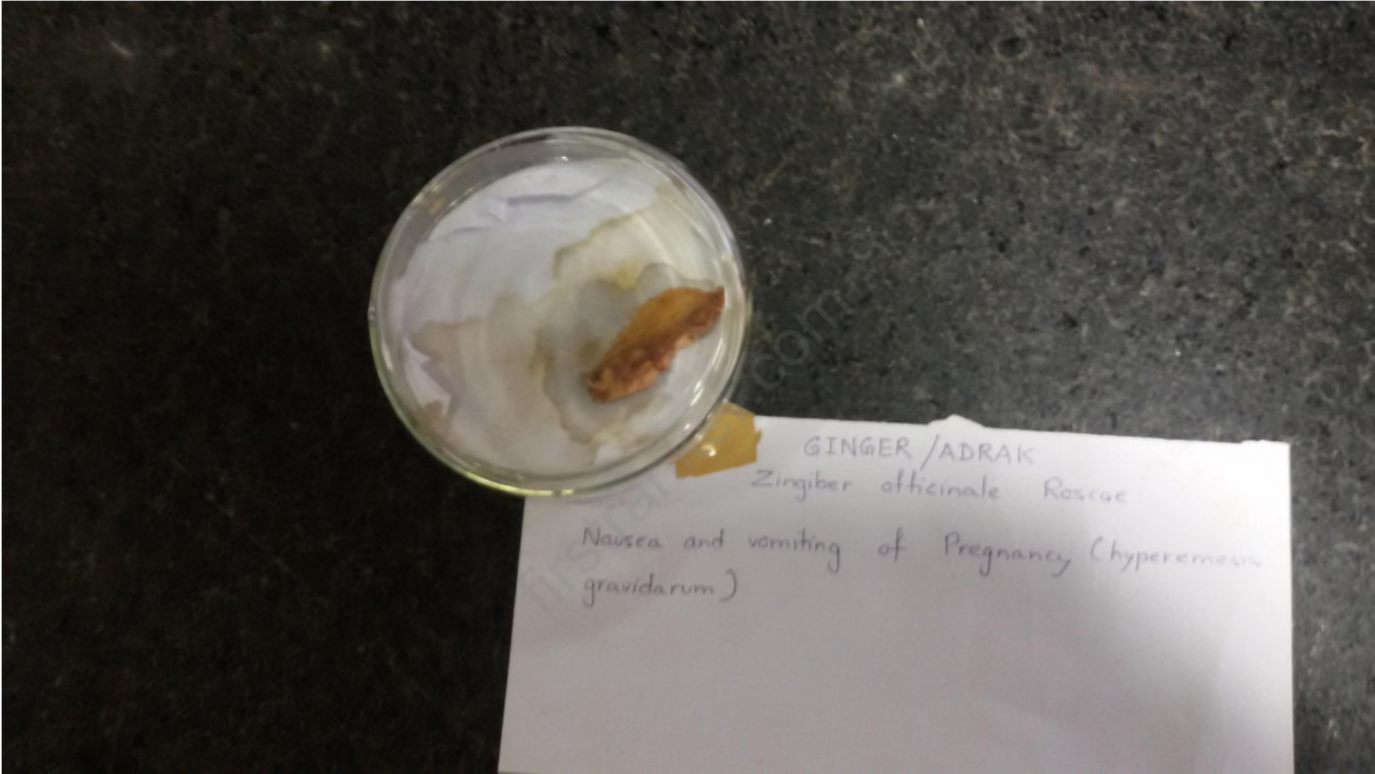


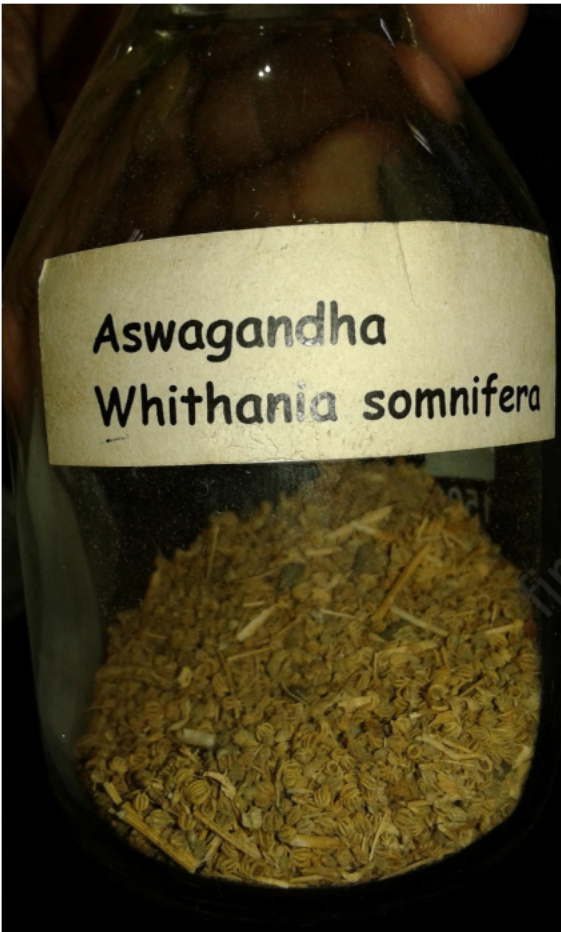


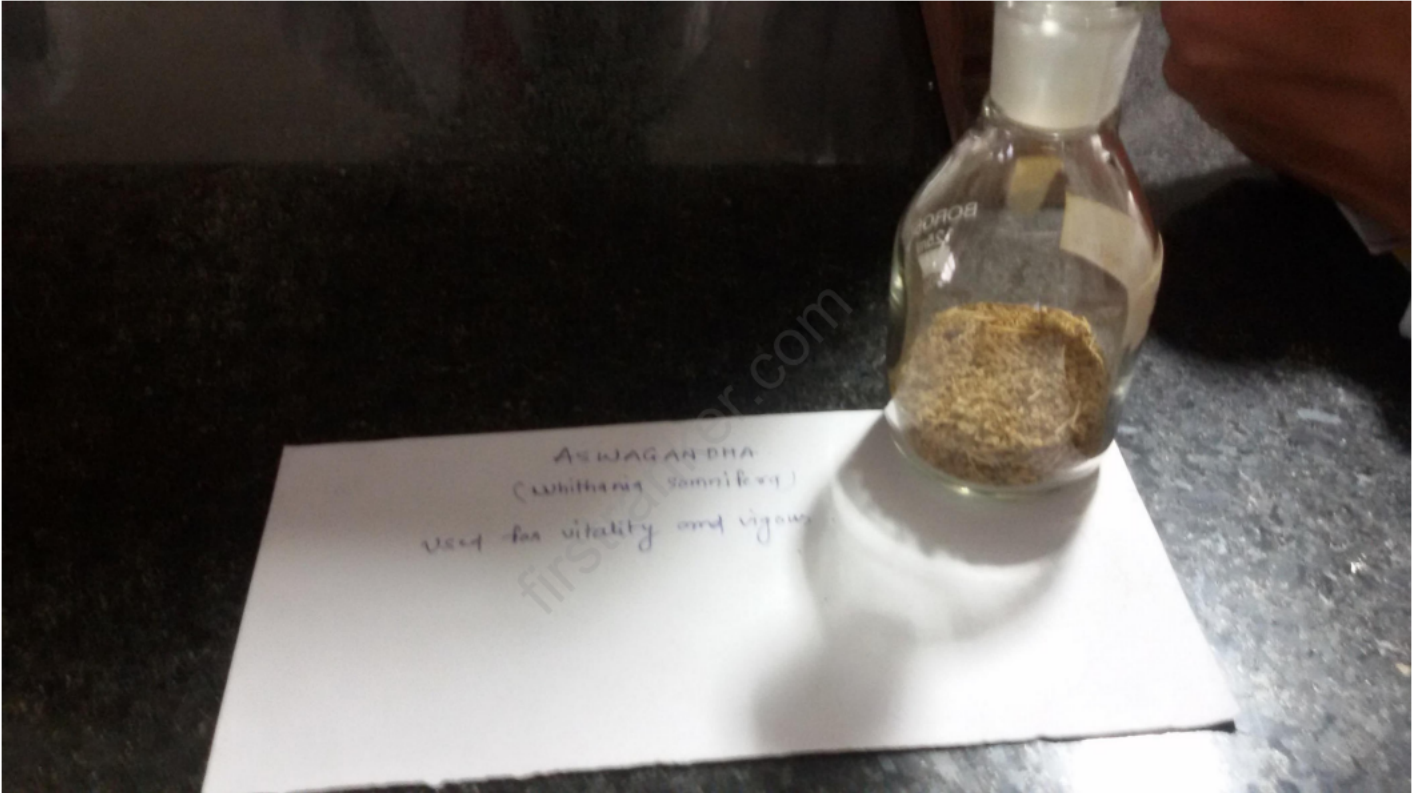




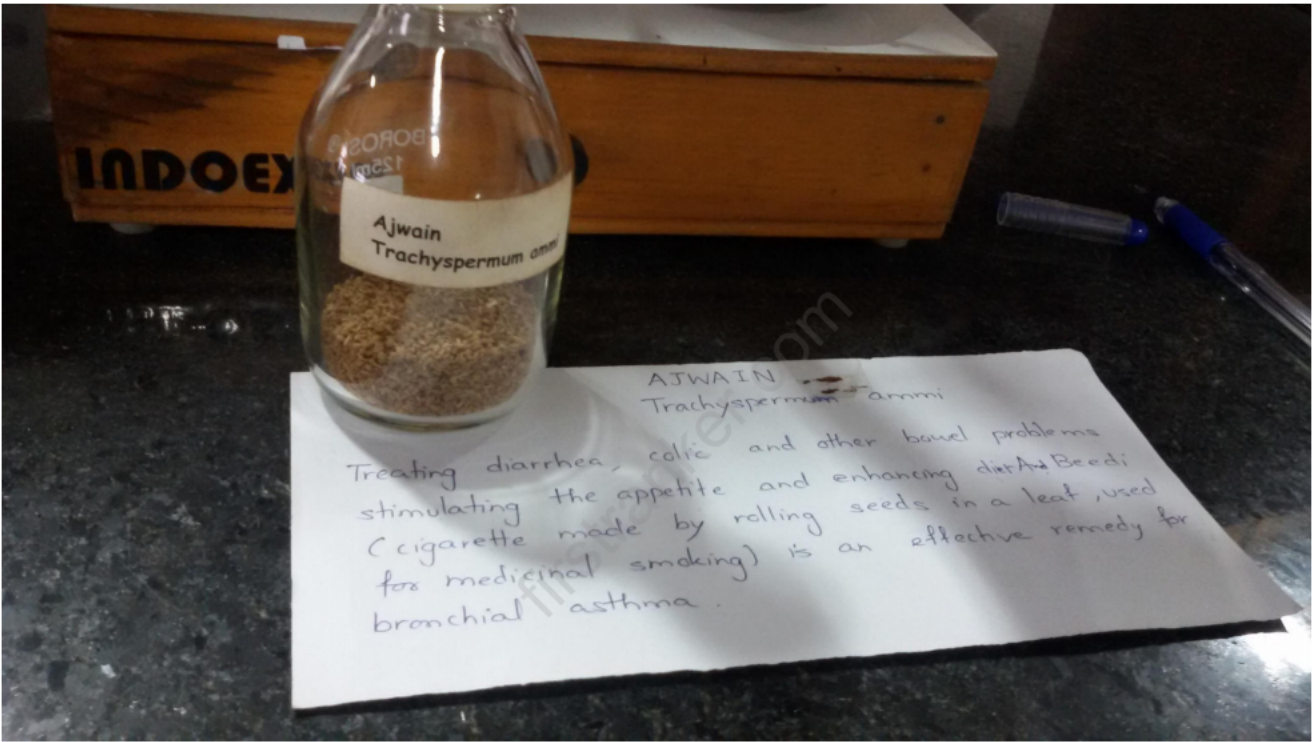




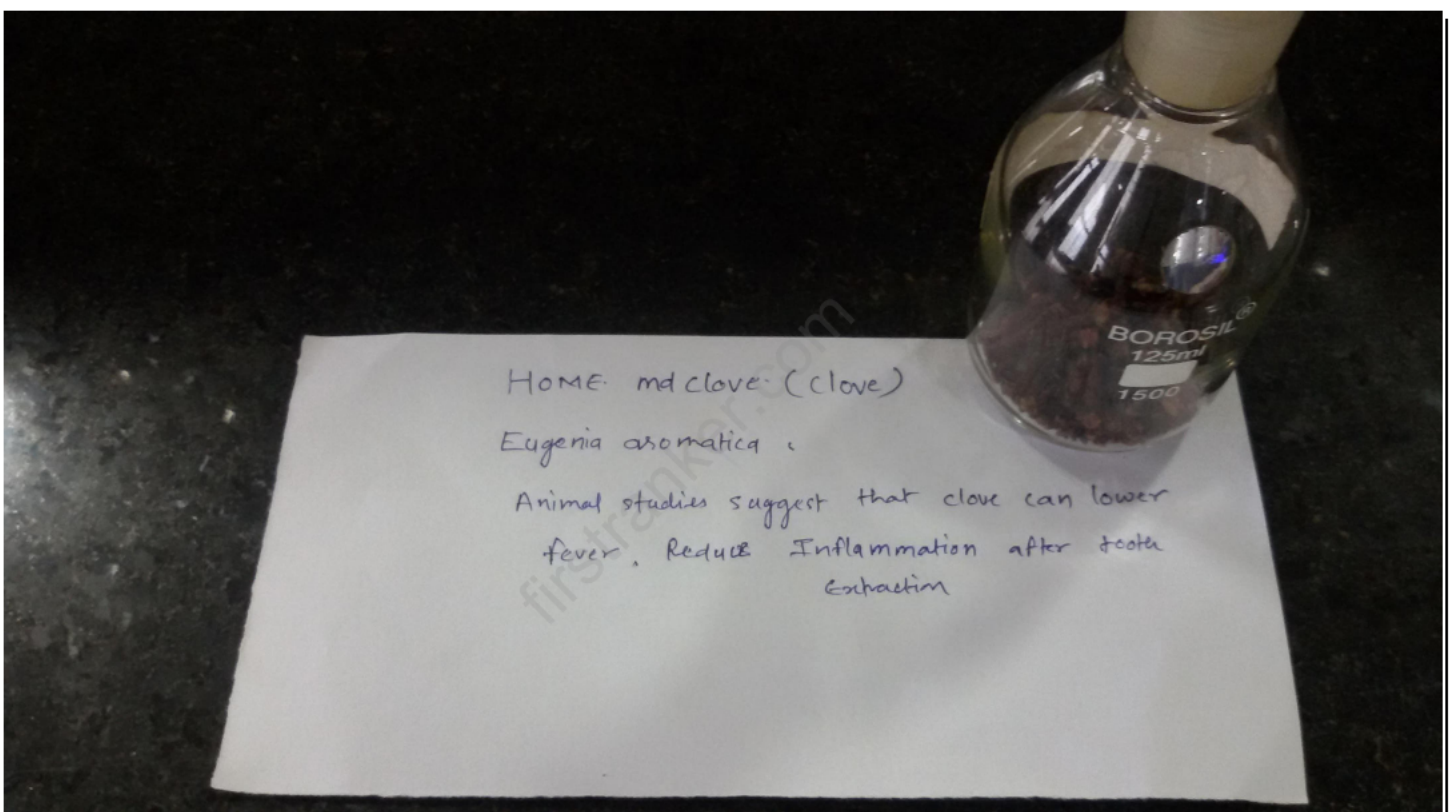




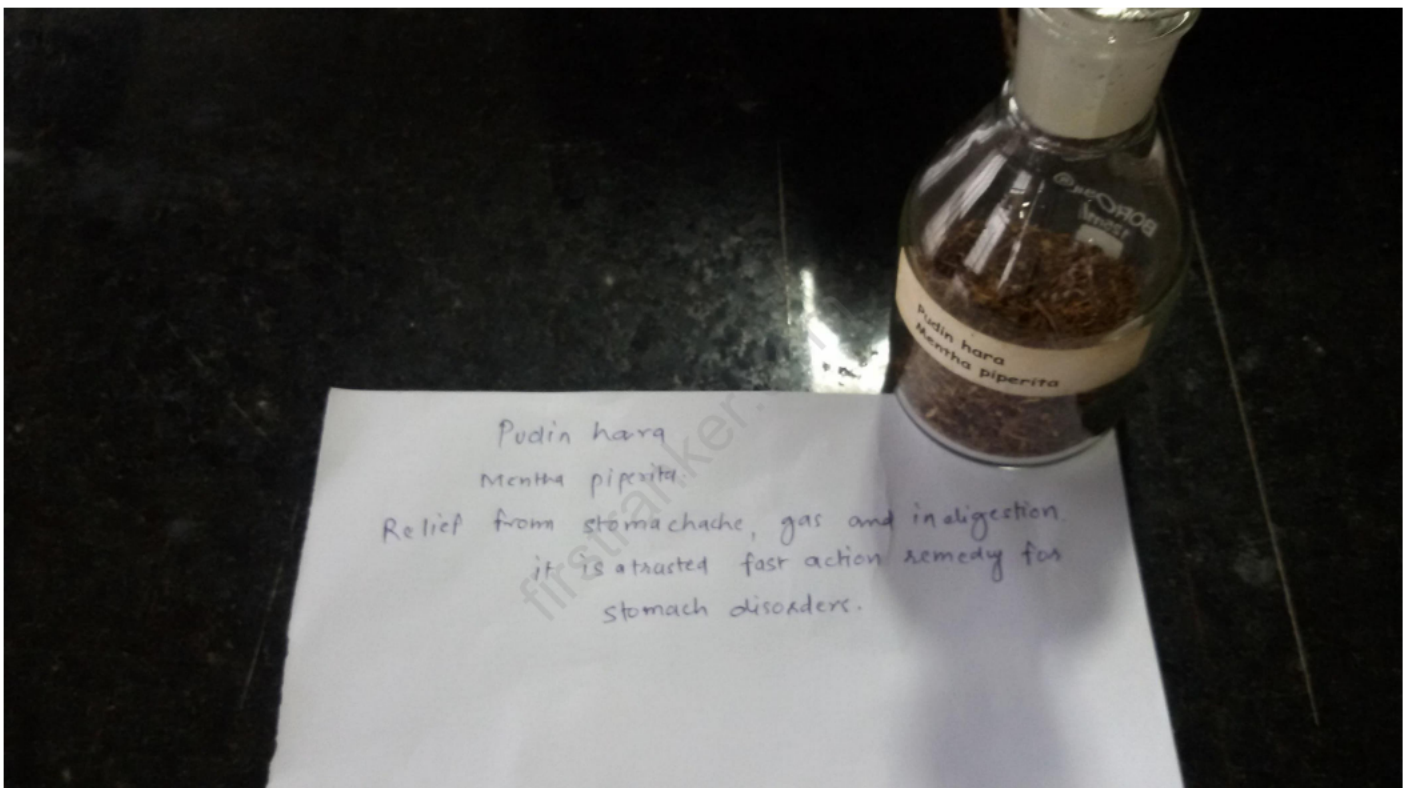


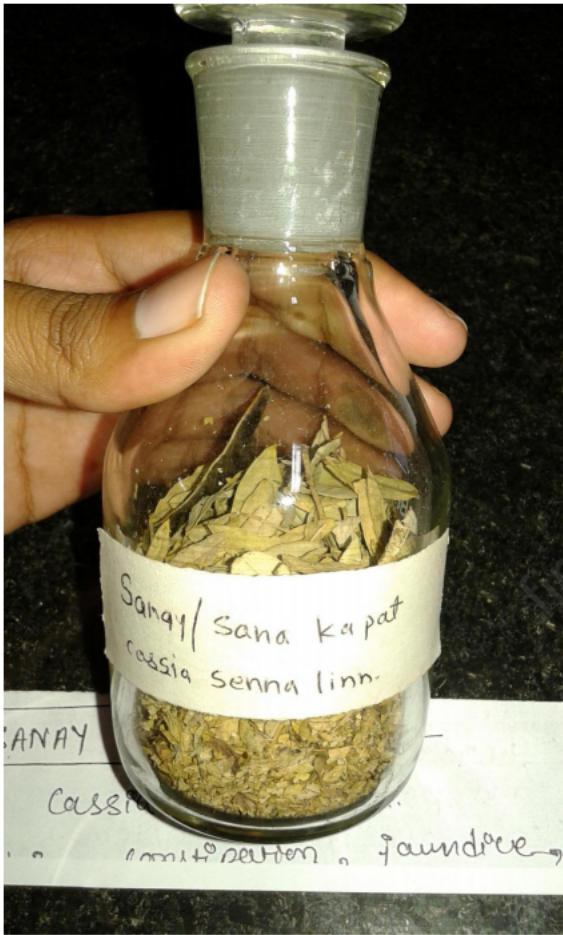


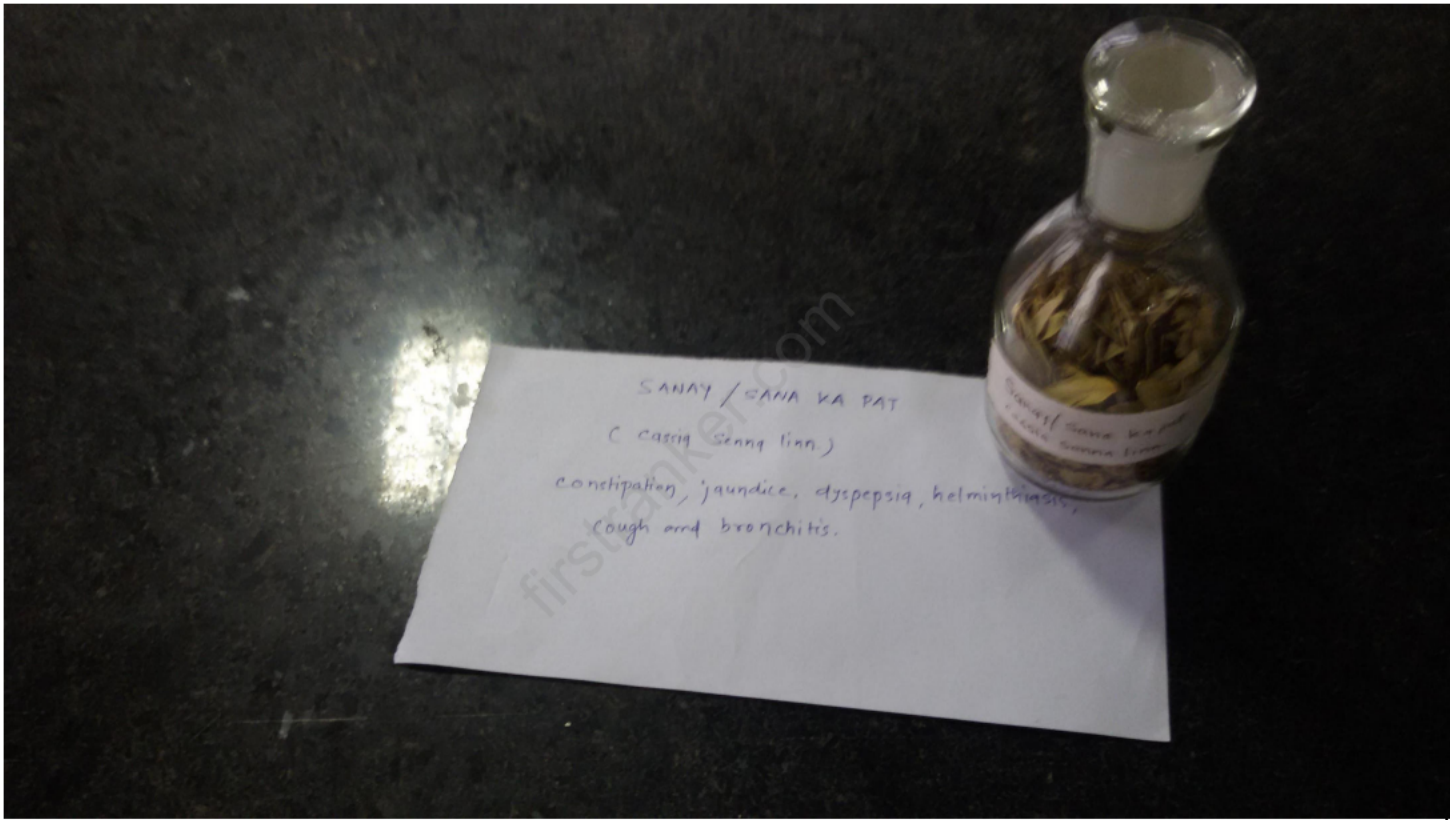


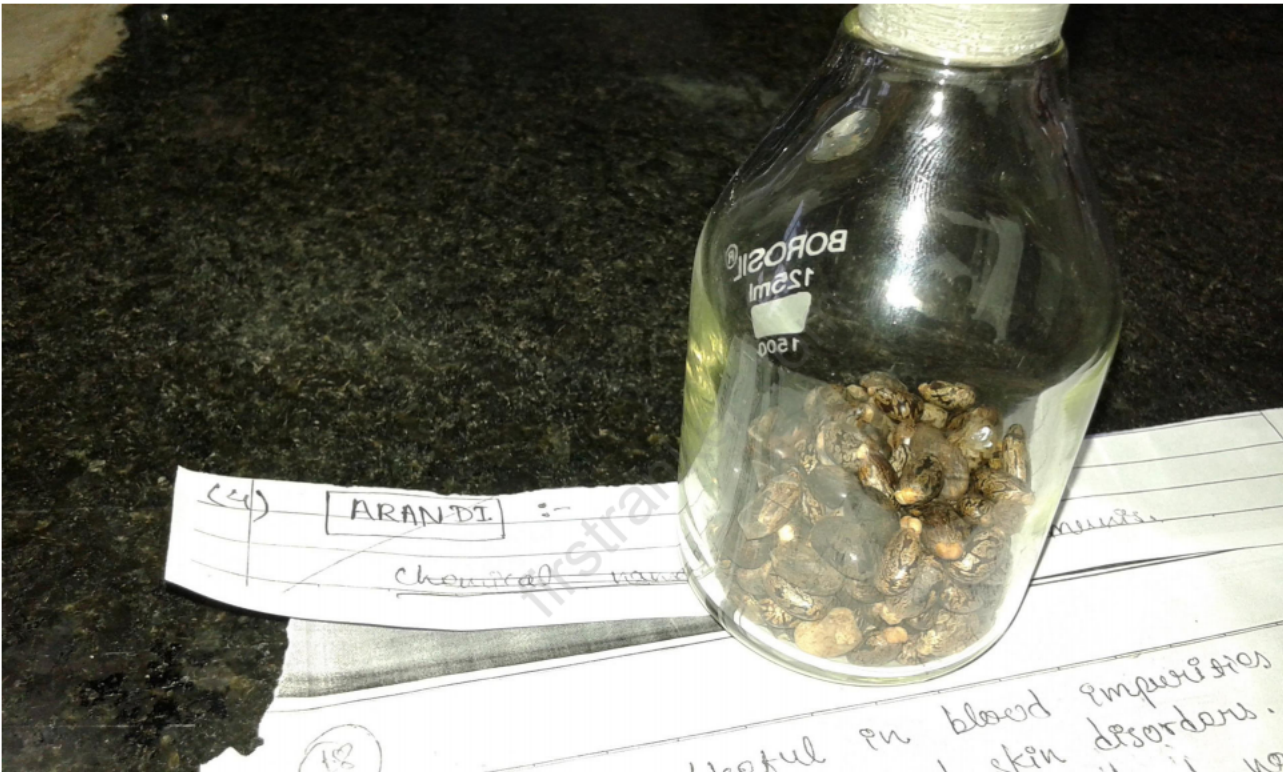


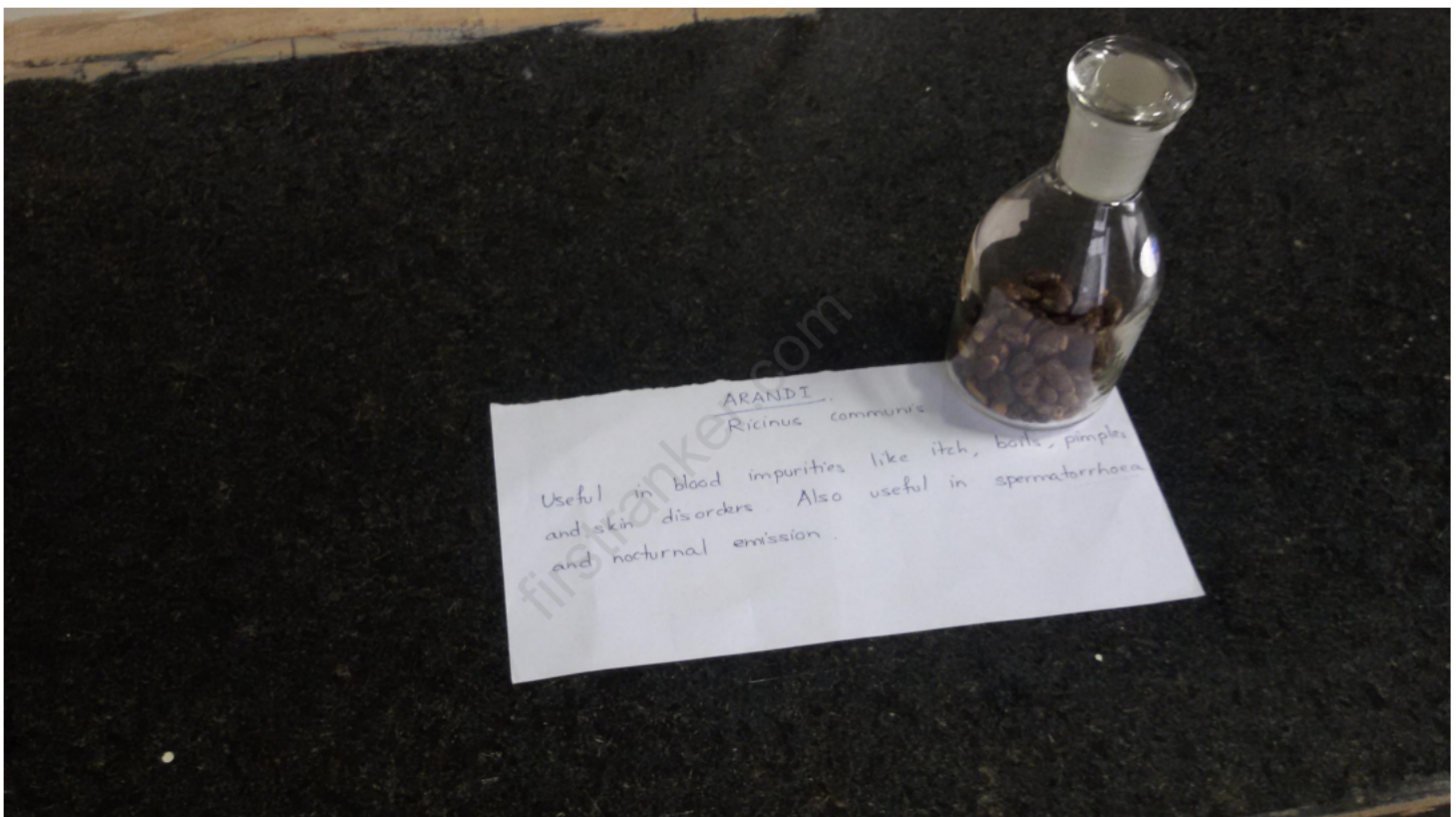


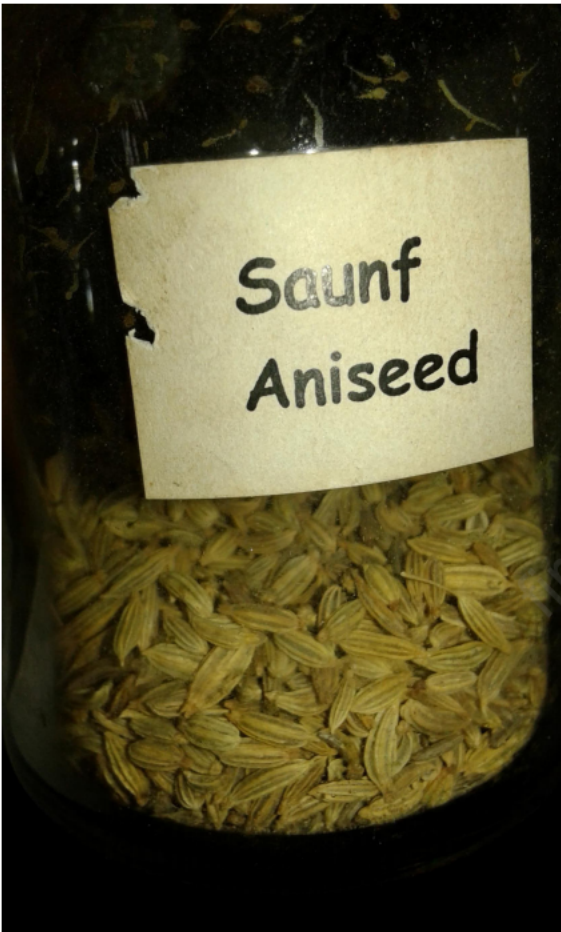


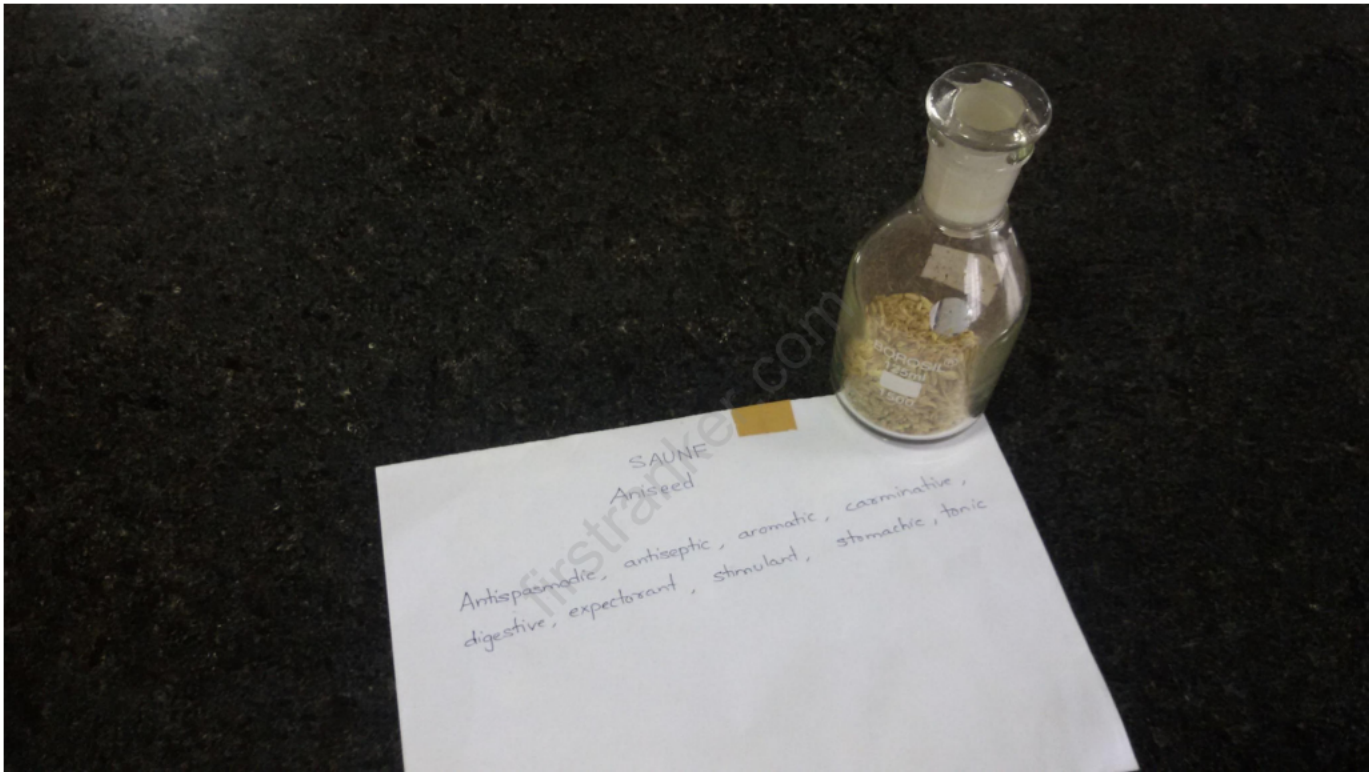




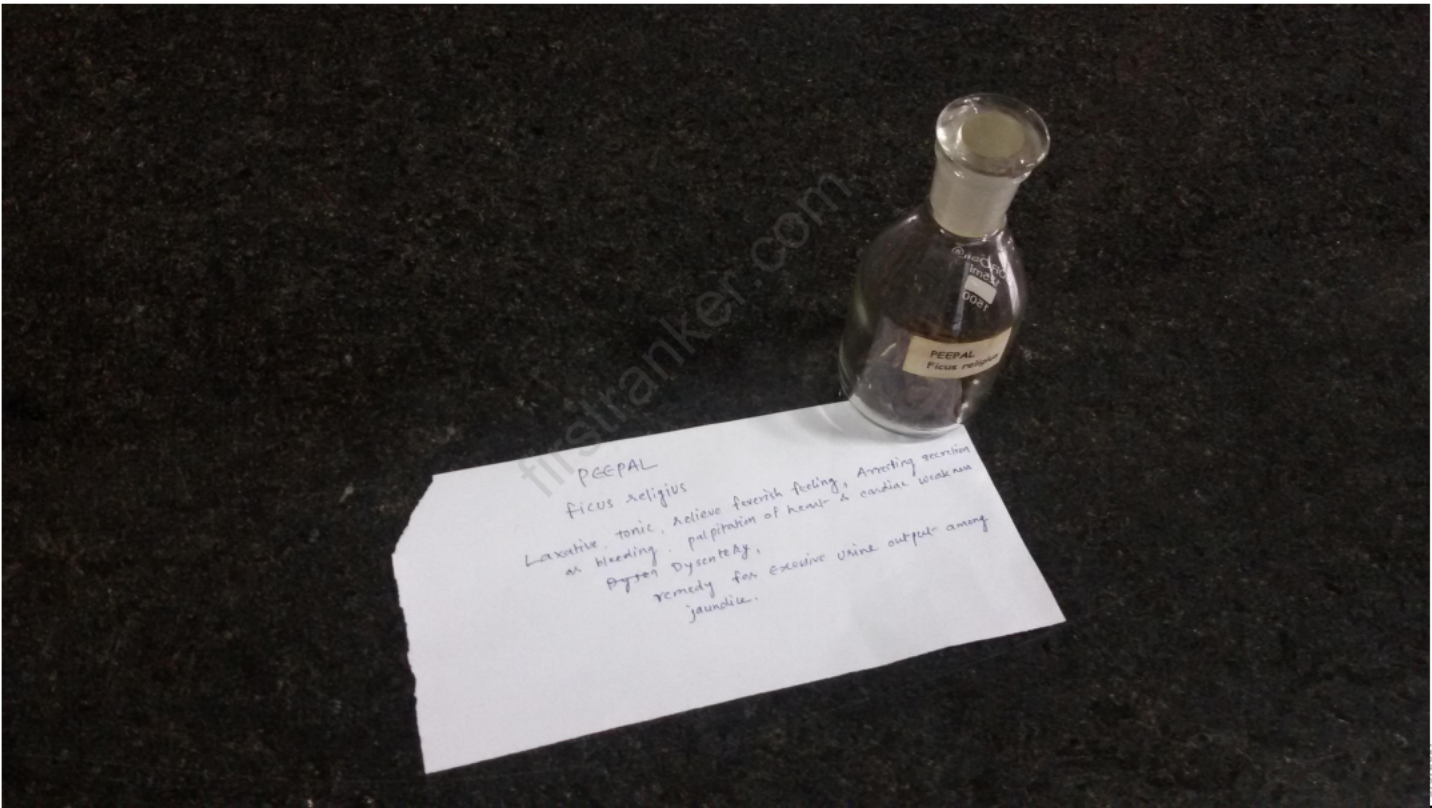




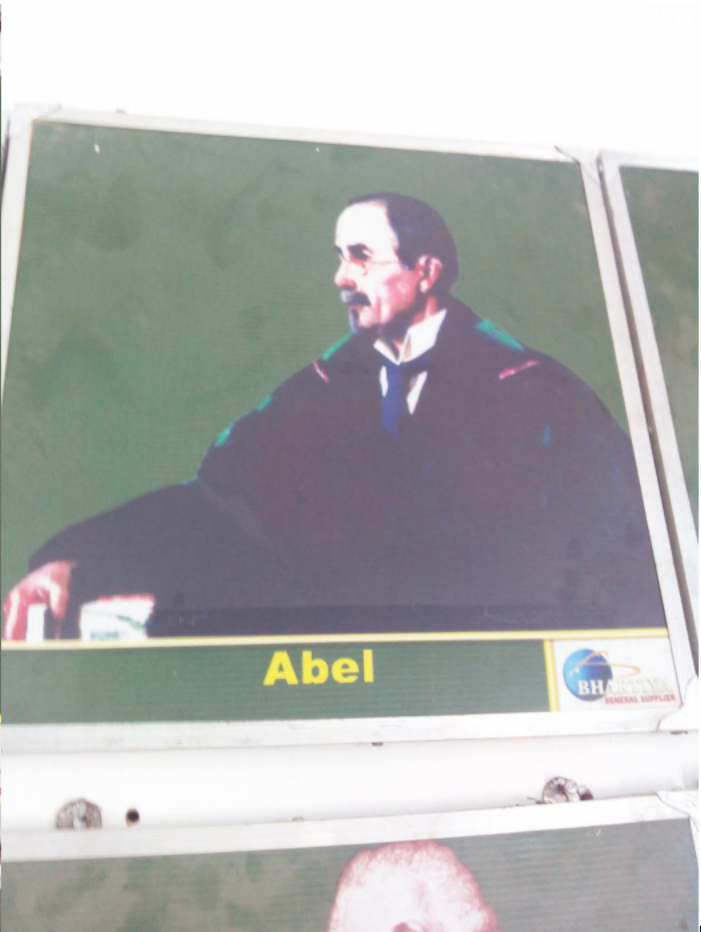
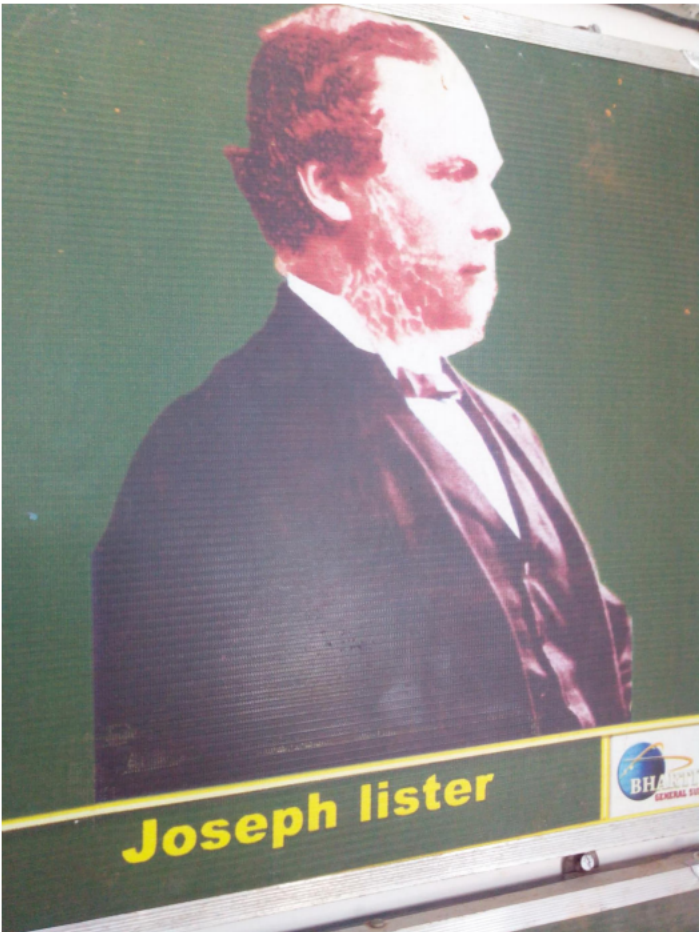














WILLIAM MORTON (1819-1868): An American Dental Surgeon.
First successful demonstration of Ether Anaesthesia during surgery.
Credited with gaining the medical world's acceptance of anaesthesia.

FRANCOIS MAGENDIE (1783-1855): A French Experimental Physiologist.
First to prove the functional difference of spinal nerves.
Studied the effects of drugs on various parts of the body - introduced
of compounds such as strychnine and morphine.
First to observe phenomenon of Anaphylaxis.

FREDERICK BANTING (1891-1941): A Canadian Physician. 1923
NOBEL PRIZE for Medicine.
One of the first to extract (1921) the Insulin Hormone.
(Joseph von Mering and Oskar Minkowski in 1889 found that pancreas
removal in dogs cause severe diabetes)

JOHN JACOB ABEL (1857-1938): An American Pharmacologist.
Second to isolate epinephrine. (first Napoleon Gybulski)
Formulated the idea of Artificial Kidney and isolated aminoacids in blood.

JOSEPH LISTER (1827-1912): A British Surgeon.
A pioneer of Antiseptic Surgery. Successfully introduced carbolic
acid (phenol) to sterilise surgical instruments and clean wounds
which led to a reduction in post-operative infections and made surgery
safer for patients.



KYMOGRAPH

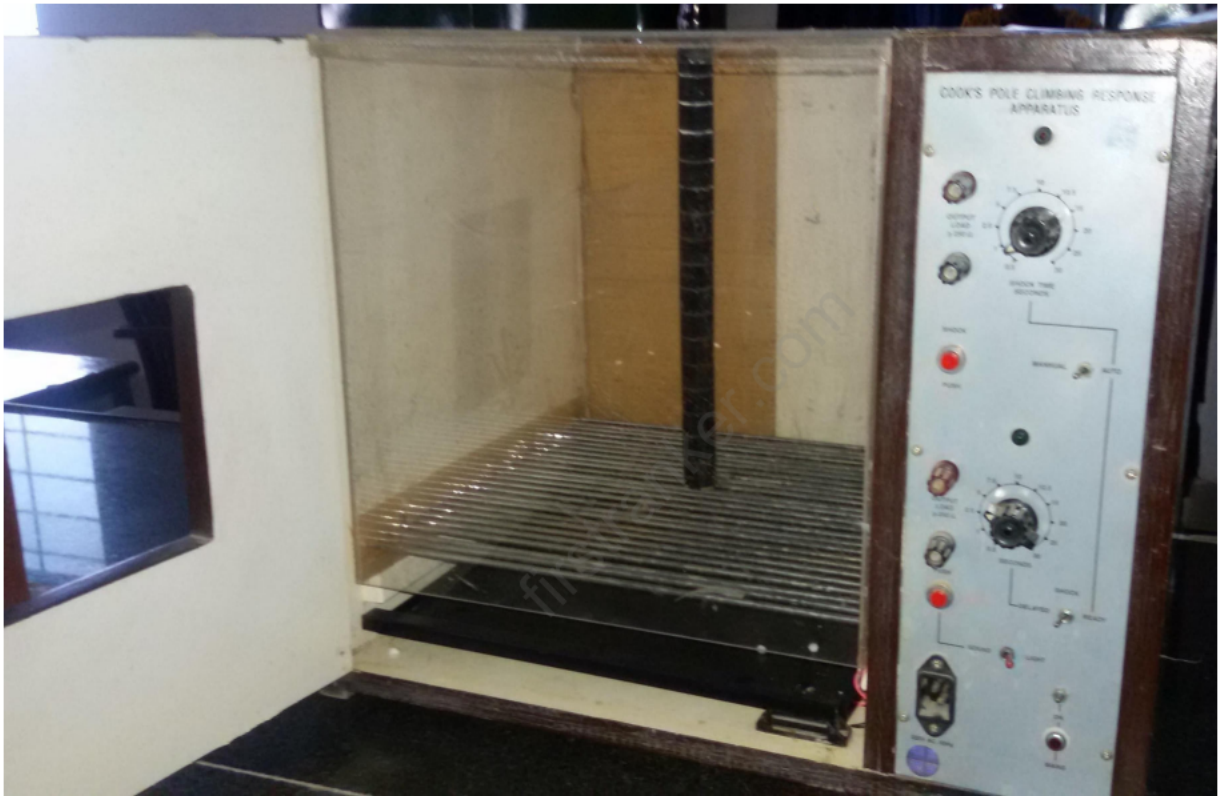




STARLING HEART LEVER



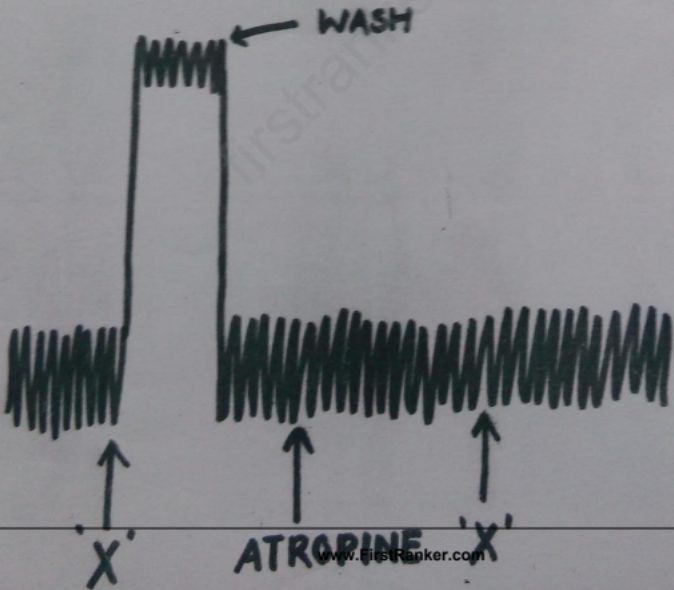




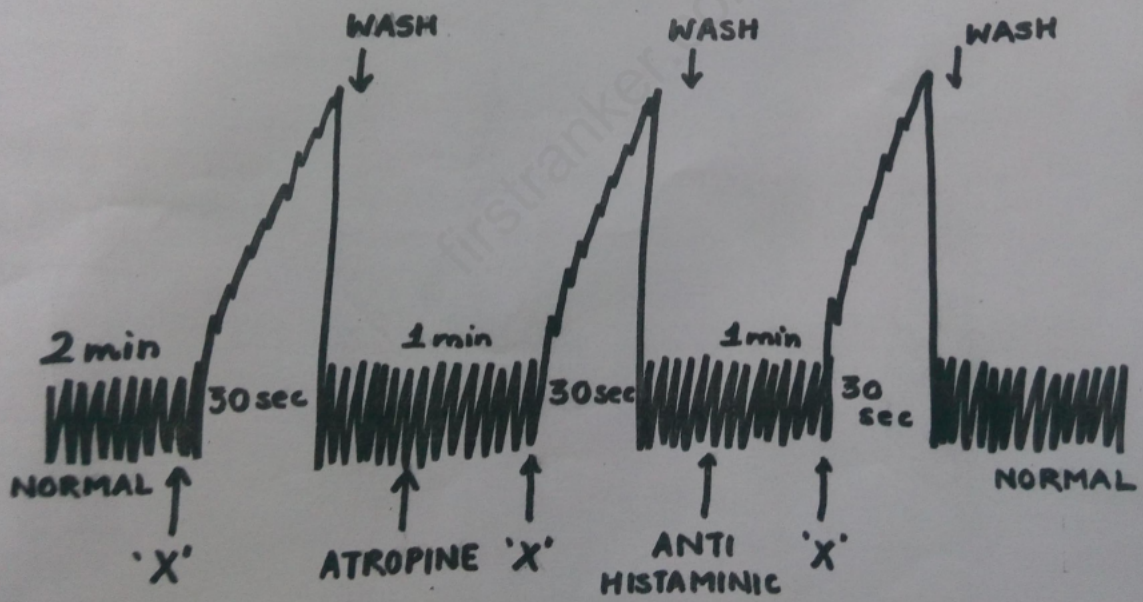
COOKS POLE CLIMBING
RESPONSE APPARUTUS

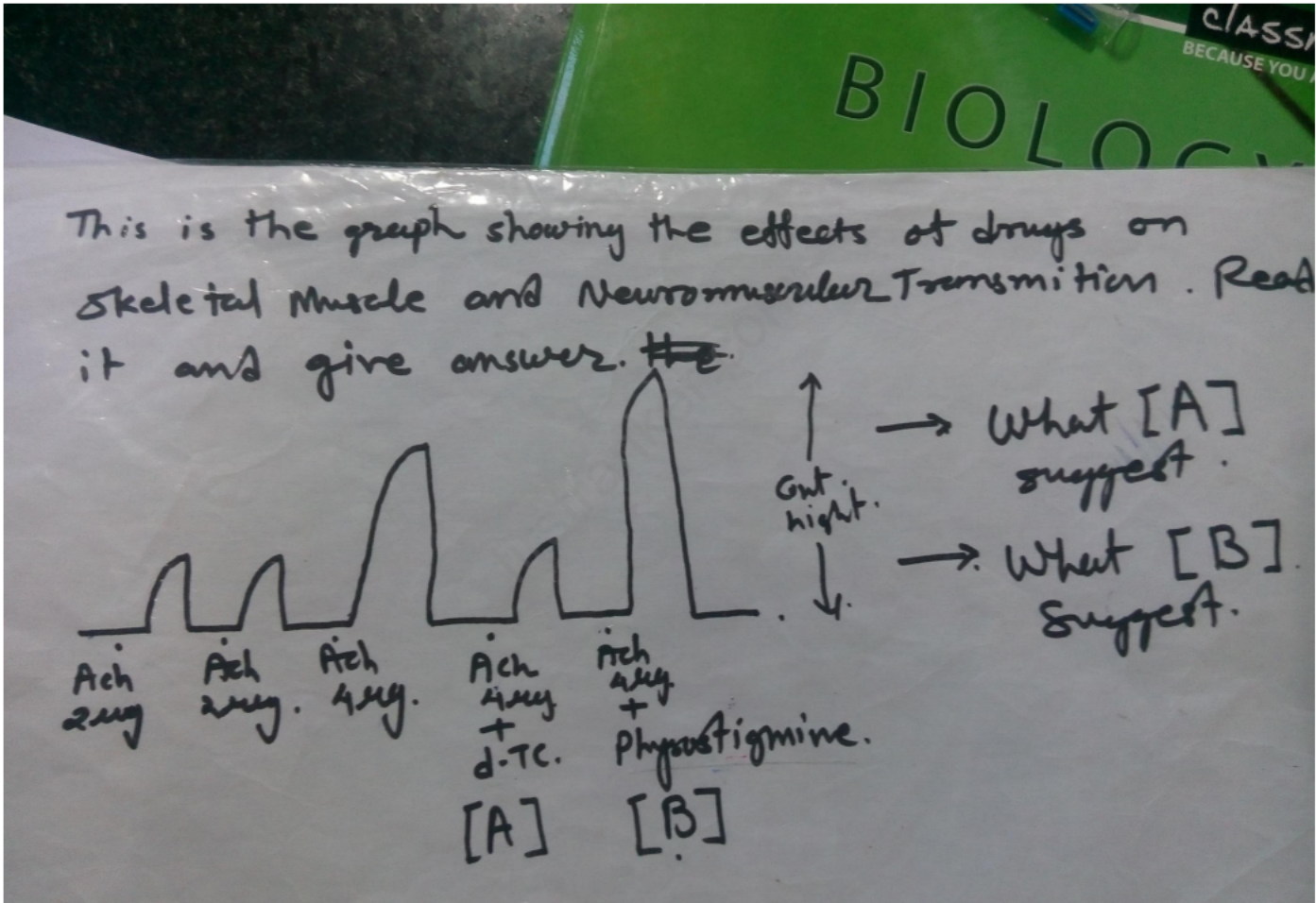


This is the Graph showing the effect of drug 'X' on rabbit's intestine. Identify the drug 'X' giving reasons.

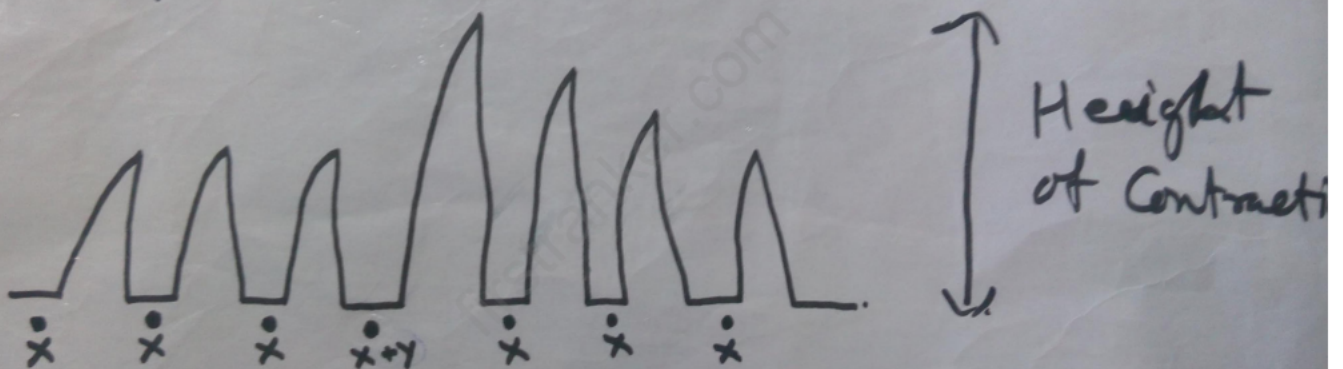


This is the Graph showing the effect of drug 'X' on rabbit's intestine. Identify the drug 'X' giving reasons.





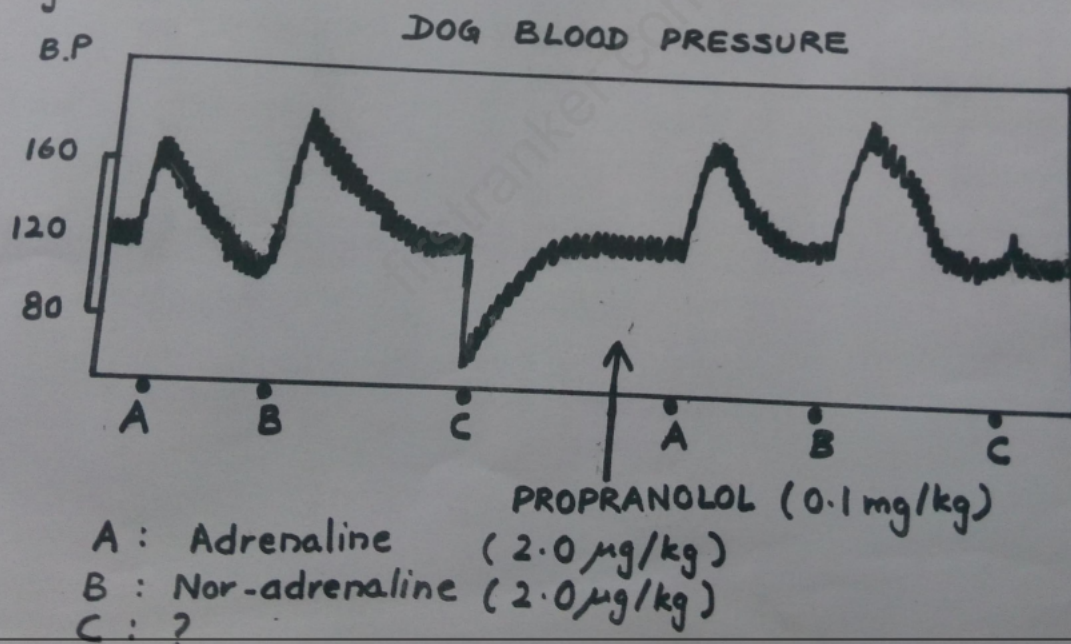
Following graph showing the effects of drugs on frog rectus abdominis muscle. Explain agonism and antagonism.



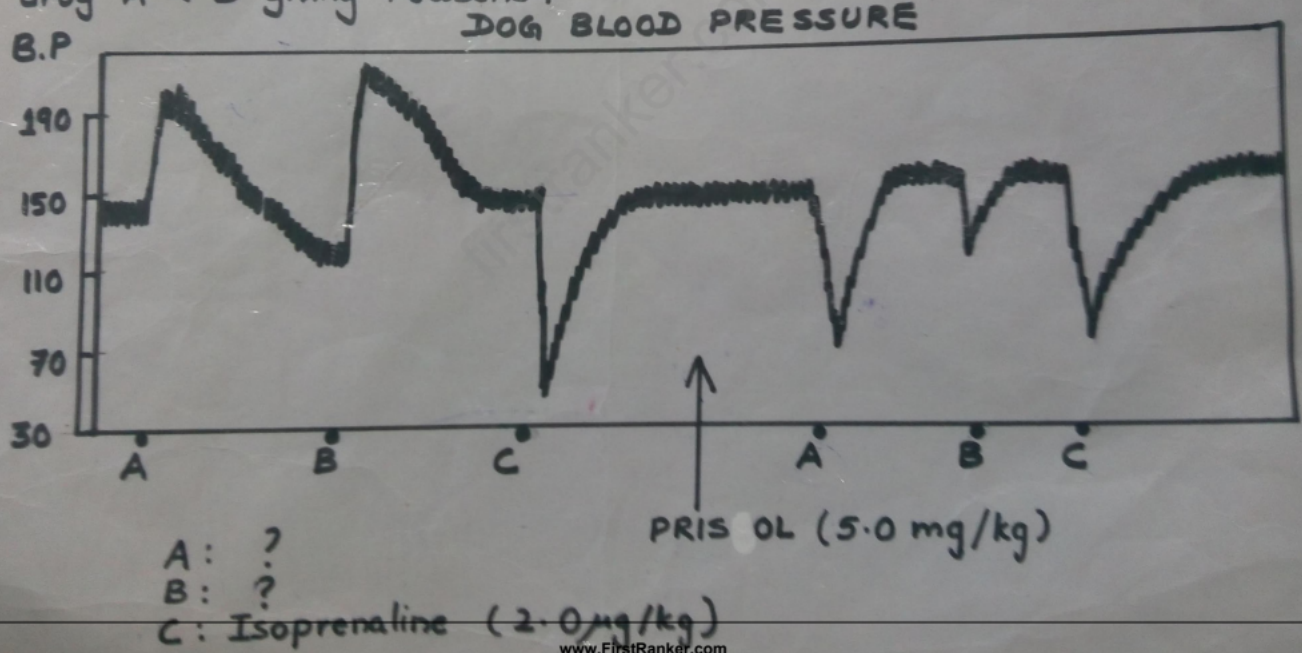
x - Ach.

y - Anti choline esterase.

Following graph shows effect of drug A, B & C on dog blood pressure. The response of drug A, B & C are repeated after administration of propranolol. Identify the probable nature of drug C giving reasons.



Following graph shows the effect of drug A, B & C on dog blood pressure. The response of these drugs are recorded after administration of prisol. Identify the probable nature of drug A & B giving reasons.



Following graph shows the effect of repeated administration of drug A on dog blood pressure. Read the graph & explain. Identify the probable nature of drug A giving reasons.

