

JELET-2017
Pharmacy Candidates

Time Allowed : 2 Hours

Maximum Marks : 100

80200403

Booklet No.

INSTRUCTIONS

Candidates should read the following instructions carefully before answering the questions:

1. This question paper contains **100** MCQ type objective questions. Each question has four answer options given, viz. A, B, C and D.
2. **Only one** answer is correct. Correct answer will fetch full marks **1**. Incorrect answer or any combination of more than one answer will fetch $-\frac{1}{4}$ marks. No answer will fetch **0** marks.
3. Questions must be answered on OMR sheet by darkening the appropriate bubble marked A, B, C and D.
4. Use only **Black/Blue ball point pen** to mark the answer by complete filling up of the respective bubbles.
5. Mark the answers only in the space provided. Do not make any stray mark on the OMR.
6. Write question booklet number and your roll number carefully in the specified locations of the OMR. Also fill appropriate bubbles.
7. Write your name (in block letter), name of the examination centre and put your full signature in appropriate boxes in the OMR.
8. The OMRs will be processed by electronic means. Hence it is liable to become invalid if there is any mistake in the question booklet number or roll number entered or if there is any mistake in filling corresponding bubbles. Also it may become invalid if there is any discrepancy in the name of the candidate, name of the examination centre or signature of the candidate vis-a-vis what is given in the candidate's admit card. The OMR may also become invalid due to folding or putting stray marks on it or any damage to it. The consequence of such invalidation due to incorrect marking or careless handling by the candidate will be sole responsibility of candidate.
9. Rough work must be done on the question paper itself. Additional blank pages are given in the question paper for rough work.
10. Hand over the OMR to the invigilator before leaving the Examination Hall.

Space for Rough Work

82400508

JELET-2017 (Pharmacy)

1. A drug which prevents uric acid synthesis by inhibiting the enzyme xanthine oxidase is
 - (A) Aspirin
 - (B) Allopurinol
 - (C) Colchicine
 - (D) Probenecid
2. The surface tension in intestinal lumen between fat droplets and aqueous medium is decreased by
 - (A) Bile Salts
 - (B) Glucuronic acid
 - (C) Hydrochloric acid
 - (D) Acetic acid
3. The general formula of monosaccharides is
 - (A) $C_nH_{2n}O_n$
 - (B) $C_{2n}H_2O_n$
 - (C) $C_nH_2O_{2n}$
 - (D) $C_nH_{2n}O_{2n}$
4. The number of isomers of glucose is
 - (A) 2
 - (B) 4
 - (C) 8
 - (D) 16
5. A carbohydrate found only in milk is
 - (A) Glucose
 - (B) Galactose
 - (C) Lactose
 - (D) Maltose
6. Synovial fluid contains
 - (A) Heparin
 - (B) Hyaluronic acid
 - (C) Chondroitin sulphate
 - (D) Keratin sulphate
7. The optically inactive amino acid is
 - (A) Glycine
 - (B) Serine
 - (C) Threonine
 - (D) Valine
8. The functions of plasma albumin are
 - (A) Osmosis
 - (B) Transport
 - (C) Immunity
 - (D) Both (A) and (B)
9. Iodine number denotes
 - (A) Degree of unsaturation
 - (B) Saponification number
 - (C) Acid number
 - (D) Acetyl number
10. Which of the following is **not** essential fatty acids?
 - (A) Oleic acid
 - (B) Linoleic acid
 - (C) Arachidonic acid
 - (D) Linolenic acid

11. The Chairman of DTAB is
(A) President, PCI (B) Drug Controller of India
(C) Union Health Minister (D) Director General Health Service
12. Antiserums and toxoids are tested at
(A) Kasauli (B) Lucknow
(C) Izatnagar (D) Delhi
13. The requirements and guidelines for clinical trials comes under which of the following schedules?
(A) Schedule K (B) Schedule V
(C) Schedule Y (D) Schedule U
14. The headquarters of AICTE is in
(A) Delhi (B) Mumbai
(C) Kolkata (D) None of these
15. List of minimum equipments for efficient running of a pharmacy is specified in
(A) Schedule-M (B) Schedule-N
(C) Schedule-O (D) Schedule-P
16. Biological products other than parenteral are categorised in
(A) Schedule-X (B) Schedule-J
(C) Schedule-C (D) Schedule-C₁
17. Common name of washing soda is
(A) Sodium carbonate (B) Calcium bicarbonate
(C) Sodium bicarbonate (D) Calcium carbonate
18. Hardness of water can be removed by adding
(A) Chlorine (B) Washing Soda
(C) Potassium Permanganate (D) Bleaching Powder
19. Nicotine is derivative of
(A) Pyridine (B) Pyrimidine
(C) Isoquinoline (D) Quinoline
20. Which of the followings is true?
(A) Amoxicillin is antimalarial (B) Ampicillin is antipyretic
(C) Paracetamol is antibiotic (D) Chloroquine is antimalarial

21. The optical rotation of freshly prepared solution of α -D glucose changes gradually from 111° to 52.5° due to
- (A) Decomposition (B) Racemization
(C) Partial Resolution (D) Mutarotation
22. Xanthine ring present in
- (A) Caffeine (B) Theophylline
(C) Theobromine (D) All of these
23. Potassium Penicillin is
- (A) Synthetic (B) Semi-synthetic
(C) Natural (D) None of these
24. Probenecid given with penicillin because
- (A) Probenecid increases distribution of penicillin. (B) Probenecid inhibits renal tubular secretion.
(C) Probenecid forms complex with penicillin. (D) Probenecid reduces penicillin allergy.
25. Acetaminophen is the chemical name of
- (A) Paracetamol (B) Aspirin
(C) Acetyl butazone (D) None of these
26. Titanium dioxide (TiO_2) is a/an
- (A) antimicrobial (B) sun screening agent
(C) antifungal (D) anti emetic
27. Which of the following is a systemic alkalinizer?
- (A) $\text{Mg}(\text{OH})_2$ (B) $\text{Al}(\text{OH})_3$
(C) NaHCO_3 (D) Megaldrate
28. Among the following cations which cation is most abundant in intracellular fluid?
- (A) Na^+ (B) K^+
(C) Ca^{2+} (D) Mg^{2+}
29. Unequal distribution of colour on a tablet, refers to
- (A) Picking (B) Mottling
(C) Capping (D) Sticking
30. Cellulose Acetate Phthalate (CAP) dissolves at pH
- (A) Above 6 (B) Below 6
(C) 4 (D) 2

31. The role of borax in cold cream is
- (A) Anti-oxidant (B) Emulsifier
(C) Antimicrobial agent (D) None of these
32. Aspartame has the main disadvantage as
- (A) Hygroscopic (B) Less sweeter than sucrose
(C) Carcinogenic (D) Bitter taste
33. For a W/O type emulsion, HLB value of emulsifier should be
- (A) 9-12 (B) 3-6
(C) More than 15 (D) Both (A) and (C)
34. Which one is used to study gastric emptying?
- (A) Barium sulphate (B) Aluminium hydroxide
(C) Calcium sulphate (D) Aluminium sulphate
35. Which of the following is a non-aqueous binder?
- (A) Veegum (B) Ethyl cellulose
(C) Starch (D) Bentonite
36. Diclofenac tablet coated with cellulose acetate phthalate has been administered to a patient. Where do you expect the drug to be released?
- (A) Stomach (B) Liver
(C) Small intestine (D) Kidney
37. Sigma blade mixtures are commonly used in
- (A) Dry granulation (B) Wet granulation
(C) Powder mixing (D) None of these
38. For mucoadhesive tablet preparation, which one of the following can be used?
- (A) Gelatin (B) Starch
(C) Sodium alginate (D) Tragacanth
39. In nail-polish, which polymer is mostly used as a film former?
- (A) Hydroxy propyl ethyl cellulose (B) PEG
(C) Nitrocellulose (D) All of these
40. Simple Syrup IP contains _____ sucrose.
- (A) 66.7% w/v (B) 85% w/v
(C) 70% w/w (D) 66.7% w/w

41. Glycosides are condensation products of
(A) Sugar + Aglycone
(B) Sugar + Protein
(C) Protein + Aglycone
(D) Fats + Aglycone
42. Tannins give colour with iron compound
(A) Pale yellow
(B) Blue black
(C) Light pink
(D) Orange
43. Drug is not an example of organized crude drug
(A) Digitalis
(B) Cinchona
(C) Aloe
(D) Clove
44. Balsams contains mainly acids
(A) Acetic acid + Benzoic acid
(B) Cinnamic acid + Hydrochloric acid
(C) Benzoic acid + Sulphuric acid
(D) Benzoic acid + Cinnamic acid
45. The ring structure present in strychnine
(A) Indole
(B) Pyrrole
(C) Pyridine
(D) Piperidine
46. Drug is an example of amino alkaloid
(A) Ephedrine
(B) Aconine
(C) Caffeine
(D) Theophylline
47. Family of the Vinca
(A) Rubiaceae
(B) Solanaceae
(C) Apocyanaceae
(D) Erythroxylaceae
48. Shatavari is under the chemical class of glycoside
(A) Sterol
(B) Saponin
(C) Cyanogentic
(D) Isothiocyanate
49. Liquorice belongs to family
(A) Liliaceae
(B) Solanaceae
(C) Loganiaceae
(D) Leguminosae
50. Ferulic acid when treated with hydrochloric acid gives
(A) Acetic acid
(B) Umbellic acid
(C) Cinnamic acid
(D) Vanillic acid

51. Tannins show some chemical reaction except
(A) solution of tannins precipitate gelatin.
(B) tannins are precipitated by salt of copper, tin and lead.
(C) they show colour reaction with iron.
(D) they react with potassium mercuric iodide.
52. Tannic acid is antidote in poisoning
(A) Iodine (B) Cyanide
(C) Alkaloid (D) Arsenic
53. Composition of Molisch reagent is
(A) Alpha naphthol + Sulphuric acid (B) Beta naphthol + Sulphuric acid
(C) Naphthylamine + Sulphuric acid (D) Phenol + Sulphuric acid
54. Keller kiliani test is used for identification of
(A) Fructose (B) Maltose
(C) Deoxy sugar (D) Glucose
55. An 'Orphan Drug' is a
(A) very cheap drug.
(B) drug which has no therapeutic use.
(C) drug needed for treatment or prevention of a rare disease.
(D) drug which acts on Orphanin receptors.
56. Alkalinization of urine hastens the excretion of
(A) weakly basic drugs (B) weakly acidic drugs
(C) strong electrolytes (D) nonpolar drugs
57. Majority of drugs cross biological membranes primarily by
(A) Passive diffusion (B) Facilitated diffusion
(C) Active transport (D) Pinocytosis
58. Which of the following drugs is most likely to be absorbed from the stomach
(A) Morphine sulphate (B) Diclofenac sodium
(C) Hyoscine hydrobromide (D) Quinine dihydrochloride
59. Which of the following is a weakly acidic drug
(A) Atropine sulphate (B) Chloroquine phosphate
(C) Ephedrine hydrochloride (D) Phenytoin sodium

60. Marked redistribution is a feature of
(A) highly lipid soluble drugs. (B) poorly lipid soluble drugs.
(C) depot preparation. (D) highly plasma protein bound drugs.
61. A prodrug is
(A) the prototype member of a class of drugs.
(B) the oldest member of a class of drugs.
(C) an inactive drug that is transformed in the body to an active metabolite.
(D) a drug that is stored in body tissues and is then gradually released in the circulation.
62. The most commonly occurring conjugation reaction for drugs and their metabolites is
(A) Glucuronidation (B) Acetylation
(C) Methylation (D) Glutathione conjugation .
63. Glomerular filtration of a drug is affected by its
(A) lipid solubility (B) plasma protein binding
(C) degree of ionization (D) rate of tubular secretion
64. Which of the following is true of 'placebos'?
(A) Placebo is a dummy medication.
(B) Placebo is the inert material added to the drug for making tablets.
(C) Placebos do not produce any effect.
(D) All patients respond to placebos.
65. A 'toxic effect' differs from a 'side effect' in that it
(A) is not a pharmacological effect of the drug.
(B) is a more intense pharmacological effect that occurs at high dose or after prolonged medication.
(C) must involve drug induced cellular injury.
(D) involves host defence mechanisms.
66. The sympathetic and parasympathetic systems exert functionally opposite influences on the following parameters except
(A) heart rate (B) atrial refractory period
(C) pupil diameter (D) intestinal motility
67. Streptomycin acts well in
(A) Acidic pH (B) Basic pH
(C) Neutral pH (D) Negative pH

68. Drug of choice for Paroxymal Supraventricular Tachycardia (PSVT) is
(A) Propranolol (B) Atenol
(C) Verapamil (D) Quinidine
69. Which antileprotic has anti-inflammatory action?
(A) Dapsone (B) Rifampin
(C) Ethionamide (D) Clofazimine
70. Heparin is a
(A) Protein (B) Homopolysaccharide
(C) Heteropolysaccharide (D) Fat
71. For chloroquine resistant malaria which drug is given?
(A) Primaquine (B) Sulfadöxine
(C) Quinine (D) Proguanil
72. Antidote for cyanide poisoning
(A) Flumazenil (B) Physostigmine
(C) N-Acetylcysteine (D) Sodium nitrite and Sodium thiosulphate
73. In skin, which macrophage cell is present?
(A) Kupffer Cell (B) Osteoclast
(C) Osteocyte (D) Dendritic cell
74. 'Inotropic effect' means
(A) Change of rate of contraction (B) Change of force of contraction
(C) Regulation of conduction velocity (D) All of these
75. Which antitubercular is a prodrug?
(A) Rifampicin (B) Streptomycin
(C) Pyrazinamide (D) Isoniazid
76. Heart receives cholinergic stimulation through _____ nerve.
(A) Vagus (B) Trigeminal
(C) Spinal Accessory (D) Trochlear
77. Sensory stimulation goes to brain from anterior part of tongue through
(A) Glossopharyngeal nerve (B) Facial
(C) Trigeminal (D) Trochlear

78. 'Sialagogue' means increase of
(A) Saliva secretion (B) Bile secretion
(C) Milk secretion (D) Acid secretion
79. Which of the following does not change with the change of temperature?
(A) Molarity (B) Normality
(C) Molality (D) Formality
80. Among the following cations which cation is most abundant in extracellular fluid?
(A) Na^+ (B) K^+
(C) Ca^{2+} (D) Mg^{2+}
81. Calamine chemically is
(A) ZnCO_3 (B) $\text{Zn}(\text{NO}_3)_2$
(C) $\text{Zn}(\text{OH})_2$ (D) ZnSO_4
82. Preservative for food material is
(A) Phenyl mercuric nitrate (B) Methyl paraben
(C) Sodium benzoate (D) Benzyl alcohol
83. Radio iodine (^{131}I) is used for
(A) Thyroid disorder (B) Pancreatic disorder
(C) Bile duct disorder (D) Liver disorder
84. Barium meal is used for visualization of
(A) Gall bladder (B) Intestinal tract
(C) Heart (D) Liver
85. Radioisotopes always follow which type of reaction?
(A) First order (B) Second order
(C) Zero order (D) Third order
86. Tripple dye does not contain which dye?
(A) Gentian Violet (B) Proflavine
(C) Brilliant Green (D) Merbromin
87. Condy's Lotion is prepared from
(A) Potassium permanganate (B) Potassium dichromate
(C) Potassium phthalate (D) Potassium bromide

88. Universal Antidote does not contain which of the followings?
(A) Activated Charcoal (B) Tannic Acid
(C) Magnesium oxide (D) Aluminium Hydroxide
89. Acid fast bacteria is
(A) *Mycobacterium leprae* (B) *Chlamydia trachomatis*
(C) *Salmonella typhi* (D) *Vibrio cholerae*
90. Clostridium tetani produces
(A) Exotoxin (B) Endotoxin
(C) Pyrogen (D) None of these
91. Which is true for 'Streptomyces'?
(A) Gram positive filamentous bacteria (B) Gram negative filamentous bacteria
(C) Fungus (D) Acid fast bacteria
92. Which is not applicable for female contraception?
(A) Tubectomy (B) Vesectomy
(C) Combined Pill (D) Mini Pill
93. Which one is Live Vaccine?
(A) DPT (B) MMR
(C) BCG (D) TT
94. Koplik's spot related to which disease?
(A) Pox (B) Measles
(C) Typhoid (D) Rabies
95. German Measles caused by
(A) Rubella virus (B) Rubeola virus
(C) Varicella zoster (D) Variola virus
96. Antibody is produced by
(A) Lymphocyte (B) Neutrophil
(C) Monocyte (D) Eosinophil
97. Which is the example of spirochaete?
(A) *Chlamydia trachomatis* (B) *Trypanosoma gambiens*
(C) *Treponema pallidum* (D) *Vibrio cholerae*

98. Which one is Gram positive bacteria?
- (A) *Salmonella typhi* (B) *Vibrio cholerae*
(C) *Pseudomonas aeruginosa* (D) *Staphylococcus aureus*
99. Pseudocholinesterase differs from true cholinesterase in that it
- (A) does not hydrolyse acetylcholine
(B) hydrolyses acetylcholine at a slower rate
(C) is more susceptible to inhibition by physostigmine
(D) is the only form of circulating cholinesterase
100. Which of the following secretions is not stimulated by acetylcholine?
- (A) Tear (B) Bile
(C) Pancreatic juice (D) Sweat
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Space for Rough Work

15-TELEL

Space for Rough Work

JELET-2017

Pharmacy Candidates

সময় : ২ ঘণ্টা

সর্বাধিক নম্বর : ১০০

Booklet No.

নির্দেশাবলি

পরীক্ষার্থীদের উত্তর দেওয়ার পূর্বে নির্দেশাবলি ভাল করে পড়ে নিতে হবে :

- ১। এই প্রশ্নপত্রে 50টি MCQ ধরনের প্রশ্ন দেওয়া আছে। প্রতিটি প্রশ্নের A, B, C এবং D এই চারটি সম্ভাব্য উত্তর দেওয়া আছে।
- ২। সঠিক উত্তর দিলে 1 নম্বর পাবে। ভুল উত্তর দিলে অথবা যে কোন একাধিক উত্তর দিলে $-\frac{1}{4}$ নম্বর পাবে। কোন উত্তর না দিলে শূন্য পাবে।
- ৩। OMR পত্রে A, B, C অথবা D চিহ্নিত সঠিক ঘরটি ভরাট করে উত্তর দিতে হবে।
- ৪। OMR পত্রে উত্তর দিতে শুধুমাত্র কালো/নীল বল পয়েন্ট পেন ব্যবহার করবে।
- ৫। OMR পত্রে নির্দিষ্ট স্থান ছাড়া অন্য কোথাও কোন দাগ দেবে না।
- ৬। OMR পত্রে নির্দিষ্ট স্থানে প্রশ্নপত্রের নম্বর এবং নিজের রোল নম্বর অতি সাবধানতার সাথে লিখতে হবে এবং প্রয়োজনীয় ঘরগুলি পূরণ করতে হবে।
- ৭। OMR পত্রে নির্দিষ্ট স্থানে নিজের নাম ও পরীক্ষাকেন্দ্রে নাম লিখতে হবে এবং নিজের সম্পূর্ণ স্বাক্ষর দিতে হবে।
- ৮। OMR উত্তরপত্রটি ইলেকট্রনিক যন্ত্রের সাহায্যে পড়া হবে। সুতরাং প্রশ্নপত্রের নম্বর বা রোল নম্বর ভুল লিখলে অথবা ভুল ঘর ভরাট করলে উত্তরপত্রটি অনিবার্য কারণে বাতিল হতে পারে। এছাড়া পরীক্ষার্থীর নাম, পরীক্ষাকেন্দ্রের নাম বা স্বাক্ষরে কোন ভুল থাকলেও পত্র বাতিল হয়ে যেতে পারে। OMR উত্তরপত্রটি ভাঁজ হলে বা তাতে অনাবশ্যিক দাগ পড়লে বা বাতিল হয়ে যেতে পারে। পরীক্ষার্থীর এই ধরনের ভুল বা অসতর্কতার জন্য উত্তরপত্র বাতিল হলে একমাত্র পরীক্ষার্থী নিজেই তার জন্য দায়ী থাকবে।
- ৯। প্রশ্নপত্রে রাফ কাজ করার জন্য ফাঁকা জায়গা দেওয়া আছে। অন্য কোন কাগজ এই কাজে ব্যবহার করবে না।
- ১০। পরীক্ষাকক্ষ ছাড়ার আগে OMR পত্র অবশ্যই পরিদর্শককে দিয়ে যাবে।