

Pharmacology (Test) [Excluding Nervous System]

Pharmacology 2

Author: Rohini Ajay

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4. Chapter: Pharmacology (Test) [Excluding Nervous System]

1. Pharmacology (Test) [Excluding Nervous System] Questions

4.1.1. The Minimum Alveolar Concentration (MAC) is

Author: Rohini Ajay

The Minimum Alveolar Concentration (MAC) is

% needed in inhaled air for 50% of the patients in being unconscious.

Check the answer of this question online at QuizOver.com:

Question: [The Minimum Alveolar Concentration MAC is . Rohini Ajay Pharmacology](#)

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<http://www.quizover.com/flashcards/question-the-minimum-alveolar-concentration-mac-is-rohini-ajay-pharmac?pdf=1604>

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4.1.2. What is the evidence to show that the Protein Theory may explain th...

Author: Rohini Ajay

What is the evidence to show that the Protein Theory may explain the mechanism of General Anaesthetics?

Mutation analysis of receptors in animal models caused an increase/decrease in potency.

Check the answer of this question online at QuizOver.com:

Question: [What is the evidence to show that the Protein Rohini Pharmacology](#)

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<http://www.quizover.com/flashcards/question-what-is-the-evidence-to-show-that-the-protein-rohini-pharmaco?pdf=1604>

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4.1.3. What is the problem with using a ligand binding assay?

Author: Rohini Ajay

What is the problem with using a ligand binding assay?

It doesn't account for non-specific binding.

Check the answer of this question online at QuizOver.com:

Question: [What is the problem with using a ligand Rohini Ajay Pharmacology](#)

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<http://www.quizover.com/flashcards/question-what-is-the-problem-with-using-a-ligand-rohini-ajay-pharmacol?pdf=1604>

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4.1.4. Why is flatulence a common side effect of taken an alpha-glucosidas...

Author: Rohini Ajay

Why is flatulence a common side effect of taken an alpha-glucosidase inhibitor to treat diabetes?

Alpha-glucosidase inhibitors block alpha-glucosidases which reduces the amount of carbohydrates broken down into glucose and other monosaccharides. Meaning it's not broken down in the intestines but in the colon, bacteria digests it and this produces flatulence (and diarrhoea).

Check the answer of this question online at QuizOver.com:

Question: [Why is flatulence a common side effect of Rohini Ajay Pharmacology](#)

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4.1.5. What is the word used to describe when an increase in dose is requi...

Author: Rohini Ajay

What is the word used to describe when an increase in dose is required to produce a pharmacological effect?

Tolerance.

Dependence=compulsive craving that develops as a result of repeated administration of the drug.

Check the answer of this question online at QuizOver.com:

Question: [What is the word used to describe when an Rohini Ajay Pharmacology](#)

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4.1.6. What is dependency?

What is an example of the disease it is used...

Author: Rohini Ajay

What is dependency?

What is an example of the disease it is used in and what is the ion channel causes the disease?

Dependency= switching off OVER active receptors/ion channels by blocking/binding drugs to them.

Eg. Epilepsy --> Na⁺ channels

Hypertension ---> Ca²⁺ channels

Cardia arrhythmias --> Na⁺ channels

Check the answer of this question online at QuizOver.com:

Question: [What is dependency What is an example of the Rohini Ajay Pharmacology](#)

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4.1.7. Why is desensitisation/desensitisation important in terms of GPCR s...

Author: Rohini Ajay

Why is desensitisation/desensitisation important in terms of GPCR signalling cascades?

To bring back the signalling cascade activation again. So another signal cascade can be produced.

Check the answer of this question online at QuizOver.com:

Question: [Why is desensitisation/desensitisation Rohini Ajay Pharmacology](#)

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4.1.8. State one reason why thiopental may not be advantageous to use as a...

Author: Rohini Ajay

State one reason why thiopental may not be advantageous to use as an intravenous anaesthetic?

It can accumulate.
It's a poor analgesic and muscle relaxant.
Can produce cardiorespiratory depression

Check the answer of this question online at QuizOver.com:

Question: [State one reason why thiopental may not be Rohini Ajay Pharmacology](#)

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4.1.9. Give one piece of supportive evidence for the Lipid Theory of how G...

Author: Rohini Ajay

Give one piece of supportive evidence for the Lipid Theory of how General Anaesthetics work and one piece of evidence for the problem of the theory.

Support:

- 1) Pressure is reversal
- 2) No defined chemical structure of GAs so theory fits for most GAs
- 3) Meyer-Overton correlation

Problems:

- 1) Stereoisomers
- 2) New compounds don't fit Meyer-Overton correlation
- 3) Increase of C-C length gives cut-off effect
- 4) Non-immobilisers
- 5) Small increases in temperature produce similar changes in membrane density and fluidity but don't produce anaesthesia.
- 6) Similar correlation with partition of GAs into protein.

Check the answer of this question online at QuizOver.com:

Question: [Give one piece of supportive evidence for Rohini Ajay Pharmacology](#)

Flashcards:

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4.1.10. What are spare receptors?

Author: Rohini Ajay

What are spare receptors?

Not 100% of receptors need to be occupied for a maximum response therefore spare receptors are the receptors left when the lowest [agonist] produces the maximum response.

Check the answer of this question online at QuizOver.com:

Question: [What are spare receptors Rohini Ajay Pharmacology 2nd step Quest](#)

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4.1.11. What is one way in which a drug may be able to cross the blood-brain...

Author: Rohini Ajay

What is one way in which a drug may be able to cross the blood-brain barrier?

Blood brain barrier= layer of tightly joined ENDOTHELIAL cells that prevents many drugs entering (main problem for treatment of alzheimer's ect.)

Easiest mechanism= passive diffusion.

Also there's carrier mechanisms, endothelial pumps.

Check the answer of this question online at QuizOver.com:

Question: [What is one way in which a drug may be able Rohini Ajay Pharmacology](#)

Flashcards:

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4.1.12. Draw an agonist concentration-response curve. (Hint: x-axis = log[a...

Author: Rohini Ajay

Draw an agonist concentration-response curve. (Hint: x-axis = log[agonist])

See in section of Pharmacodynamics

Check the answer of this question online at QuizOver.com:

Question: [Draw an agonist concentration-response curve Rohini Ajay Pharmacology](#)

Flashcards:

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4.1.13. Gliclazide is a sulphonylurea that binds only to beta cells SURs. G...

Author: Rohini Ajay

Gliclazide is a sulphonylurea that binds only to beta cells SURs. Give one potential side effect of a sulphonylurea.

Hypoglycaemia
Weight gain
Hunger
Trembling
Anxiety, Blurred vision, paleness, vagueness, fast pulse

Check the answer of this question online at QuizOver.com:

Question: [Gliclazide is a sulphonylurea that binds only Rohini Pharmacology](#)

Flashcards:

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4.1.14. What order of kinetics do most drugs obey?

Author: Rohini Ajay

What order of kinetics do most drugs obey?

First order where the rate of elimination is proportional to the drug.
 $C_t = C_0 e^{-k_{el} \times t}$ (Know the equation and diagram).

Check the answer of this question online at QuizOver.com:

Question: [What order of kinetics do most drugs obey Rohini Ajay Pharmacology](#)

Flashcards:

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4.1.15. Name one possible treatment for Type 1 diabetes.

Author: Rohini Ajay

Name one possible treatment for Type 1 diabetes.

Type 1=insufficient insulin production. Pancreatic beta cells destroyed by immune response.
Treatment: Islet transplantation, Insulin injection, Diet and exercise monitoring.

Check the answer of this question online at QuizOver.com:

Question: [Name one possible treatment for Type 1 diabetes Rohini Pharmacology](#)

Flashcards:

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Interactive Question:

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4.1.16. State one effect on the CNS when using opioids.

Author: Rohini Ajay

State one effect on the CNS when using opioids.

Many from:

Respiratory depression (less sensitivity in medulla of partial pressure of CO₂)

Nausea and vomiting

Dry mouth

Euphoria

Drowsiness/lethargy

Depression of cough reflex

Pupillary constriction

Check the answer of this question online at QuizOver.com:

Question: [State one effect on the CNS when using opioids Rohini Pharmacology](#)

Flashcards:

<http://www.quizover.com/flashcards/question-state-one-effect-on-the-cns-when-using-opioids-rohini-pharmac?pdf=1604>

Interactive Question:

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4.1.17. Which blood plasma protein does a weak acid drug bind to?

Author: Rohini Ajay

Which blood plasma protein does a weak acid drug bind to?

Albumin

Weak bases bind to acid glycoprotein

Check the answer of this question online at QuizOver.com:

Question: [Which blood plasma protein does a weak acid Rohini Ajay Pharmacology](#)

Flashcards:

<http://www.quizover.com/flashcards/question-which-blood-plasma-protein-does-a-weak-acid-rohini-ajay-pharm?pdf=1604>

Interactive Question:

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4.1.18. Gliclazide is a sulphonylurea that binds only to beta cells SURs. G...

Author: Rohini Ajay

Gliclazide is a sulphonylurea that binds only to beta cells SURs. Give one potential side effect of a sulphonylurea.

Burnout of beta cells
Hypoglycaemia
Weigh gain
Hunger
Trembling
Anxiety, Blurred vision, paleness, vagueness, fast pulse

Check the answer of this question online at QuizOver.com:

Question: [Gliclazide is a sulphonylurea that binds only Rohini Pharmacology](#)

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Interactive Question:

<http://www.quizover.com/question/question-gliclazide-is-a-sulphonylurea-that-binds-only-rohini--3884332?pdf=1604>

4.1.19. In zero order kinetics (saturation kinetics) the rate of eliminatio...

Author: Rohini Ajay

In zero order kinetics (saturation kinetics) the rate of elimination is what to the drug constant?

NOT proportional to drug concentration but is a constant. E.g. ethanol, aspirin.
Half-life is NOT a constant and depends on the starting concentration

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Question: [Bioavailability area under curve dosage form Rohini Ajay Pharmacology](#)

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4.1.20. Describe the Gate Theory of feeling pain

Author: Rohini Ajay

Describe the Gate Theory of feeling pain

Hypothesises that feel pain less when combated with a distractive signal. So this signal (e.g. rubbing) stops the pain being registered as much in the brain.

Check the answer of this question online at QuizOver.com:

Question: [Describe the Gate Theory of feeling pain Rohini Ajay Pharmacology](#)

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4.1.21. State the equation to measure the proportion (P) of receptors occup...

Author: Rohini Ajay

State the equation to measure the proportion (P) of receptors occupied using the [A] (concentration of the drug) and its Kd.

$$P = [A] / (Kd + [A])$$

Check the answer of this question online at QuizOver.com:

Question: [State the equation to measure the proportion Rohini Ajay Pharmacology](#)

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4.1.22. What is HYPERglycaemia and what is HYPOglycaemia.

Author: Rohini Ajay

What is HYPERglycaemia and what is HYPOglycaemia.

Hyper=too high blood sugar
Hypo=too low blood sugar

Check the answer of this question online at QuizOver.com:

Question: [What is HYPERglycaemia and what is HYPOglycaemia Rohini Pharmacology](#)

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4.1.23. Which two forms of administration of drugs can be done to avoid fir...

Author: Rohini Ajay

Which two forms of administration of drugs can be done to avoid first-pass metabolism?

IV
Inhalation
Rectal at middle-lower part of rectum
Intranasal
Transdermal
Buccal & Sublingual

Check the answer of this question online at QuizOver.com:

Question: [Which two forms of administration of drugs Rohini Ajay Pharmacology](#)

Flashcards:

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4.1.24. Name one consequence of diabetes.

Author: Rohini Ajay

Name one consequence of diabetes.

Diabetic retinopathy, diabetic neuropathy, reduced blood flow, kidney failure, heart disease & stroke, CVD.

Check the answer of this question online at QuizOver.com:

Question: [Name one consequence of diabetes. Rohini Ajay Pharmacology 2nd Quest](#)

Flashcards:

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4.1.25. Name two ligands of family A (Rhodopsin Family) of GPCRs.

Author: Rohini Ajay

Name two ligands of family A (Rhodopsin Family) of GPCRs.

Rhodopsin, dopamine, oxytocin, vasopressin, adenosine, serotonin, chemokines

Check the answer of this question online at QuizOver.com:

Question: [Name two ligands of family A Rhodopsin Family Rohini Pharmacology](#)

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4.1.26. State the formula to measure the antagonist potency (pA2)

Author: Rohini Ajay

State the formula to measure the antagonist potency (pA2)

$pA_2 = -\log[\text{antagonist}]$

It is the concentration of antagonist that'd reduce the response by 1/2

Check the answer of this question online at QuizOver.com:

Question: [State the formula to measure the antagonist Rohini Ajay Pharmacology](#)

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4.1.27. What is desensitisation? (in terms of receptor and drug binding)

Author: Rohini Ajay

What is desensitisation? (in terms of receptor and drug binding)

When there is binding to a receptor for a prolonged period of time, the receptor becomes modified.

Check the answer of this question online at QuizOver.com:

Question: [What is desensitisation in terms of receptor Rohini Pharmacology](#)

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4.1.28. Draw the dose-response curve with:

- 1) The agonist alone on
- 2) Th...

Author: Rohini Ajay

Draw the dose-response curve with:

- 1) The agonist alone on
- 2) The agonist and a non-competitive antagonist

The non-competitive antagonist binds covalently/alters the receptor so the agonist cannot bind therefore the maximum response cannot be achieved.

Check the answer of this question online at QuizOver.com:

Question: [Draw the dose-response curve with: 1 The Rohini Ajay Pharmacology](#)

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4.1.29. What is the class type of drugs that activate receptors?

Author: Rohini Ajay

What is the class type of drugs that activate receptors?

Agonists
Antagonists=receptor blockers

Check the answer of this question online at QuizOver.com:

Question: [What is the class type of drugs that activate Rohini Pharmacology](#)

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4.1.30. What is the basic neuroendocrine axis?

Author: Rohini Ajay

What is the basic neuroendocrine axis?

Check the answer of this question online at QuizOver.com:

Question: [What is the basic neuroendocrine axis Rohini Ajay Pharmacology](#)

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4.1.31. Explain the mode of action of sulphonylureas in stimulating insulin...

Author: Rohini Ajay

Explain the mode of action of sulphonylureas in stimulating insulin secretion (can use diagram).

Refer to book for diagram.

- 1) Binds to SUR1 receptors (only on B cells)
- 2) Closes K⁺ ATP channel
- 3) Depolarises membrane
- 4) Opens voltage-dependent/gated Ca²⁺ channel (V(D/G)CC)
- 5) Stimulates exocytosis of insulin

Check the answer of this question online at QuizOver.com:

Question: [Explain the mode of action of sulphonylureas Rohini Ajay Pharmacology](#)

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4.1.32. Briefly underline the stages of anaesthesia (Guedel-1937)

Author: Rohini Ajay

Briefly underline the stages of anaesthesia (Guedel-1937)

Stage 1=awake but drowsy and at the end of the stage = analgesia
Stage 2= Loss of consciousness, loss of temp. control, irregular breathing
Stage 3= Surgical. Drop in BP, Regular breathing, large skeletal muscles relax.
Stage 4-Deeper Still= No ventilation due to depression of medulla oblongata (respiratory centres)

Check the answer of this question online at QuizOver.com:

Question: [Briefly underline the stages of anaesthesia Rohini Ajay Pharmacology](#)

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<http://www.quizover.com/flashcards/question-briefly-underline-the-stages-of-anaesthesia-rohini-ajay-pharm?pdf=1604>

Interactive Question:

<http://www.quizover.com/question/question-briefly-underline-the-stages-of-anaesthesia-rohini-ajay-pharm?pdf=1604>

4.1.33. Give one effect (of the two) of opioids on nociceptive pathways.

Author: Rohini Ajay

Give one effect (of the two) of opioids on nociceptive pathways.

- 1) Inhibition of pain transmission through the dorsal horn.
- 2) Inhibits transmitter release from primary afferent neurons.

Check the answer of this question online at QuizOver.com:

Question: [Give one effect of the two of opioids on Rohini Ajay Pharmacology](#)

Flashcards:

<http://www.quizover.com/flashcards/question-give-one-effect-of-the-two-of-opioids-on-rohini-ajay-pharmaco?pdf=1604>

Interactive Question:

<http://www.quizover.com/question/question-give-one-effect-of-the-two-of-opioids-on-rohini-ajay-pharmaco?pdf=1604>

4.1.34. Define Bioavailability

Author: Rohini Ajay

Define Bioavailability

Check the answer of this question online at QuizOver.com:

Question: [Define Bioavailability Rohini Ajay Pharmacology 2nd step Quest](#)

Flashcards:

<http://www.quizover.com/flashcards/question-define-bioavailability-rohini-ajay-pharmacology-2nd-step-ques?pdf=1604>

Interactive Question:

<http://www.quizover.com/question/question-define-bioavailability-rohini-ajay-pharmacology-2nd-step-ques?pdf=1604>

4.1.35. What is first-pass metabolism?

Author: Rohini Ajay

What is first-pass metabolism?

Metabolism by the liver and gut.

Check the answer of this question online at QuizOver.com:

Question: [What is first-pass metabolism Rohini Ajay Pharmacology 2nd step Quest](#)

Flashcards:

<http://www.quizover.com/flashcards/question-what-is-first-pass-metabolism-rohini-ajay-pharmacology-2nd-st?pdf=1604>

Interactive Question:

<http://www.quizover.com/question/question-what-is-first-pass-metabolism-rohini-ajay-pharmacology-2nd-st?pdf=1604>

4.1.36. Using the single compartment model say for example, 3mg of drug X h...

Author: Rohini Ajay

Using the single compartment model say for example, 3mg of drug X has been administered. 0.1% is in tissue and 99.9% is in blood plasma proteins of about 1mg/L . What is the apparent volume of distribution?

$$3\text{mg}/1\text{mg} = 3\text{L}$$

E.g. 3mg drug. 99% in tissue and 1% in plasm. With conc. in plasm at 0.01 mg/L

Apparent volume of distribution = $3/0.01 = 300\text{L}$

Apparent volume of distribution (L) = Amount of drug in body at equilibrium (mg) / plasma drug concentration (mg/L)

Check the answer of this question online at QuizOver.com:

Question: [Using the single compartment model say for Rohini Ajay Pharmacology](#)

Flashcards:

<http://www.quizover.com/flashcards/question-using-the-single-compartment-model-say-for-rohini-ajay-pharma?pdf=1604>

Interactive Question:

<http://www.quizover.com/question/question-using-the-single-compartment-model-say-for-rohini-ajay-pharma?pdf=1604>

4.1.37. What is the clearance equation?

Author: Rohini Ajay

What is the clearance equation?

Clearance (mL/min) = Rate of elimination / concentration of input

Total body clearance is the sum of all clearances occurring simultaneously by different organs in the body.

Check the answer of this question online at QuizOver.com:

Question: [What is the clearance equat Rohini Ajay Pharmacology 2nd step Quest](#)

Flashcards:

<http://www.quizover.com/flashcards/question-what-is-the-clearance-equat-rohini-ajay-pharmacology-2nd-step?pdf=1604>

Interactive Question:

<http://www.quizover.com/question/question-what-is-the-clearance-equat-rohini-ajay-pharmacology-2nd-step?pdf=1604>

4.1.38. What is the Henderson and Hasselbach equation?

Author: Rohini Ajay

What is the Henderson and Hasselbach equation?

$pH = pKa + \log \left(\frac{A^-}{HA} \right)$
e.g. pH in stomach = ~2 and pKa aspirin = ~3.5
 $2 = 3.5 + \log \left(\frac{A^-}{HA} \right)$
 $\log \left(\frac{A^-}{HA} \right) = -1.5$
 $10^{-1.5} = 0.03$ [Proportion of unionised molecules for every 1 ionised]
 $1/0.03 = 33 \%$

Check the answer of this question online at QuizOver.com:

Question: [What is the Henderson and Hasselbach equation Rohini Ajay Pharmacology](#)

Flashcards:

<http://www.quizover.com/flashcards/question-what-is-the-henderson-and-hasselbach-equation-rohini-ajay-pharma?pdf=1604>

Interactive Question:

<http://www.quizover.com/question/question-what-is-the-henderson-and-hasselbach-equation-rohini-ajay-pharma?pdf=1604>

4.1.39. Name an agonist

Author: Rohini Ajay

Name an agonist

Adrenaline, Salbutamol (asthma), Oxymetazoline (nasal congestion), Dopamine, Morphine

Check the answer of this question online at QuizOver.com:

Question: [Name an agonist Rohini Ajay Pharmacology 2nd step Quest](#)

Flashcards:

<http://www.quizover.com/flashcards/question-name-an-agonist-rohini-ajay-pharmacology-2nd-step-quest?pdf=1604>

Interactive Question:

<http://www.quizover.com/question/question-name-an-agonist-rohini-ajay-pharmacology-2nd-step-quest?pdf=1604>

4.1.40. Give one advantage of using an inhalation anaesthetic?

Author: Rohini Ajay

Give one advantage of using an inhalation anaesthetic?

Fast loss of consciousness.
Smooth induction and recovery
Produce dose dependent lowering of the mean arterial pressure.

Check the answer of this question online at QuizOver.com:

Question: [Give one advantage of using an inhalation Rohini Ajay Pharmacology](#)

Flashcards:

<http://www.quizover.com/flashcards/question-give-one-advantage-of-using-an-inhalation-rohini-ajay-pharmac?pdf=1604>

Interactive Question:

<http://www.quizover.com/question/question-give-one-advantage-of-using-an-inhalation-rohini-ajay-pharmac?pdf=1604>

4.1.41. List all 5 steps of peptide/protein hormone synthesis from mRNA

Author: Rohini Ajay

List all 5 steps of peptide/protein hormone synthesis from mRNA

Check the answer of this question online at QuizOver.com:

Question: [List all 5 steps of hormone synthesis from Rohini Ajay Pharmacology](#)

Flashcards:

<http://www.quizover.com/flashcards/question-list-all-5-steps-of-hormone-synthesis-from-rohini-ajay-pharma?pdf=1604>

Interactive Question:

<http://www.quizover.com/question/question-list-all-5-steps-of-hormone-synthesis-from-rohini-ajay-pharma?pdf=1604>

4.1.42. What does (at least in the short term) use of alpha-glucosidase inh...

Author: Rohini Ajay

What does (at least in the short term) use of alpha-glucosidase inhibitors do?

They inhibit the enzyme alpha glucosidase which digests oligosaccharides into glucose and monosaccharides. Inhibition of these enzymes causes a decreased rate of digestion of these carbohydrates = less glucose is absorbed = decrease in current blood glucose levels.

Check the answer of this question online at QuizOver.com:

Question: [What does at least in the short term use of Rohini Ajay Pharmacology](#)

Flashcards:

<http://www.quizover.com/flashcards/question-what-does-at-least-in-the-short-term-use-of-rohini-ajay-pharm?pdf=1604>

Interactive Question:

<http://www.quizover.com/question/question-what-does-at-least-in-the-short-term-use-of-rohini-ajay-pharm?pdf=1604>

4.1.43. How is steroid hormone synthesis different from peptide/protein hor...

Author: Rohini Ajay

How is steroid hormone synthesis different from peptide/protein hormone synthesis

Check the answer of this question online at QuizOver.com:

Question: [How is steroid hormone synthesis different Rohini Ajay Pharmacology](#)

Flashcards:

<http://www.quizover.com/flashcards/question-how-is-steroid-hormone-synthesis-different-rohini-ajay-pharma?pdf=1604>

Interactive Question:

<http://www.quizover.com/question/question-how-is-steroid-hormone-synthesis-different-rohini-ajay-pharma?pdf=1604>

4.1.44. In reference to GPCRs what are orphan receptors?

Author: Rohini Ajay

In reference to GPCRs what are orphan receptors?

Orphan receptors= identified to be from GPCR family by homology cloning but activating ligand of them is unknown.

Check the answer of this question online at QuizOver.com:

Question: [In reference to GPCRs what are orphan receptors Rohini Pharmacology](#)

Flashcards:

<http://www.quizover.com/flashcards/question-in-reference-to-gpcrs-what-are-orphan-receptors-rohini-pharma?pdf=1604>

Interactive Question:

<http://www.quizover.com/question/question-in-reference-to-gpcrs-what-are-orphan-receptors-rohini-pharma?pdf=1604>

4.1.45. Where in the general body do general anaesthetics work?

Author: Rohini Ajay

Where in the general body do general anaesthetics work?

The brain to cause loss of consciousness.

Check the answer of this question online at QuizOver.com:

Question: [Where in the general body do general anaesthetics Rohini Pharmacology](#)

Flashcards:

<http://www.quizover.com/flashcards/question-where-in-the-general-body-do-general-anaesthetics-rohini-phar?pdf=1604>

Interactive Question:

<http://www.quizover.com/question/question-where-in-the-general-body-do-general-anaesthetics-rohini-phar?pdf=1604>

4.1.46. Name one general anaesthetic (inhalation anaesthetic)

Author: Rohini Ajay

Name one general anaesthetic (inhalation anaesthetic)

Choice from:

Halothane, isoflurane, seroflurane, desflurane.

Check the answer of this question online at QuizOver.com:

Question: [Name one general anaesthetic inhalation Rohini Ajay Pharmacology](#)

Flashcards:

<http://www.quizover.com/flashcards/question-name-one-general-anaesthetic-inhalation-rohini-ajay-pharmacol?pdf=1604>

Interactive Question:

<http://www.quizover.com/question/question-name-one-general-anaesthetic-inhalation-rohini-ajay-pharmacol?pdf=1604>

4.1.47. Draw a labelled diagram of the G-protein cycle and how it's activit...

Author: Rohini Ajay

Draw a labelled diagram of the G-protein cycle and how it's activity is regulated by binding of accessory proteins.

Draw with the GEF and GAP proteins switching the G-protein on and off. Not the other cycle diagram.

Check the answer of this question online at QuizOver.com:

Question: [Draw a labelled diagram of the G-protein Rohini Ajay Pharmacology](#)

Flashcards:

<http://www.quizover.com/flashcards/question-draw-a-labelled-diagram-of-the-g-protein-rohini-ajay-pharmaco?pdf=1604>

Interactive Question:

<http://www.quizover.com/question/question-draw-a-labelled-diagram-of-the-g-protein-rohini-ajay-pharmaco?pdf=1604>

4.1.48. If Kel is 0.3/hour and Co is 100mg/L what is the concentration (Ct)...

Author: Rohini Ajay

If Kel is 0.3/hour and Co is 100mg/L what is the concentration (Ct) after 4 hours?

Ct= Coe^{-Kel x t}
Ct= 30.1 mg/L

Check the answer of this question online at QuizOver.com:

Question: [If Kel is 0.3/hour and Co is 100mg/L what is Rohini Ajay Pharmacology](#)

Flashcards:

<http://www.quizover.com/flashcards/question-if-kel-is-0-3-hour-and-co-is-100mg-l-what-is-rohini-ajay-phar?pdf=1604>

Interactive Question:

<http://www.quizover.com/question/question-if-kel-is-0-3-hour-and-co-is-100mg-l-what-is-rohini-ajay-phar?pdf=1604>

4.1.49. Draw a drug-response curve with:

- 1) The agonist alone
- 2) The agon...

Author: Rohini Ajay

Draw a drug-response curve with:

- 1) The agonist alone
- 2) The agonist and a competitive antagonist where the agonist outcompetes the antagonist

In Pharmacokinetics.
The EC50 should be noted on as higher with a shift to the right.
Same max. response should be achieved by both curves.

Check the answer of this question online at QuizOver.com:

Question: [Draw a drug-response curve with: 1 The agonist Rohini Pharmacology](#)

Flashcards:

<http://www.quizover.com/flashcards/question-draw-a-drug-response-curve-with-1-the-agonist-rohini-pharmaco?pdf=1604>

Interactive Question:

<http://www.quizover.com/question/question-draw-a-drug-response-curve-with-1-the-agonist-rohini-pharmaco?pdf=1604>

4.1.50. What is an opioid analgesic and give an example of one of these.

Author: Rohini Ajay

What is an opioid analgesic and give an example of one of these.

They are drugs derived from opium (from the poppy) and are used as analgesics. Eg. include: morphine and codeine.

Check the answer of this question online at QuizOver.com:

Question: [What is an opioid analgesic and give an Rohini Ajay Pharmacology](#)

Flashcards:

<http://www.quizover.com/flashcards/question-what-is-an-opioid-analgesic-and-give-an-rohini-ajay-pharmacol?pdf=1604>

Interactive Question:

<http://www.quizover.com/question/question-what-is-an-opioid-analgesic-and-give-an-rohini-ajay-pharmacol?pdf=1604>

4.1.51. What evidence is there to suggest that opioid agonists bind to spec...

Author: Rohini Ajay

What evidence is there to suggest that opioid agonists bind to specific receptors (unlike general anaesthetics)?

Opioid analogs have strict structure that are related to their activity, unlike general anaesthetics. And use of opioid antagonists caused a reverse effect of opioid analgesics.

Check the answer of this question online at QuizOver.com:

Question: [What evidence is there to suggest that opioid Rohini Pharmacology](#)

Flashcards:

<http://www.quizover.com/flashcards/question-what-evidence-is-there-to-suggest-that-opioid-rohini-pharmaco?pdf=1604>

Interactive Question:

<http://www.quizover.com/question/question-what-evidence-is-there-to-suggest-that-opioid-rohini-pharmaco?pdf=1604>

4.1.52. GLP-1 is secreted by L=cells upon ingestion of food. It has many ef...

Author: Rohini Ajay

GLP-1 is secreted by L=cells upon ingestion of food. It has many effects, one of which is on the stomach. What is it's effect on the stomach?

Effects:

Beta cells= enhances glucose=dependent insulin secretion in pancreas.

Alpha cells=suppresses glucagon secretion

Liver = reduces glucose output

Stomach= slows rate of gastric emptying

Brain= promotes satiety and reduces appetite.

Check the answer of this question online at QuizOver.com:

Question: [GLP-1 is secreted by L cells upon ingestion Rohini Ajay Pharmacology](#)

Flashcards:

<http://www.quizover.com/flashcards/question-glp-1-is-secreted-by-l-cells-upon-ingestion-rohini-ajay-pharm?pdf=1604>

Interactive Question:

<http://www.quizover.com/question/question-glp-1-is-secreted-by-l-cells-upon-ingestion-rohini-ajay-pharm?pdf=1604>

4.1.53. State one reason why administering a injection intravenously may no...

Author: Rohini Ajay

State one reason why administering a injection intravenously may not be done

Any from:
Needing sterile equipment
Needing trained personnel
Costs may be too expensive
It could be potentially painful

Check the answer of this question online at QuizOver.com:

Question: [State one reason why administering a injection Rohini Pharmacology](#)

Flashcards:

<http://www.quizover.com/flashcards/question-state-one-reason-why-administering-a-injection-rohini-pharmac?pdf=1604>

Interactive Question:

<http://www.quizover.com/question/question-state-one-reason-why-administering-a-injection-rohini-pharmac?pdf=1604>

4.1.54. Draw a drug response curve to show binding of a full agonist and pa...

Author: Rohini Ajay

Draw a drug response curve to show binding of a full agonist and partial agonist, where the partial agonist has a higher affinity than the full agonist.

See section on Pharmacokinetics.

Check the answer of this question online at QuizOver.com:

Question: [Draw a drug response curve to show binding Rohini Ajay Pharmacology](#)

Flashcards:

<http://www.quizover.com/flashcards/question-draw-a-drug-response-curve-to-show-binding-rohini-ajay-pharma?pdf=1604>

Interactive Question:

<http://www.quizover.com/question/question-draw-a-drug-response-curve-to-show-binding-rohini-ajay-pharma?pdf=1604>

4.1.55. The rate of absorption of a drug orally taken is dependent on what ...

Author: Rohini Ajay

The rate of absorption of a drug orally taken is dependent on what 3 things?

Gut motility

Gastric emptying (modulated by e.g. meal size, meal composition, physiological state)

Blood flow concentration gradient--> There's an increased blood flow to the gut after eating.

2+3 are small changes.

Check the answer of this question online at QuizOver.com:

Question: [The rate of absorption of a drug orally taken Rohini Pharmacology](#)

Flashcards:

<http://www.quizover.com/flashcards/question-the-rate-of-absorption-of-a-drug-orally-taken-rohini-pharmaco?pdf=1604>

Interactive Question:

<http://www.quizover.com/question/question-the-rate-of-absorption-of-a-drug-orally-taken-rohini-pharmaco?pdf=1604>

4.1.56. Explain the G-protein cycle

Author: Rohini Ajay

Explain the G-protein cycle

See diagram on having the complex forming, then GTP, then activated complex.

Check the answer of this question online at QuizOver.com:

Question: [Explain the G-protein cycle Rohini Ajay Pharmacology 2nd step Quest](#)

Flashcards:

<http://www.quizover.com/flashcards/question-explain-the-g-protein-cycle-rohini-ajay-pharmacology-2nd-step?pdf=1604>

Interactive Question:

<http://www.quizover.com/question/question-explain-the-g-protein-cycle-rohini-ajay-pharmacology-2nd-step?pdf=1604>

4.1.57. The EEG is another way of measuring the stages of anaesthesia. As a...

Author: Rohini Ajay

The EEG is another way of measuring the stages of anaesthesia. As anaesthesia deepens the amplitude of EEG of higher frequency components increases and that of lower frequency decreases.

What is a caveat of this method?

Changes are agent dependent.
Various pathophysiological events affect the EEG (e.g. hypercapnia, hypoxia).

Check the answer of this question online at QuizOver.com:

Question: [The EEG is another way of measuring the stages Rohini Pharmacology](#)

Flashcards:

<http://www.quizover.com/flashcards/question-the-eeeg-is-another-way-of-measuring-the-stages-rohini-pharmac?pdf=1604>

Interactive Question:

<http://www.quizover.com/question/question-the-eeeg-is-another-way-of-measuring-the-stages-rohini-pharmac?pdf=1604>

4.1.58. Name one factor that can decrease the length of recovery from anaes...

Author: Rohini Ajay

Name one factor that can decrease the length of recovery from anaesthesia.

- 1) Reduction of the inspired concentration
- 2) High alveolar ventilation
- 3) Low blood gas solubility
- 4) Short duration of anaesthesia.

Check the answer of this question online at [QuizOver.com](http://www.quizover.com):

Question: [Name one factor that can decrease the length Rohini Ajay Pharmacology](#)

Flashcards:

<http://www.quizover.com/flashcards/question-name-one-factor-that-can-decrease-the-length-rohini-ajay-phar?pdf=1604>

Interactive Question:

<http://www.quizover.com/question/question-name-one-factor-that-can-decrease-the-length-rohini-ajay-phar?pdf=1604>