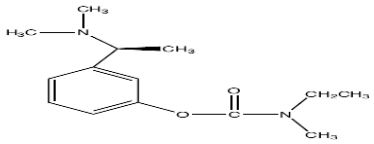
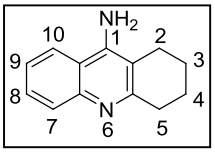
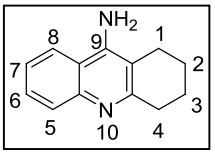
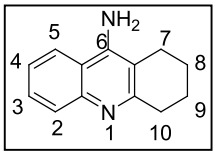
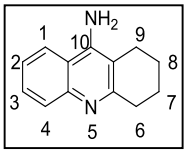
Unit	Q. No	Options		Difficulty Level
1	1		_____ is a short acting benzodiazepin	Easy
		A	diazepam	
		B	lorazepam	
		C	**triazolam**	
		D	clonazepam	
1	2		Trimethadione belongs to which class	Easy
		A	**Oxazolidinediones**	
		B	Succinimides	
		C	Biscarbamates	
		D	Benzodiazepines	
1	3		(+/-)-trans-2-phenylcyclopropylamine is	Easy
		A	doxepine	
		B	**tranylcypromine**	
		C	paroxetine	
		D	imipramine	
1	4		The atomic position number for Nitrogen in Tricyclic Antidepressants is____	Easy
		A	1	
		B	**5**	
		C	10	
		D	11	
1	5		Which of the folowing corresponds to Oxazepam	Easy
		A	7-chloro-1,3-dihydro-5-phenyl-1(2,2,2-trifluoroethyl)-2H-1,4-benzodiazepine-2-one	
		B	**7-chloro-1,3-dihydro-3-hydroxy-5-phenyl-2H-1,4-benzodiazpin-2-one**	
		C	7-chloro-5-(2-chlorophenyl)-3-dihydro-3-hydroxy-2H-1,4-	

			benzodiazepine-2-one	
		D	7-chloro-1,3-dihydro-1-methyl-5-phenyl-2H-1,4-benzodiazepine-2-one	
1	6		A carbamate group containing drug which is used as anxiolytic	Easy
		A	pralidoxime	
		B	Meprobamate	
		C	Buspiron	
		D	procyclidine	
1	7		For phenothiazine antipsychotic agents if C2 position is substituted with	Easy
		A	**electron withdrawing gropp it increases activity**	
		B	electron donating gropp it increases activity	
		C	bulky group it increases activity	
		D	any group it drcreases activity	
1	8		procyclidine belong to	Easy
		A	Anticholinergic aminoethers	
		B	**Anticholinergic aminoalcohols**	
		C	Tetrahydroisoquinoline-Based Neuromuscular Blocking Agent	
		D	Steroid-Based Neuromuscular Blocking Agent	
1	9		Longer side chain branching increases the sedative effect, this sentence is true for	Moderate
		A	pentobarbital	
		B	secobarbital	
		C	thiopental sodium	
		D	phenobarbital	
1	10		Carbamazepine metabolizes through	Moderate
		A	Reduction	
		B	hydrolysis	

		C	**epoxodation and hydrolysis to diol**	
		D	dehydrogenation	
1	11		Match the Pair : Classes of antidepressant : a) SNRIs b) SSRIs c) NSRIs Antidepressant : i) mipramine, ii) Fluoxetine iii) amitriptyline	Moderate
		A	**a-i,b-ii,c-iii**	
		B	a-i,b-iii,c-ii	
		C	a-ii,b-iii,c-i	
		D	a-iii,b-ii,c-i	
1	12		A phenotioazine with Piperazine side chain is	Moderate
		A	Chlorpromazine	
		B	Haloperidol	
		C	thioridazine,	
		D	**Fluphenazine**	
1	13		carbidopa is	Moderate
		A	Plasma MAO-A Inhibitors	
		B	CNS MAO-A Inhibitors	
		C	Plasma MAO-B Inhibitors	
		D	**Plasma DOPA decarboxylase inhibitor**	
1	14		What is NOT correct about selegeline i.is an irreversible MAO-B inhibitor ii. produces cheese effect iii. Metabilizes by N-delakylation iv. Does not undego first pass metabolism	Difficult
		A	I & III	
		B	**ii & iv**	
		C	I & iv	
		D	ii & ii	

1	15		Match the pairs Drugs applicable a) phenytoin, b) gabapentin, c) clonazepam, d) ethosuximide, e) lamotrigine Seizures type : i) PARTIAL AND GENERALIZED TONIC-CLONIC SEIZURES, ii)MYOCLONIC SEIZURES and iii)ABSENCE SEIZURES Vs	Difficult
		A	a-i,ii &iii,b-iii,c-ii&iii,d-i&iii,e-i	
		B	a-i,ii,b-ii-iii,c-i,iii,d-i,ii&iii,e-iii	
		C	a-iii,b-ii,c-i,ii &iii,d-ii&iv,e-ii	
		D	**a-i, b-i&iii,c-ii&iii,d-iii,e-i,ii &iii**	
1	16		phenobarbital majorly metabolized through	Difficult
		A	Glucuronidation	
		B	GSH conjugation	
		C	**hydroxylation**	
		D	N-demethylation	
2	17		Atropine has been used to decrease gastrointestinal motility and to counteract anticholinesterase poisoning, What action does this molecule have?	Easy
		A	Muscarinic agonist	
		B	**Muscarinic antagonist**	
		C	Nicotinic agonist	
		D	Nicotinic antagonist	
2	18		nicotinic receptor is	Easy
		A	A G-protein coupled receptor	
		B	A kinase linked receptor	
		C	An intracellular receptor	
		D	**An ion channel**	

2	19		This molecule is used in therapy of alzheimers disease 	Easy
		A	because it inhibits Ach rceptors, since its structurally similar to acetylcholine	
		B	**because it binds to AchE enzyme and hydrolyses in longer time**	
		C	it has alpha methyl group and can not bind to AchE exzymen	
		D	Its an irreversible AchE inhibitor making it agent of choice.	
2	20		Which do you think is right way to number atoms in tacrine an anti-alzheimers agent	Easy
		A		
		B		
		C		
		D		
2	21		Which of the following is a natural chemical messenger for the adrenergic receptor?	Easy
		A	Acetylcholine	
		B	Dopamine	
		C	**Norepinephrin**	
		D	Serotonin	
2	22		What is the predominant β-adrenoceptor in bronchial smooth muscle?	Easy
		A	β1-adrenoceptor	
		B	**β2-adrenoceptor**	
		C	β3-adrenoceptor	
		D	α2-adrenoceptor	

2	23		Which of the following is an irreversible antagonist to the adrenoceptor	Easy
		A	**Phenoxybenzamine**	
		B	Prazosin	
		C	Phentolamin	
		D	Pindolol	
2	24		What Clinical property does Tubocurarine have?	Moderate
		A	A cardiovascular agent	
		B	An analgesic	
		C	**A neuromuscular blocker**	
		D	An anti-asthmatic drug	
2	25		When discussing the structure–activity relationship of acetylcholine what will alkyl substitutions on the beta carbon cause to the molecule? i. decrease rate of hydrolysis by esterases ii. decrease nicotinic action iii. increase muscarinic action iv. makes it an antichlonergic agents	Moderate
		A	ii and iii are true	
		B	I and iv both are false	
		C	**ii and iv are false**	
		D	only iv is true	Moderate
2	26		Which of the following will enhance β-adrenoceptor selectivity for adrenergic agonists.	
		A	Introduction of a naphthalene ring	
		B	Removal of one of the catechol OH groups	
		C	Addition of an α-methyl group (alpha to the carbon bearing the amine)	
		D	**Introduction of a bulky N-alkyl substituent**	
2	27		Match the Pairs a) α1 antagonist b) β2 agonist, c) α2 agonist ,d) β1 antagonist	Moderate

i)Prazosin, ii)Clonidine, iii)Terbutaline, iv) Propranolol

A a-i, b-ii,c-iii,d-iv

B **a-i, b-iii,c-ii,d-iv**

C a-iii, b-ii,c-i,d-iv

D a-iv, b-ii,c-iii,d-i

Difficult

2 28 Ipratoropium was developed based on structure of atropin. WhichDrug development approach was used here?

A **Simplification**

B Rigidification

C Extension

D Substituent variation

2 29 What are starting material for the synthesis of propranolol Difficult

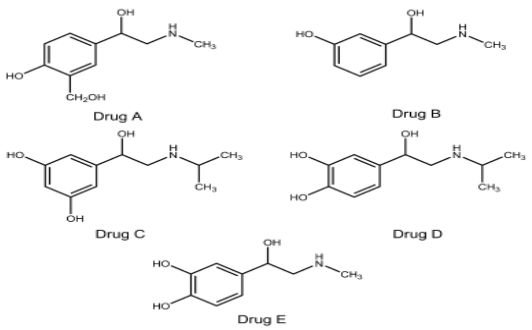
A alpha -naphthol and 2-chrlomethylcyclopropane

B beta-naphthol and 2-chrlomethylcyclopropane

C **alpha-naphthol and 2-chrlomethyloxirane**

D beta-naphthol and 2-chrlomethyloxirane

2 30 Difficult

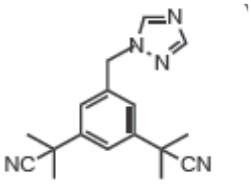
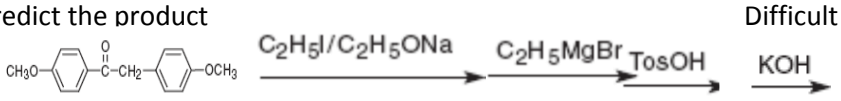


Which of the following drugs would be resistant to metabolism
by COMT?

A D and E

		B	A and B	
		C	B, and E	
		D	**A and C**	
3	31		Which of these is odd one out?	Easy
		A	endorphin	
		B	enkephalin	
		C	**Melatonin**	
		D	Dynorphin	
3	32		The hydroxy grooups in morphine structure are present in position	Easy
		A	3, 8	
		B	3,9	
		C	**3,6**	
		D	3,14	
3	33		Which of the following is most appted target for NSAIDs' inhibition	Easy
		A	COX1	
		B	**COX2**	
		C	COX3	
		D	opioid recptors	
3	34		The major metabiliete of aspirin in the human body is	Easy
		A	Salicylic acid	
		B	**Salicyluric acid**	
		C	Glucuronides	
		D	sulfate	
3	35		Which one of the following agents is selective to COX-2	Easy
		A	**Celecoxib**	
		B	Diclofenac	

		C	Ketoprofen	
		D	Naproxen	
3	36		Identify the unique in the list	Moderate
		A	FENTANYL	
		B	Methadone	
		C	Morphine,	
		D	**Naltrexone**	
3	37		The first amino acid residue of all the endogenous opioid peptides is_____	Moderate
		A	Methionine	
		B	Threonine	
		C	**Tyrosine**	
		D	Tryptophan	
3	38		Bioisosteric replacement of ring Nitrgen of indole ring to alkene in Indomethacine lead to	Moderate
		A	Ketorolac	
		B	Nabumetone	
		C	Sulindac	
		D	flurbiprofen	
3	39		Arrange the sequence of event in mechanism of action of opioiates in right order a) Inhibition of adenylate cyclase activity. b) Closure of voltage-gated Ca2+ channels c) Hyperpolarization of the nerve cell d) cyclic adenosine monophosphate (cAMP) reduction e) Activation the G protein f) efflux of potassium ions,	Difficult
		A	b-a-d-e-c-f	
		B	c-f-d-e-a-b	
		C	**e-a-d-f-b-c**	

		D	a-e-b-d-c-f	
3	40		Identify the right pair of metabolising enzyme and reaction for Piroxicam	Difficult
		A	CYP2C9, bezylic hydroxylation	
		B	CYP3A4,bezylic hydroxylation	
		C	**CYP2C9, Ring hydroxylation**	
		D	CYP3A4,Ring hydroxylation	
4	41		The synthetic analogue for estrogen is	Easy
		A	exemestane	
		B	norethindrone	
		C	**diethylstilbestrol**	
		D	tamoxifen	
4	42		A Triazole-based aromatase inhibitor with the structure 	Easy
		A	tamoxifen	
		B	letrozole,	
		C	**anastrozole,**	
		D	clomiphene	
4	43		An oral contraceptive with IUPCA name (17)-( )-13-ethyl-17-hydroxy-18,19-dinorpregn- 4-en-20-yn-3-one, is	Moderate
		A	exemestane	
		B	**norgestrel,**	
		C	diethylstilbestrol	
		D	tamoxifen	
4	44		predict the product 	Difficult

		A	**diethylstilbestrol**	
		B	letrozole,	
		C	anastrozole,	
		D	clomiphene	
5	45		Thyroid Follicular Cells from Thyroglobulin, a protein is rich in _____ amino acind which on iodination and hydrolysis liberates thyroid hormons.	Easy
		A	Phenylalanine	
		B	Tryptophan	
		C	Threonine	
		D	**Tyrosine**	
5	46		Which one of the following is an adrenocorticoid	Easy
		A	fluoxymesterone,	
		B	**betamethasone**	
		C	megestrol	
		D	clomiphene	
5	47		A 34 amino acid peptide, generallly recommended for osteoporosis, fracture by administered with a boxed warning regarding a potential risk of developing osteosarcoma	Easy
		A	human parathyroid hormone	
		B	**teriparatide**	
		C	raloxiphene	
		D	progabide	
5	48		Single doses of PTU in excess of 300 mg are capable of almost total blockage of peripheral production of	Moderate
		A	DIT	
		B	**T3**	
		C	T4	
		D	r-T3	

5	49		cortison an hydrocortoson keep interconverting metabolically and the enzyme involved is	Moderate
		A	**11β-hydroxysteroid dehydrogenase**	
		B	3α-hydroxysteroid dehydrogenase	
		C	5β-reductase	
		D	C-17 oxidase	
5	50		The order of GR affinity is	Difficult
		A	triamcinolone < dexamethasone < prednisolone < hydrocortisone	
		B	**dexamethasone > triamcinolone > prednisolone > hydrocortisone**	
		C	hydrocortisone = prednisolone > dexamethasone = triamcinolone	
		D	prednisolone > dexamethasone > triamcinolone > hydrocortisone	