

# HiYield Paper A(2)

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**Grade** 0.00 out of 100.00

## Question 1

Not answered

Marked out of 1.00

 Flag question

HiY Basic Pharmacology 001

Which of the following has at least a preliminary evidence base for managing Treatment-Resistant Depression?

Select one:

- Fluoxetine and clonazepam
- Fluoxetine and mianserin
- Citalopram and valproate
- Venlafaxine and Mirtazapine
- Duloxetine and fluoxetine

Check


Venlafaxine-mirtazapine combination is called Californian rocket fuel, which is recommended by NICE in the treatments of refractory depression. It is usually well tolerated, has reasonable literature support and is becoming more widely used. (Palaniyappan et al., 2008)

The correct answer is: Venlafaxine and Mirtazapine

## Question 2

Not answered

Marked out of 1.00

 Flag question

HiY Basic Pharmacology 002

Buspirone is a

Select one:

- GABA agonist
- 5-HT<sub>1A</sub> partial agonist
- 5-HT<sub>1A</sub> agonist
- 5-HT<sub>1A</sub> antagonist
- GABA antagonist

Check


It is a partial agonist

The correct answer is: 5-HT1A partial agonist

**Question 3**

Not answered

Marked out of 1.00

 Flag question

HiY Basic Pharmacology 003

Which of the following is linked with intentional nonadherence?

Select one:

- Missed doses after long period on treatment
- High degree of trust on the treating doctor
- A desire for self-efficacy
- Receipt of adequate levels of drug information
- Higher severity of illness

Check


Patients with a high desire for self-efficacy are found to have higher degree of intentional nonadherence.

The correct answer is: A desire for self-efficacy

**Question 4**

Not answered

Marked out of 1.00

 Flag question

HiY Basic Pharmacology 004

A placebo is best described as which one of the following?

Select one:

- A preparation of active compound without a label
- An active preparation of precursor molecules
- A preparation with higher than average propensity to cause side effects
- A compound that is active for an unrelated disorder
- A dummy preparation of inactive compound

Check


Medication possesses a potential for therapeutic efficacy far beyond its chemical capacity. The placebo effect is a psychobiological phenomenon that can be attributable to different mechanisms, including an expectation of clinical improvement and Pavlovian conditioning. The Journal of Neuroscience, 9 November 2005, 25(45): 10390-10402;

The correct answer is: A dummy preparation of inactive compound

**Question 5**

Not answered

Marked out of 1.00

 Flag question

HiY Basic Pharmacology 005

Ethnic differences in psychiatric drug effects are noted in which of the following pharmacological actions?

Select one:

- Blood levels of haloperidol

- Hydroxylation of tricyclics
- All of the listed
- Prolactin response to antipsychotics
- Alcohol metabolism

Check

Maximal haloperidol concentration in plasma after rapid tranquillisation is significantly high for Asians than Caucasians. Nearly 40% Asians and around 60% South American Native Indians lack Aldehyde dehydrogenase enzyme in sufficient amounts to metabolise alcohol. Caucasians appear to have lower plasma levels of tricyclic antidepressants and attain plasma peaks later when compared with Asians (of Far Eastern ancestry as well as those from the Indian subcontinent). These differences have been attributed to a greater incidence of slow hydroxylation among Asians when compared with Caucasians. . On administration of antipsychotics, Asian subjects were reported to produce greater serum prolactin levels than Caucasian subjects. (Bhugra, D., & Bhui, K. (1999). Ethnic and cultural factors in psychopharmacology. *Advances in Psychiatric Treatment*, 5, 89-95.)

The correct answer is: All of the listed

#### Question 6

Not answered

Marked out of 1.00

Flag question

HiY Basic Pharmacology 006

Which of the following best describes lofexidine?

Select one:

- Natural opioid
- Alpha 1 antagonist
- Alpha 2 agonist
- Synthetic opioid
- Opioid antagonist

Check

In opioid detoxification, if short duration of treatment is desirable,  $\alpha_2$  adrenergic agonists such as lofexidine and clonidine are preferred to methadone.

The correct answer is: Alpha 2 agonist

#### Question 7

Not answered

Marked out of 1.00

Flag question

HiY Basic Pharmacology 007

Which of the following chemical class of drugs used as antidepressants can increase seizure risk heavily?

Select one:

- Triazolopyridine
- Hydrazine derivatives
- SSRIs
- Cyclopyrrolone

Aminoketone

Check


Aminoketone ( Bupropion) is contraindicated in seizure disorder.

The correct answer is: Aminoketone

**Question 8**

Not answered

Marked out of 1.00

 Flag question

HiY Basic Pharmacology 008

Which of the following is a substituted benzamide used as an antipsychotic?

Select one:

- Amisulpride
- Benzhedrine
- Paliperidone
- Risperidone
- Olanzapine

Check


Amisulpride is a substituted benzamide that has atypical antipsychotic activity.

The correct answer is: Amisulpride

**Question 9**

Not answered

Marked out of 1.00

 Flag question

HiY Basic Pharmacology 009

Choose a secondary amine from the below list:

Select one:

- Clomipramine
- Dothiepin
- Amitriptyline
- Amoxapine
- Imipramine

Check

Secondary amines = desipramine, amoxapine, nortriptyline and protriptyline also duloxetine) [more potent mg to mg basis; less sedating; more noradrenergic, less antihistaminic or anticholinergic than tertiary].

The correct answer is: Amoxapine

**Question 10**

Not answered

HiY Basic Pharmacology 010

Which of the following best applies to the chemical structure of buspirone?

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Flag question

Select one:

- Imidazopyridine
- Benzisoxazole
- Thienobenzodiazepine
- Aminoketone
- Azaspirone-decanedione

Check

Buspirone, anxiolytics, is an azaspirone. Bupropion is an aminoketone.  
The correct answer is: Azaspirone-decanedione

**Question 11**

Not answered

Marked out of 1.00

Flag question

HiY Basic Pharmacology 011

Buspirone belongs to the chemical class of

Select one:

- Azaspirones
- Cyclopyrrolone
- Imidazopyridine
- Pyrazopyrimidine
- Butyrophenone

Check

Buspirone is believed to exert its anxiolytic effect by acting as a partial agonist at the 5-HT<sub>1A</sub> autoreceptor. It is an azaspirodecanedione anxiolytic.

The correct answer is: Azaspirones

**Question 12**

Not answered

Marked out of 1.00

Flag question

HiY Basic Pharmacology 012

The new antipsychotic drug paliperidone belongs to the class of

Select one:

- dibenzothiazepines
- benzisoxazoles
- thienobenzodiazepine
- dibenzodiazepines
- benzamides

Check


Being a metabolite of risperidone, paliperidone belongs to the same class - benzisoxazoles.

The correct answer is: benzixosazoles

**Question 13**

Not answered

Marked out of 1.00

 Flag question

HiY Basic Pharmacology 013

The drug alprazolam belongs to which of the following class of psychotropics?

Select one:

- Stimulant
- Antipsychotics
- Anticholinesterase
- Benzodiazepines
- Antidepressant

Check


Alprazolam is a benzodiazepine that is used for panic disorder in the USA.

The correct answer is: Benzodiazepines

**Question 14**

Not answered

Marked out of 1.00

 Flag question

HiY Basic Pharmacology 014

Which of the following is termed as a norepinephrine and dopamine re-uptake inhibitor?

Select one:

- Varenicline
- Nefazadone
- Buspirone
- Mirtazapine
- Bupropion

Check


Bupropion is quite widely used in the USA as an antidepressant; it appears to inhibit the reuptake of both dopamine and noradrenaline and, therefore, tends to have a slightly alerting action. In many European countries, it has been introduced, at a lower than antidepressant dose, in the treatment of nicotine withdrawal in smoking cessation programmes.

The correct answer is: Bupropion

**Question 15**

Not answered

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 Flag question

HiY Basic Pharmacology 015

Discovery of psychotropic use of lithium is associated with

Select one:

- Sen and Ghose
- Bleuler
- Delay and Deniker

- Cade
- Kane

Check


Believing that mania might be caused by intoxication by normal body products, Cade's experiments led him to focus on lithium urate. He observed that guinea pigs became very lethargic on the compound, and he subsequently conducted a clinical trial of lithium with ten manic patients. (Excerpt retrieved from <http://ps.psychiatryonline.org/doi/pdf/10.1176/ps.50.7.969>)

The correct answer is: Cade

### Question 16

Not answered

Marked out of 1.00

 Flag question

HiY Basic Pharmacology 016

Which of the following can be called a major tranquilliser?

Select one:

- Risperidone
- Chlorpromazine
- Propofol
- Chlordiazepoxide
- Secobarbital

Check


Antipsychotics came to be known as major tranquilizers while barbiturates and benzodiazepines were called minor tranquilizers. 1950-52, Presurgical antihistamine chlorpromazine was shown to have antipsychotic effects independently by Delay and Deniker's team, and Charpentier from France

The correct answer is: Chlorpromazine

### Question 17

Not answered

Marked out of 1.00

 Flag question

HiY Basic Pharmacology 017

Which one of the following drugs is not correctly paired with its proponents?

Select one:

- Chlorpromazine-Delay and Deniker
- Imipramine-Kuhn
- Clozapine-Bowden
- Lithium- John Cade
- Haloperidol-Janssen

Check


Since the publication of the landmark study by Kane et al (1988), clozapine has been regarded as an effective treatment for people with treatment-resistant schizophrenia.

The correct answer is: Clozapine-Bowden

**Question 18**

Not answered

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 Flag question

HiY Basic Pharmacology 018

Which one of the following names is associated with the use of valproate in mania?

Select one:

- Delay and Deniker
- John Cade
- Kuhn
- Janssen
- Bowden

Check


Bowden is associated with use of valproate in Mania (1994). A controlled trial by Kane et al in 1987 showed that clozapine might be effective in schizophrenia that had been resistant to all other types of antipsychotic therapy.

The correct answer is: Bowden

**Question 19**

Not answered

Marked out of 1.00

 Flag question

HiY Basic Pharmacology 019

Zopiclone belongs to the chemical class of

Select one:

- Butyrophenone
- Cyclopyrrolones
- Imidazopyridine
- Pyrazopyrimidine
- Azaspiroones

Check


Zopiclone- cyclopyrrolone Zolpidem-imidazopyridine Zaleplon-pyrazopyrimidine

The correct answer is: Cyclopyrrolones

**Question 20**

Not answered

Marked out of 1.00

 Flag question

HiY Basic Pharmacology 020

Discovery of tranquilising properties of chlorpromazine is associated with

Select one:

- Delay and Deniker
- Bleuler
- Cade
- Sen and Ghose



Kane

Check


Chlorpromazine was synthesized on December 11, 1951 by Paul Charpentier, in the laboratories of Rhone-Poulenc, a French pharmaceutical company, and released for clinical investigation in May 1952 as a possible potentiator of general anesthesia. Clinical investigations with CPZ began at Saint-Anne's hospital - at Pierre Deniker's service in Jean Delay's department in 1952. (Fifty years chlorpromazine: a historical perspective. <http://europepmc.org/articles/PMC2655089/> (accessed April 11, 2015).)

The correct answer is: Delay and Deniker

**Question 21**

Not answered

Marked out of 1.00

 Flag question

HiY Basic Pharmacology 021

Choose the correct match from the following pairs:

Select one:

- Risperidone: dibenzoxapine
- Droperidol: butyrophenones
- Aripiprazole: Benzisothiazole
- Thioridazine: diphenyl butyl piperidine
- Flupentixol: dihydroindole

Check


Droperidol and haloperidol are classified as butyrophenones. The correct matching for other mentioned drugs is given below- Piperidine derivatives- Thioridazine, Thioxanthenes- Flupentixol; Benzisoxazole derivative- Risperidone; arylpiperidylindole (quinolone)- Aripiprazole.

The correct answer is: Droperidol: butyrophenones

**Question 22**

Not answered

Marked out of 1.00

 Flag question

HiY Basic Pharmacology 022

A potential advancement in the treatment of dementia is

Select one:

- Drugs acting on dendritic receptors
- Drugs acting on plasma enzymes
- Drugs acting on presynaptic receptors
- Drugs acting on intracellular mechanisms
- Drugs acting on synaptic enzymes

Check

Drugs acting on  $\beta$ -secretase are promising candidates to enter clinical trial for Alzheimer's disease as of now.  $\beta$ -secretase activity has a low optimum pH, and this membrane-bound enzyme is predominantly localized in acidic intracellular compartments (for example, endosomes


and the trans-Golgi network). Bart De Strooper, Robert Vassar, and Todd Golde, 'The secretases: enzymes with therapeutic potential in Alzheimer disease,' Nat Rev Neurol 6, no. 2 (February 2010): 99-107.

The correct answer is: Drugs acting on intracellular mechanisms

**Question 23**

Not answered

Marked out of 1.00

 Flag question

HiY Basic Pharmacology 023

Which of the following is an inhibitor of norepinephrine and serotonin re-uptake?

Select one:

- Reboxetine
- Bupropion
- Galantamine
- Duloxetine
- Aripiprazole

Check


SNRIs - serotonin and noradrenaline reuptake inhibitor. This includes venlafaxine, milnacipran, duloxetine. Reboxetine is an NARI - Noradrenaline reuptake inhibitor. NaSSA - Noradrenergic and specific serotonergic antagonist - which includes Mirtazapine and mianserin.

The correct answer is: Duloxetine

**Question 24**

Not answered

Marked out of 1.00

 Flag question

HiY Basic Pharmacology 024

Which of the following antidepressant is an enantiomer of another antidepressant drug?

Select one:

- Fluoxetine
- Paroxetine
- Citalopram
- Escitalopram
- Sertraline

Check


Research evidence suggests that escitalopram may be more effective and have an earlier onset of action than citalopram. This is attributed to escitalopram's binding to both the re-uptake site and an allosteric site causing conformational changes in the 5-HT Transporter and enhancing re-uptake blockade.

The correct answer is: Escitalopram

**Question 25**

Not answered

Marked out of 1.00

 Flag question

HiY Basic Pharmacology 025

Which one among the following is a butyrophenone derivative?

Select one:

- Chlorpromazine
- Thioridazine
- Haloperidol
- Flupenthixol
- Zuclopenthixol

Check


First-generation agents are usually classified into three groups: phenothiazines (chlorpromazine, Thioridazine), butyrophenones (e.g., haloperidol), and several other minor chemicals (e.g., thiothixene, molindone, and loxapine), based on their structure.

The correct answer is: Haloperidol

### Question 26

Not answered

Marked out of 1.00

 Flag question

HiY Basic Pharmacology 026

Which one of the following led a trial that proved Clozapine's effectiveness in treating resistant schizophrenia?

Select one:

- Kretschmer
- Cade
- Kraepelin
- Kane
- Bleurer

Check


The most widely cited study on rebirth of clozapine was the one published in Archives of Psychiatry in 1988 by Kane and colleagues (*Arch Gen Psychiatry* 1988; 45:789-796). 268 patients with treatment-resistant schizophrenia (failing *three* different conventional neuroleptic trials, including a six-week trial of haloperidol at maximum (60mg) doses) were randomly assigned to clozapine up to 900 mg or chlorpromazine up to 1800 mg. 30% of the clozapine group responded while only 4% in the chlorpromazine group responded.

The correct answer is: Kane

### Question 27

Not answered

Marked out of 1.00

 Flag question

HiY Basic Pharmacology 027

Select the reason why clozapine was initially withdrawn before Kane's landmark trial:

Select one:

- High costs
- High fatality rates
- Lack of efficacy
- Unclear dosing schedule
- Excessive sedation

Check


Clozapine was introduced in Europe in 1975. As a result of reports from Finland, where 16 patients out of 2260 exposed (0.7%) developed agranulocytosis and 8 (50%) of them subsequently died from secondary infections, the drug was voluntarily withdrawn from use. Following pressure from psychiatrists to reintroduce clozapine, trials in patients with treatment-resistant schizophrenia, under close haematological monitoring were devised, which showed significant improvement in 30% of patients after six months (Kane et al., 1988). Subsequent studies showed improvement in 61% of patients if treatment was continued for up to one year (Meltzer et al., 1989; Meltzer, 1992). [excerpt from Focus on Clozapine - Priory, <http://priory.com/focus14.htm> (accessed April 11, 2015).]

The correct answer is: High fatality rates

**Question 28**

Not answered

Marked out of 1.00

 Flag question

HiY Basic Pharmacology 028

Which of the following ethnic differences in pharmacogenetics create natural alcohol deterrence?

Select one:

- Low cholinesterase
- Lack of aldehyde dehydrogenase
- High aldehyde dehydrogenase
- High alcohol dehydrogenase
- High CYP 3A4

Check


Nearly 40% Asians and around 60% South American Native Indians lack Aldehyde dehydrogenase enzyme in sufficient amounts to metabolise alcohol - this serves as a natural deterrent in these communities

The correct answer is: Lack of aldehyde dehydrogenase

**Question 29**

Not answered

Marked out of 1.00

 Flag question

HiY Basic Pharmacology 029

Which of the following psychotropic agents has the same pharmacokinetic properties in Asians and White Europeans?

Select one:

- Alprazolam
- Haloperidol
- Diazepam
- Chlorpromazine
- Lithium

Check


Lithium is completely excreted renally; its excretion does not differ between Asians and Europeans.

The correct answer is: Lithium

**Question 30**

Not answered

Marked out of 1.00

 Flag question

HiY Basic Pharmacology 030

A 15-year-old boy has not been to his school for last few weeks as he has been disturbed by derogatory auditory hallucinations. He has been hearing voices in the third person for two months and is receiving messages from the television. The most likely treatment option is

Select one:

- Parental Training
- Family Therapy
- Fluoxetine
- Cognitive Behavioural Therapy for anxiety
- Low dose risperidone

Check


The diagnosis is early onset schizophrenia and treatment should be one of the second-generation antipsychotics like Risperidone (low dose).

The correct answer is: Low dose risperidone

**Question 31**

Not answered

Marked out of 1.00

 Flag question

HiY Basic Pharmacology 031

Which one of the following is the first antidepressant to be introduced?

Select one:

- SNRIs
- Tetracyclics
- SSRIs
- Tricyclics
- MAO inhibitors

Check

Iproniazid is a monoamine oxidase inhibitor. This was the first antidepressant developed in 1952. Iproniazid was being used in treating tuberculosis discovery of mood lifting properties. But hypertensive reactions precluded large-scale use. Imipramine manufactured as chlorpromazine derivative came to market soon.

The correct answer is: MAO inhibitors

**Question 32**

Not answered

Marked out of 1.00

HiY Basic Pharmacology 032

The antidementia drug with an NMDA receptor antagonistic property is;

Select one:

Flag question

- Tacrine
- Galantamine
- Donepezil
- Rivastigmine
- Memantine

Check

Memantine as an NMDA receptor antagonist can prevent the pathological stimulation of NMDA receptors.

The correct answer is: Memantine

**Question 33**

Not answered

Marked out of 1.00

Flag question

HiY Basic Pharmacology 033

Which drugs among the following is classified as a reversible MAOI?

Select one:

- Isocarboxazid
- Tranylcypromine
- Moclobemide
- Raclopride
- Phenelzine

Check

Reversible MAO inhibitors include moclobemide and brofaromine. These are less likely to induce hypertensive crisis than first-generation MAOIs.

The correct answer is: Moclobemide

**Question 34**

Not answered

Marked out of 1.00

Flag question

HiY Basic Pharmacology 034

A patient is diagnosed with mild cognitive impairment. Which one of the following is recommended for prevention of dementia? (June 2008)

Select one:

- Arachidonic acid (unsaturated fatty acid)
- Donepezil
- No recommendation
- Memantine
- NSAIDS

Check


Currently there is no recommended prophylactic intervention is available for preventing the conversion of MCI to dementia.

The correct answer is: No recommendation

**Question 35**

Not answered

Marked out of 1.00

 Flag question

HiY Basic Pharmacology 035  
Placebo effect is NOT mediated via

Select one:

- Nocebo response
- Natural remission
- classical conditioning
- expectancy
- operant conditioning

Check


A placebo makes patients feel better for reasons unrelated to the specific healing properties of the treatment. A nocebo makes patients feel worse (or does other harm) in the same way.

The correct answer is: Nocebo response

**Question 36**

Not answered

Marked out of 1.00

 Flag question

HiY Basic Pharmacology 036

A 45-year-old man with paranoid schizophrenia is started on a thienobenzodiazepine. Which of the following drugs is prescribed here?

Select one:

- Paliperidone
- Piperazine
- Olanzapine
- Quetiapine
- Clozapine

Check


Olanzapine is a thienobenzodiazepine.

The correct answer is: Olanzapine

**Question 37**

Not answered

Marked out of 1.00

 Flag question

HiY Basic Pharmacology 037

Which of the following is true about placebo response in drug trials?

Select one:

- No placebo response is seen in personality disorders
- A group of 'placebo reactors' with stereotyped personality can be identified

- Degree of placebo response is similar irrespective of the treatment studied
- Opioids may have a role to play in placebo response
- Placebo response to depression is gradual but persistent

Check

Endogenous opioids (e.g. endorphins) play a significant role in mediating placebo-induced analgesia. Dopamine reward system is being increasingly implicated in placebo effects in psychotropic. Placebo response to depression starts abruptly, occurs early in treatment and is less likely to persist. Placebos work better for severe than mild pain, but mildly depressed patients respond well than severely depressed ones. There are no homogenous placebo reactors in the population.

The correct answer is: Opioids may have a role to play in placebo response

### Question 38

Not answered

Marked out of 1.00

Flag question

HiY Basic Pharmacology 038

Which of the following is a true statement about the placebo effect?

Select one:

- Placebo response is perceived to be better for tablets than capsules
- Placebo effects do not operate on active drugs
- Placebo response is likely if patient is of lower social class
- Severely depressed subjects respond well to placebos than mildly depressed ones
- Oral medications elicit a stringer placebo effect than injections

Check

Placebo reactors are often less educated and belong to somewhat lower social class than non-reactors.

The correct answer is: Placebo response is likely if patient is of lower social class

### Question 39

Not answered

Marked out of 1.00

Flag question

HiY Basic Pharmacology 039

Before approval of a drug molecule, mutagenicity, carcinogenicity and organ system toxicity are studied at which phase of clinical trials?

Select one:

- Preclinical animal phase
- Phase 1
- Phase 3
- Postmarketing surveillance
- Phase 2

Check




Preclinical Animal Studies: The pathway a drug must undergo before approval starts with animal studies where the molecule is demonstrated to have specific actions. These extensive preclinical animal studies must be carried out at least on two different animal species. Mutagenicity, carcinogenicity and organ system toxicity are studies at this phase

The correct answer is: Preclinical animal phase

**Question 40**

Not answered

Marked out of 1.00

 Flag question

HiY Basic Pharmacology 040

Reserpine was originally introduced as an antipsychotic. It is extracted from which of the following plants?

Select one:

- Hypericum alkaloids
- Solanacea Henbane
- Rauwolfia serpentina
- Hellebore
- Belladonna

Check


Rauwolfia serpentina was used in India for more than 2000 years ago for insanity. Reserpine was isolated from it in 1953 and synthesized and introduced as an antipsychotic in 1954. It provided insights into the role of dopamine, noradrenaline and serotonin in the brain and also the mechanism of antidepressant/antipsychotic drug actions.

The correct answer is: Rauwolfia serpentina

**Question 41**

Not answered

Marked out of 1.00

 Flag question

HiY Basic Pharmacology 041

Rivastigmine is a

Select one:

- Irreversible inhibitor of AchEs
- NMDA receptor antagonist
- Reversible non-competitive inhibitor of AchEs
- Competitive inhibitor of AchEs
- Reversible competitive inhibitor of AchEs

Check

Rivastigmine is a reversible and non inhibitor of acetylcholinesterase. It inhibits both acetylcholinesterase and butyryl cholinesterase in CNS.

The correct answer is: Reversible non-competitive inhibitor of AchEs

**Question 42**

Not answered

Marked out of 1.00

HiY Basic Pharmacology 042

Which one among the following is a benzisoxazole derivative?

Flag question

Select one:

- Amisulpride
- Clozapine
- Risperidone
- Sulpiride
- Ziprasidone

Check

Risperidone is a benzisoxazole derivative while sulpride and amisulpride are substituted benzamides. Ziprasidone, rather confusingly, is a Benzisothiazole, while clozapine is a Dibenzodiazepine.

The correct answer is: Risperidone

**Question 43**

Not answered

Marked out of 1.00

Flag question

HiY Basic Pharmacology 043

Which of the following drugs is correctly matched with its metabolite?

Select one:

- Naloxone - naltrexone
- Imipramine - nomifensine
- citalopram - escitalopram
- risperidone - paliperidone
- fluoxetine - duloxetine

Check

Escitalopram is not a metabolite but an enantiomer of citalopram. Paliperidone is the active phase 1 metabolic product of risperidone.

The correct answer is: risperidone - paliperidone

**Question 44**

Not answered

Marked out of 1.00

Flag question

HiY Basic Pharmacology 044

Duloxetine and milnacipran are classified as

Select one:

- Monoamine oxidase inhibitors
- Tricyclic antidepressants
- Selective serotonin reuptake inhibitors
- Serotonergic and noradrenergic reuptake inhibitors
- Adrenergic type 2 antagonists

Check


Both these drugs belong to the same class as venlafaxine.

The correct answer is: Serotonergic and noradrenergic reuptake inhibitors

**Question 45**

Not answered

Marked out of 1.00

 Flag question

HiY Basic Pharmacology 045

Which drug is useful for the treatment of OCD?

Select one:

- Trazadone
- Duloxetine
- Phenelzine
- Venlafaxine
- Sertraline

Check


SSRIs remain as the first-line treatments for OCD. Sertraline is SSRI drug, which is also useful for the treatment of OCD in children. (Refer - POTS study).

The correct answer is: Sertraline

**Question 46**

Not answered

Marked out of 1.00

 Flag question

HiY Basic Pharmacology 046

Venlafaxine is best described as a

Select one:

- SNRI (Serotonin and noradrenaline reuptake inhibitor)
- SSRI (Selective serotonin reuptake inhibitors)
- NARI (Nor adrenaline reuptake inhibitors)
- Tricyclic antidepressant
- Alpha 2 adrenoceptor antagonist

Check


Venlafaxine and duloxetine are drugs showing selectivity in inhibiting the reuptake of both noradrenaline and serotonin. They are best grouped as SNRIs.

The correct answer is: SNRI (Serotonin and noradrenaline reuptake inhibitor)

**Question 47**

Not answered

Marked out of 1.00

 Flag question

HiY Basic Pharmacology 047

Which drug could be used for the treatment of mixed affective episodes of bipolar disorder?

Select one:

- Carbamazepine
- Gabapentin
- Sodium Valproate

- Lithium
- Lamotrigine

Check


Mixed affective states are characterised by combinations of manic and depressive symptoms during one episode and may occur in up to 40% of bipolar patients. Mixed affective states have been insufficiently researched to arrive at definitive recommendations for treatment. Sixty six percent of these patients exhibit a poor response to lithium (SIGN Guidelines on bipolar disorder: Guideline 82 Section 3: Retrieved from <http://www.sign.ac.uk/guidelines/fulltext/82/section3.html>). NICE recommends that mixed affective episodes are treated as manic episodes. Sodium valproate as a first line option for the treatment of acute manic episode and prophylaxis of bipolar affective disorder, and thus can be used as first line for mixed affective episodes as well.

The correct answer is: Sodium Valproate

#### Question 48

Not answered

Marked out of 1.00

 Flag question

HiY Basic Pharmacology 048

Zimeldine caused demyelination disorder on introduction, leading to its withdrawal. Which of the following class does it belong to?

Select one:

- MAO inhibitors
- Tricyclics
- Benzodiazepines
- Antipsychotics
- SSRIs

Check


Carlissen synthesized purpose made SSRI Zimeldine - but withdrawn due to the incidence of a hypersensitivity syndrome and demyelinating disease that followed its use.

The correct answer is: SSRIs

#### Question 49

Not answered

Marked out of 1.00

 Flag question

HiY Basic Pharmacology 049

Acamprosate is a

Select one:

- Synthetic taurine analogue
- Type of benzodiazepine
- Long acting opioid agonist
- Alpha-1 agonist
- Opioid receptor antagonist

Check

Acamprosate is a synthetic taurine analogue, which appears to act centrally on glutamate and GABA neurotransmitter systems, although the mechanism has not been fully established.

The correct answer is: Synthetic taurine analogue

**Question 50**

Not answered

Marked out of 1.00

Flag question

HiY Basic Pharmacology 050

What is cyproterone acetate?

Select one:

- Glucocorticoid analogue
- Testosterone antagonist
- Mineralocorticoid antagonist
- Progesterone antagonist
- Testosterone partial agonist

Check

Cyproterone has a structure similar to testosterone. It works by preventing testosterone from binding to the receptors (antagonist).

The correct answer is: Testosterone antagonist

**Question 51**

Not answered

Marked out of 1.00

Flag question

HiY Basic Pharmacology 051

You are giving a talk to your hospital staff about the importance of clinical trials. How would you explain the term 'standardised difference in effectiveness'?

Select one:

- The difference in the effect of treatment in the active treatment group compared to the placebo group after taking into account the variation in the treatment effect
- The effect of treatment in the active treatment group
- The difference in the effect of treatment in the active treatment group compared to the placebo group
- The number of patients that require one treatment compared to the other in order to detect one positive response
- The effect of treatment in the placebo group

Check


The number of patients that require one treatment compared to the other in order to detect one positive response is the NNT (Number Needed to Treat). The standardised mean difference is also called Cohen's d.

The correct answer is: The difference in the effect of treatment in the active treatment group compared to the placebo group after taking into account the variation in the treatment effect

**Question 52**

Not answered

Marked out of 1.00

 Flag question

HiY Basic Pharmacology 052

The term active placebo refers to which one of the following?

Select one:

- None of the above
- The placebo produces side effects
- The placebo gains positive effect with repeated use.
- The placebo has activity against the treated illness.
- The placebo has some activity inherently


An 'active placebo' has some activity inherently, but not against the treated condition. When a drug administered as placebo produces prominent side-effects, it is known as a 'nocebo'. Placebo sag is a term used to refer to decrease in placebo effect with repeated or chronic administration of placebo drugs.

The correct answer is: The placebo has some activity inherently

**Question 53**

Not answered

Marked out of 1.00

 Flag question

HiY Basic Pharmacology 053

Which of the following psychotropics is well known to cause sudden death?

Select one:

- Temazepam
- Procyclidine
- Zopiclone
- Lithium
- Thioridazine


Antipsychotic related sudden death may be due to cardiac arrhythmias or even seizures asphyxiation or malignant hyperthermia. Drugs causing QT prolongation are associated with more sudden deaths (esp. thioridazine, droperidol). Clozapine is also implicated.

The correct answer is: Thioridazine

**Question 54**

Not answered

Marked out of 1.00

 Flag question

HiY Basic Pharmacology 054

Flupenthixol belongs to the chemical class of

Select one:

- Diphenylbutylpiperidine
- Piperidine phenothiazine
- Thioxanthene
- Piperazine phenothiazine

- Aliphatic phenothiazine

Check


Flupenthixol and zuclopenthixol are thioxanthenes.

The correct answer is: Thioxanthenes

**Question 55**

Not answered

Marked out of 1.00

 Flag question

HiY Basic Pharmacology 055

Which of the following hormones is most commonly used in the treatment of depression?

Select one:

- Cortisol
- Vasopressin
- Prolactin
- Thyroid hormone
- Growth hormone

Check


The link between thyroid function and depression is well-studied in psycho-endocrinology. Notably, hypothyroidism can be accompanied by depression. All the hormones of the hypothalamic- pituitary-thyroid axis have been used in the treatment of depression, alone or in combination with other agents, although the most commonly used are thyroxine and levothyroxine.

The correct answer is: Thyroid hormone

**Question 56**

Not answered

Marked out of 1.00

 Flag question

HiY Basic Pharmacology 056

An 81-year-old woman with dementia presented to the hospital with chest pain. Upon admission, she becomes acutely confused and agitated. She is combative and attacks a nurse who tried to pacify her. She refuses to accept a nurse to sit beside her and observe her continuously and threatens to kick anyone who attempts this. The best option available for the medical team is

Select one:

- Use heavy sedation to prevent physical attacks
- Discharge her back to home
- Use temporary physical or pharmacological restraints with regular re-evaluation of her medical status
- Continue to try verbal de-escalation to calm her down
- Transfer her to a psychiatric ward

Check

Using rapid tranquillisation or physical restraints is sometimes necessary for the elderly to reduce harm to the patient and/or the health professionals. Only a minimal amount of restraint should be used, and the need for continued restraint re-evaluated frequently. Transferring to a psychiatry ward does not seem practical at this time due to the acute level of patient agitation and his behaviors, and verbal de-escalation has already failed to calm the patient. Involving a carer may help to calm the patient down, and that individual may be able to assist in making decisions for his care.

The correct answer is: Use temporary physical or pharmacological restraints with regular re-evaluation of her medical status

Finish review