FINAL ANSWER KEY

Question 28/2024/OL

Paper Code:

Category 349/2023

Code:

Exam: Assistant Professor in Pharmacology

Date of Test 20-03-2024

Department Medical Education

Question1:-Which of the following is an example for supra additive synergism?

A:-Nitrous oxide + Halothane

B:-Levodopa + Carbidopa

C:-Amlodipine + Atenolol

D:-Glibenclamide + Metformin

Correct Answer:- Option-B

Question2:-All are examples of pharmacogenetically mediated adverse effects except

A:-Tardive dyskinesia by neuroleptics

B:-Acetylator status of isoniazid

C:-Malignant hyperthermia of halothane

D:-Acute intermittent porphyria by barbiturates

Correct Answer:- Option-A

Question3:-All the following molecules act through JAK/STAT receptors except

A:-Growth hormone

B:-Interferon

C:-Cytokine

D:-Thyroxine

Correct Answer: - Option-D

Question4:-Which of the following drugs produce phototoxicity?

- i. Amiodarone
- ii. Sulfonamides
- iii. Phenothiazines
- iv. Phenytoin

A:-(i, ii, iii) only

B:-(i, iii, iv) only

C:-(i, ii, iv) only

D:-(ii, iii, iv) only

Correct Answer:- Option-A

Question5:-Characteristic features of intramuscular route of drug administration

- i. Hypertonic solution can be injected
- ii. Only water solutions can be injected
- iii. Oily solutions can be injected

A:-only i

B:-only ii

C:-only iii

D:-all of the above

Correct Answer:- Option-C

Question6:-Which of the following statements are correct about Meta-analysis?

- i. Cannot prove cause and effect
- ii. Evaluation and grouping of similar studies
- iii. Aim is to decrease the number of subjects studied

A:-Only (i and ii)

B:-Only (i and iii)

C:-Only (ii & iii)

D:-All of the above

Correct Answer:- Option-A

Question7:-Which statement is not true about transdermal therapeutic system?

A:-provides smooth plasma concentration of the drug

B:-better patient compliance

C:-more inter individual variations

D:-mild local adverse effects

Correct Answer:- Option-C

Question8:-Among the following combinations which is not a CYP3A4 substrate and its inhibitor?

A:-Carbamazepine - Clarithromycin

B:-Simvastatin - Itraconazole

C:-Losartan - Verapamil

D:-Metoprolol - Nevirapine

Correct Answer:- Option-D

Question9:-All are indications of therapeutic drug monitoring except

A:-Drugs with high inter-individual variation in plasma concentration

B:-Drugs with irreversible actions

C:-Monitoring of patient compliance

D:-Drugs whose therapeutic effect cannot be determined clinically

Correct Answer:- Option-B

Question 10:-Which of the following statements are correct about clinical trial?

- i. Phase I Dose range, safety and etolerability, only in patients
- ii. Phase II Therapeutic efficacy and dose range in patients
- iii. Phase III Drug safety and tolerability in large number of patients
- iv. Phase IV Therapeutic efficacy in large number of patients
 - A:-(i and ii) only
 - B:-(ii and iii) only
 - C:-(i and iv) only
 - D:-(ii and iv) only

Correct Answer:- Option-B

Question11:-Systemic clearance of a drug is directly related with all the following except

- A:-Bioavailability
- B:-Volume of distribution
- C:-Plasma half-life
- D:-Elimination rate constant

Correct Answer:- Option-C

Question12:-Which statement is not true about OATP1B1 transporter?

- A:-More than 40 nonsynonymous variants
- B:-Encoded by 8hCO1B1 gene
- C:-Polymorphism increases transport of OATP1B1 substrates
- D:-Responsible for the hepatic uptake of weakly acidic drugs

Correct Answer:- Option-C

Question13:-Which schedule under the drugs and cosmetics rules, 1945 deals with the prescription of tramadol and pentazocine?

- A:-Schedule C1
- B:-Schedule E1
- C:-Schedule F1
- D:-Schedule H1

Correct Answer:- Option-D

Question14:-Among the following benzodiazipines which is preferred in elderly individuals?

- A:-Diazepam
- B:-Lorazepam
- C:-Flurazepam
- D:-Midazolam

Correct Answer:- Option-B

Question15:-Quality Adjusted Life Years (QALYS) is a measure of which pharmaco economic analysis

- A:-Cost-effectiveness analysis
- B:-Cost-minimization analysis
- C:-Cost-utility analysis
- D:-Cost-risk analysis

Correct Answer:- Option-C

Question16:-Botulinum toxin is beneficial in all except

A:-age related facial wrinkles

B:-post operative paralytic ileus

C:-Spastic cerebral palsy

D:-Axillary hyper-hydrosis

Correct Answer:- Option-B

Question17:-Among the following drugs which is not useful in acute congestive glaucoma

A:-Dipivefrine

B:-IV Mannitol

C:-Glycerol

D:-Acetazolamide

Correct Answer:- Option-A

Question 18:-All are advantages of third generation β blocker Nebivolol except

A:-Absense of hyperlipidemia

B:-Increases insulin sensitivity

C:-Enhances nitric oxide production

D:-Slow onset of hypotensive response

Correct Answer: - Option-D

Question19:-All are properties of halothane except

A:-Potent anaesthetic agent

B:-Good analgesic agent

C:-Potentiates competitive neuromuscular blockers

D:-Can produce cardiotoxicity

Correct Answer:- Option-B

Question20:-Which adverse effect is more seen with pentazocin than with morphine?

A:-Biliary spasm

B:-Constipation

C:-Hypertension

D:-Vomiting

Correct Answer:- Option-C

Question21:-All are AMPA blockers used as antiepileptic drugs except

A:-Topiramate

B:-Lamotrigine

C:-Perampanel

D:-Felbamate

Correct Answer: - Option-D

Question22:-Which of the following statement is not true about Agomelatine an atypical antidepressant drug?

A:-Agonist on MT1 receptor

B:-Agonist on MT2 receptor

C:-Antagonist on 5HT2A receptor

D:-Antagonist on 5HT2C receptor

Correct Answer:- Option-C

Question23:-All are adverse effects of clozapine which is an atypical antipsycholic agent except

A:-Agranulocytosis

B:-Acute muscular dystonia

C:-Myocarditis

D:-Metabolic syndrome

Correct Answer:- Option-B

Question24:-Baclofen is a centrally acting skeletal muscle relaxant used to treat following clinical conditions except

A:-Amyotropic lateral sclerosis

B:-Cerebral palsy

C:-Spinal injuries

D:-Multiple sclerosis

Correct Answer:-Question Cancelled

Question25:-All are properties of local anesthetic agent Ropivacaine

- i. Short acting
- ii. Less cardiotoxicity
- iii. Blocks A8 and C fibres completely
- iv. Used epidurally for labour pain

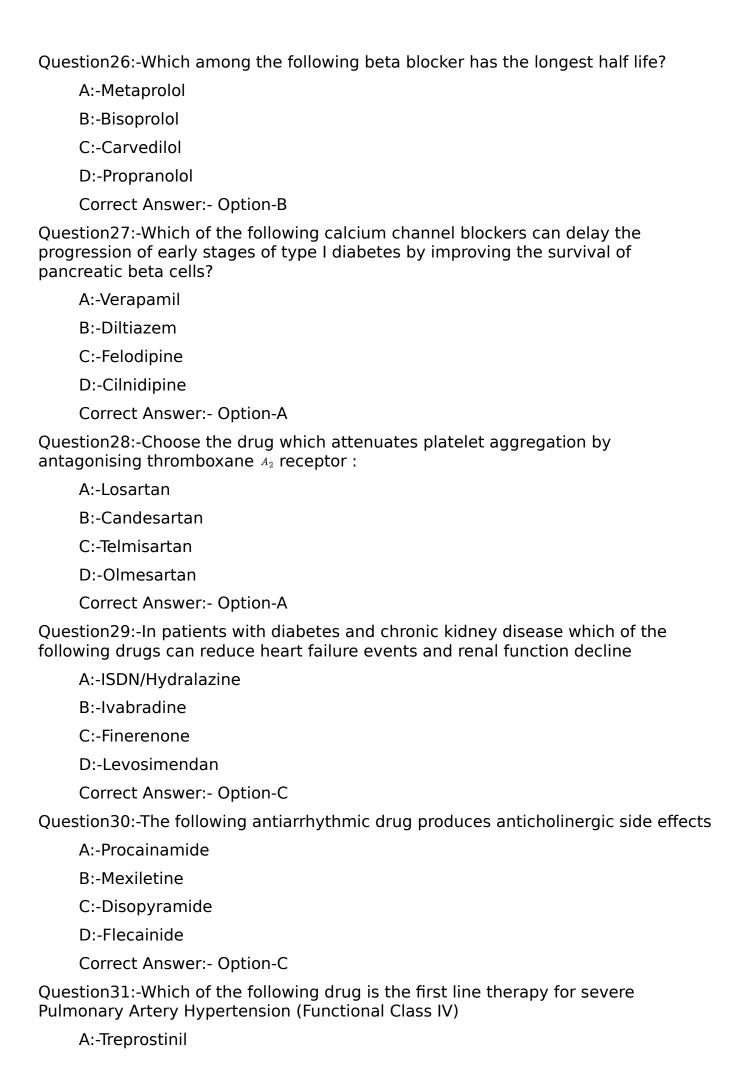
A:-(i and ii) only

B:-(i, ii and iii) only

C:-(ii, iii and iv) only

D:-All of the above

Correct Answer:- Option-C



- B:-Riociguat
- C:-Ambrisentan
- D:-Epoprostenol

Correct Answer:- Option-D

Question32:-Idarucizumab is a reversal agent for toxicity due to

- A:-Dabigatran
- B:-Rivaroxaban
- C:-Apixaban
- D:-Betrixaban

Correct Answer:- Option-A

Question33:-Which of the following antiplatelet drug has rapid onset of action and a circulating half life of 3 to 4 days?

- A:-Abciximab
- B:-Ticagrelor
- C:-Cangrelor
- D:-Vorapaxar

Correct Answer:- Option-D

Ouestion34:-Evolocumab is a

- A:-Liver microsomal triglyceride transfer protein inhibitor
- B:-ATP-Citrate Lyase Inhibitor
- C:-Proprotein convertase subtilisin/Kexin type 9 inhibitor
- D:-Angiopoietin-Like protein 3 inhibitor

Correct Answer:- Option-C

Question35:-Thrombopoietin Receptor Agonist (TRAs) preferred in chronic hepatitis C virus (HCV) associated thrombocytopenia

- A:-Romiplostim
- B:-Eltrombopag
- C:-Avatrombopag
- D:-Lusutrombopag

Correct Answer:- Option-B

Question36:-GnRH agonist which can be given intranasally is

- A:-Goserelin
- B:-Nafarelin
- C:-Deslorelin
- D:-Histrelin

Correct Answer:- Option-B

Question37:-Which of the following statement regarding methimazole is correct A:-is the drug of choice for Graves disease B:-Multiple doses need to be given to produce desired effect C:-Chance of liver toxicity more than propylthiouracil D:-Methimazole is contraindicated in second and third trimester of pregnancy Correct Answer: - Option-A Question38:-Hypoactive Sexual Desire Disorder (HSDD) is treated with: A:-Raloxifene B:-Toremifene C:-Ospemifene D:-Bazedoxifene Correct Answer:- Option-C Question39:-Phosphodiesterase 5 (PDE5) inhibitor with maximum duration of action is A:-Sildenafil B:-Vardenafil C:-Tadalafil D:-Avanafil Correct Answer:- Option-C Question 40:- Anti inflammatory potency is maximum for A:-Fludrocortisone B:-Prednisolone C:-Triamcinolone D:-Betamethasone Correct Answer: - Option-D Question41:-Inoperable adrenocortical carcinoma is treated with A:-Mitotane B:-Etomidate C:-Osilodrostat D:-Abiraterone acetate Correct Answer: - Option-A Question42:-Which of the following insulin preparation forms multihexameric complexes after sub cutaneous injection?

A:-Detemir

B:-Glargine

C:-Degludec

D:-Glulisine

Correct Answer:- Option-C

Question43:-The GLP-1 agonist approved for weight loss independent of diabetes status are

- i. Dulaglutide
- ii. Liraglutide
- iii. Lixisenatide
- iv. Semaglutide
 - A:- only (i and ii)
 - B:-only (i and iii)
 - C:-only (ii and iv)
 - D:-only (i and iv)

Correct Answer:- Option-C

Question44:-The following bisphosphonate is preferred in treatment of hypercalcemia because of its more rapid normalization of serum Ca^{2+} and longer duration of action

- A:-Pamidronate
- B:-Ibandronate
- C:-Risedronate
- D:-Zoledronate

Correct Answer:- Option-D

Question45:-The Vitamin D analogue used in the treatment of Psoriasis is

- A:-Calcipotriol
- B:-Paricalcitol
- C:-Calcitriol
- D:-Calcifediol

Correct Answer: - Option-A

Question46:-Diagnostic testing of cancer specimen for BRAF V 600 mutation is important in guiding treatment decision for the following drug

- A:-Ceritinib
- B:-Trametinib
- C:-Crizotinib
- D:-Afatinib

Correct Answer:- Option-B

Question47:-Most neurotoxic alkylating agent is

- A:-Ifosfamide
- **B:-Carmustine**
- C:-Melphalan

D:-Busulfan

Correct Answer:- Option-A

Question48:-Which of the following drug is a very potent radiosensitizer and should not be used with radiotherapy?

A:-Decitabine

B:-Capecitabine

C:-Gemcitabine

D:-Cytarabine

Correct Answer:- Option-C

Question49:-Pancreatic Neuro Endocrine Tumor is treated with

A:-Sorafenib

B:-Pazopanib

C:-Axitinib

D:-Sunitinib

Correct Answer:- Option-D

Ouestion 50: - Abiraterone is used for the treatment of

A:-Metastatic renal cell cercinoma

B:-Metastatic prostate cancer

C:-Metastatic breast cancer

D:-Metastatic colon cancer

Correct Answer:- Option-B

Question51:-Bedaquiline acts by

A:-Inhibiting mycolic acid synthesis

B:-Inhibiting DNA dependent RNA polymerase

C:-Inhibiting squalene epoxidase

D:-Inhibiting Adenosine 5'triphosphate synthase in mycobacteria

Correct Answer:- Option-D

Question52:-Guanosine analogue with antiretroviral action is

A:-Zidovudine

B:-Emixtricitabine

C:-Abacavir

D:-Lamivudine

Correct Answer:- Option-C

Question53:-Orally effective antifungal antibiotic capable of inducing microsomal enzymes is

A:-Griseofulvin

- B:-Caspofungin acetate
- C:-Posaconazole
- D:-Terbinafine

Correct Answer:- Option-A

Question54:-An orange dye which exerts analgesic action in urinary tract is

- A:-Nitrofurantoin
- B:-Methenamine
- C:-Phenazopyridine
- D:-Mandelic acid

Correct Answer:- Option-C

Question55:-Advantages of Artemisinin based combination therapy include all except

- A:-Rapid clinical and parasitological cure
- B:-Good tolerability profile
- C:-High recrudescence rate
- D:-Absence of parasite resistance

Correct Answer:- Option-C

Ouestion56:-All are true about Linezolid EXCEPT

A:-It is bactericidal against enterococci

B:-It acts on 23S rRNA fraction of 50S ribosomal subunit

C:-It has nearly 100% oral bioavailability

D:-Thrombocytopenia is a common adverse effect

Correct Answer:- Option-A

Question57:-Minocycline, in comparison to Doxycycline,

- A:-Attains higher concentration in tears and saliva
- B:-Exhibits poor activity against mycobacterium leprae
- C:-Exhibits higher incidence of photosensitivity
- D:-Does not undergo extensive hepatic metabolism

Correct Answer:- Option-A

Question 58: The antimicrobial agent effective against pseudomonas is

- A:-Cefazolin
- B:-Ticarcillin
- C:-Tigercycline
- D:-Ampicillin

Correct Answer:- Option-B

Question59:-Topically effective sulphonamide preparation for bacterial

conjunctivities is

A:-Sulfasalazine

B:-Sulfadiazine

C:-Sodium Sulfacetamide

D:-Sulfadoxine

Correct Answer:- Option-C

Question60:-Orally effective carbapenem, resistant to inactivation by renal dehydropeptidase is

A:-Imipenem

B:-Ertapenem

C:-Doripenem

D:-Faropenem

Correct Answer:- Option-D

Question61:-The mismatched pair among the following is

A:-Tiotropium bromide - Bronchodilator

B:-Ketotifen - PAF antagonist

C:-Pranlukast - Leukotriene synthesis inhibitor

D:-Omalizumab - Recombinant humanised anti IgE Monoclonal Antibody

Correct Answer:-Question Cancelled

Question62:-All are uses of N Acetyl Cysteine except

A:-Captopril induced dry cough

B:-Dry Eyes

C:-Acute paracetamol poisoning

D:-Cyclophosphamide induced haemorrahagic cystitis

Correct Answer:- Option-A

Question63:-The CCK1/CCKA receptor antagonist that increases motility of the gastrointestinal tract is

A:- Sodium Alginate

B:-Lubiprostone

C:-Magaldrate

D:-Loxiglumide

Correct Answer:- Option-D

Question64:-New formula for WHO-ORS provides

A:-133 mM $_{Na^{+}}$, 13mM $_{K^{+}}$, 98 mM $_{CI^{-}}$

B:-75 mM $_{Na^{+}}$, 20mM $_{K^{+}}$, 65 mM $_{CI^{-}}$

C:-130 mM $_{Na^+}$, 4mM $_{K^+}$, 109 mM $_{CI^-}$

D:-85 mM $_{Na^+}$, 13 mM $_{K^+}$, 90 mM $_{CI^-}$ Correct Answer:- Option-B Question65:-Emesis is induced by A:-Aprepitant B:-Nabilone C:-Cyclizine D:-Ipecacuanha Correct Answer:- Option-D Question66:-Active form of the Enkephalinase inhibitor, Racecadotril is A:-Pinaverium B:-Thiorphan C:-Trimebutine D:-Crofelemer Correct Answer:- Option-B Question67:-In Rheumatoid arthritis, Anakinra acts by A:-Interleukin 1 receptor antagonism B:-Inhibition of Calcineurin C:-Interleukin 6 receptor antagonism D:-Tumour necrosis factor alpha antagonism Correct Answer:- Option-A Question68:-Alprostadil effective in Erectile dysfunction in males is a A:-PGI2 analogue B:- $PGF_{2\alpha}$ analogue C:-PGE2 analogue D:-PGE1 analogue Correct Answer:- Option-D Question69:-Longest acting 5HT1D/1B agonist is A:-Naratriptan B:-Frovatriptan C:-Zolmitriptan D:-Rizatriptan Correct Answer: - Option-B Question 70:- The true statement about probenecid is A:-It is used in patients with gout and nephrolithiasis B:-It should be taken with plenty of fluids

C:-Peptic ulcer is not a contraindication for its use

D:-It is effective in patients with serum creatinine more than 2 mg/dl. Correct Answer:- Option-B Question71:-Orally effective drug in scabies is A:-Permethrin B:-Crotamiton C:-Ivermectin D:-Benzyl benzoate Correct Answer:- Option-C Question72:-Drug effective in treatment of Vitiligo is A:-Trioxsalen B:-Hydroquinone C:-Monobenzone D:-Adapalene Correct Answer:- Option-A Question73:-Nephrotoxicity is less common with the use of A:-Amphotericin B **B:-Cyclosporine** C:-Tacrolimus D:-Sirolimus Correct Answer:- Option-D Question74:-Immunostimulant action is exhibited by A:-Levamisole B:-Methotrexate C:-Azathioprine D:-Pentostatin Correct Answer:- Option-A Question75:-Lowering of intraocular pressure is seen with the use of A:-Tropicamide **B:-Neostigmine** C:-Tafluprost D:-Cyclopentolate Correct Answer:- Option-C Question76:-Dimercaprol is contraindicated in A:-Lead poisoning B:-Cadmium poisoning C:-Mercury poisoning

D:-Arsenic poisoning

Correct Answer:- Option-B

Question77:-Povidone lodine is an example for

A:-Oxidising agent

B:-Anionic surfactant

C:-Dye

D:-lodophore

Correct Answer:- Option-D

Question78:-Find the wrong pair

A:-Alemtuzumab - CD52

B:-Gemtuzumab -CD3

C:-Muromonab-CD3

D:-Rituximab-CD20

Correct Answer:- Option-B

Question79:-Read the assertion and reason statements and choose the single best response

Assertion (A): Sildenafil causes impaired blue green discrimination

Reason (R): Sildenafil is a weak inhibitor of phosphodiesterase 6

A:-Both (A) and (R) are true and (R) is the correct explanation of (A)

B:-Both (A) and (R) are true but (R) is not the correct explanation of (A)

C:-(A) is true and (R) is false

D:-Both (A) and (R) are false

Correct Answer:- Option-A

Question80:-False statement about lorcaserin is

A:-It is a $5HT_{2C}$ agonist

B:-It has appetite suppressant action

C:-It is a cannabinoid receptor antagonist

D:-Headache, Dizziness, Dry mouth can occur as an adverse effect

Correct Answer:- Option-C

Question81:-Experimental animal commonly used for pyrogen testing

A:-Guineapig

B:-Mouse

C:-Rabbit

D:-Rat

Correct Answer:- Option-C

Question82:-According to prevention of Cruelty to Animals Act 1960, definition of 'animal' includes all except

- A:-Cockroach
- B:-Human beings
- C:-Rat
- D:-Monkey

Correct Answer:- Option-B

Question83:-Sodium dihydrogen phosphate is a constituent of

- A:-De Jalon's solution
- B:-Frog ringer solution
- C:-Kerbs solution
- D:-Tyrode solution

Correct Answer:- Option-D

Question84:-Which of the anesthetic agents is not suitable for the study of cardiovascular drugs in experimental animals

- A:-Chloralose
- B:-Ketamine
- C:-Pentobarbitone
- D:-Urethane

Correct Answer:- Option-C

Question85:-Which among the following can be used as a mobile phase in normal phase HPLC?

- A:-Acetonitrile
- B:-Chloroform
- C:-Methanol
- D:-Water

Correct Answer:-Question Cancelled

Question86:-Which among the following is not used as a label in Radioimmunoassay

- A:-Carbon-14
- B:-lodine-125
- C:-lodine-127
- D:-lodine-131

Correct Answer:- Option-C

Question87:-Mean total cholesterol values of 50 diabetic patients is 346 mg/dl with standard deviation of 20 and that of non-diabetics is 288 mg/dl with standard deviation 9. To compare these values, which statistical test is the most appropriate?

- A:-Independent sample t test
- B:-One sample t test
- C:-Median test

D:-ANOVA

Correct Answer: - Option-A

Question88:-According to the empirical rule, approximately what percentage of the date should lie within +/-2SD

A:-68%

B:-75%

C:-95%

D:-99.7%

Correct Answer:- Option-C

Question89:-If the data are normally distributed with a mean of 180 and standard deviation of 40. Between what two values will approximately 68% of the data fall

A:-140 and 220

B:-100 and 260

C:-60 and 300

D:-30 and 120

Correct Answer: - Option-A

Question 90:- In a box and whisker plot, two sides of the box represent

A:-3rd and 97th percentiles

B:-3rd and 97th percentages

C:-5rd and 95th percentiles

D:-25th and 75th percentiles

Correct Answer:- Option-D

Question91:-Bradykinin receptor antagonist useful for symptomatic treatment of hereditary angioedema

A:-Ambristentan

B:-Donidalorsen

C:-Ecallantide

D:-Icatibant

Correct Answer: - Option-D

Question92:-An endocrine disrupting chemical is

A:-Aflatoxin B1

B:-Chromium

C:-Dichlorodiphenyltrichloroethane (DDT)

D:-Tetrachlorodibenzo-p-dioxin(TCDD)

Correct Answer:-Question Cancelled

Question93:-The preferred drug in type 2 diabetes mellitus patient with patient with cardiac failure

- A:-Empagliflozin
- B:-Nateglinide
- C:-Sitagliptin
- D:-Voglibose

Correct Answer:- Option-A

Question94:-Which among the following is not an example of drug repurposing?

- A:-Minoxidil for treatment of baldness
- B:-Sildenafil for treatment of erectile dysfunction
- C:-Thalidomide for multiple myeloma treatment
- D:-Topiramate for treatment of epilepsy

Correct Answer:- Option-D

Question 95:-Which among the statements regarding Semaglutide is incorrect?

- A:-it is administered subcutaneously
- B:-it causes weight gain in patients
- C:-it has GLP-1 like action
- D:-pancreatitis is an adverse effect

Correct Answer:- Option-B

Question96:-The drug useful for controlling delusions, hallucinations and psychosis in parkinson's disease

- A:-Opicapone
- B:-Pimavanserin
- C:-Rotigotine
- D:-Safinamide

Correct Answer:- Option-B

Question97:-Which among the following is not included in world Health Organisation's prescribing indicators

- A:-Percentage of encounters with tablets prescribed
- B:-Percentage of medicines prescribed by generic name
- C:-Percentage of encounters with an antibiotic prescribed
- D:-Percentage of medicines prescribed from essential medicines list

Correct Answer:- Option-A

Question 98:-Which among the following is a Watch drug as per Aware classification of antimicrobials?

- A:-Azithromycin
- B:-Gentamicin
- C:-Pencillin
- D:-Meropenem

Correct Answer:-Question Cancelled

Question99:-The partial nicotine receptor agonist useful in smoking cessation

A:-Bupropion

B:-Rimonabant

C:-Varenicline

D:-None of the above

Correct Answer:- Option-C

Question100:-The assumed average maintenance dose per day for a drug used for its main indication in adults is

A:-Defined daily dose

B:-Therapeutic range

C:-Therapeutic window

D:-Therapeutic dose

Correct Answer:- Option-A