

DO NOT OPEN THIS BOOKLET UNTIL YOU ARE ASKED TO DO SO.

**JELET-2025**  
**Paper-II (For Pharmacy Candidates)**

(Booklet Number)

**Duration : 2 Hours**

**No. of MCQ : 100**

**Full Marks : 100**

**INSTRUCTIONS**

1. All questions are of objective type having four answer options for each.
2. Category-I : Carry 1 mark each and only one option is correct. In case of incorrect answer or any combination of more than one answer,  $\frac{1}{4}$  mark will be deducted.
3. Questions must be answered on OMR Sheet by darkening the appropriate bubble marked A, B, C, or D.
4. Use only **Black/Blue ink ball point pen** to mark the answer by complete filling up of the respective bubbles.
5. Write question booklet number and your roll number carefully in the specified locations of the **OMR Sheet**. Also fill appropriate bubbles.
6. Write your name (in block letter), name of the examination center and put your signature (as it appears in the Admit Card) in appropriate boxes in the OMR Sheet.
7. The OMR Sheet is liable to become invalid if there is any mistake in filling the correct bubbles for question booklet number/roll number or if there is any discrepancy in the name / signature of the candidate, name of the examination center. The OMR Sheet 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 the candidate.
8. Candidates are not allowed to carry any written or printed material, calculator, pen, log-table, wristwatch, graph paper, slide rule, any communication device like mobile phones, bluetooth etc. inside the examination hall. Any candidate found with such prohibited items will be **reported against** and his/her candidature will be summarily cancelled.
9. Rough work must be done on the question booklet itself. Additional blank pages are given in the question booklet for rough work.
10. Hand over the OMR Sheet to the invigilator before leaving the Examination Hall.
11. Candidates are allowed to take the Question Booklet after Examination is over.

Signature of the Candidate : \_\_\_\_\_  
(as in Admit Card)

Signature of the Invigilator : \_\_\_\_\_

**JELET-2025 ( 2 )**

**SPACE FOR ROUGH WORK**

JELET-2025 ( 3 )

## Pharmacy

### Category-I (Q 1 to 100)

(Carry 1 mark each. Only one option is correct. Negative marks: – ¼)

1. For general anesthesia, Thiopental sodium is administered
  - (A) Orally
  - (B) Intramuscularly
  - (C) Intravenously
  - (D) Topically
  
2. Most alkaloids occur in nature as:
  - (A) Free base
  - (B) Water soluble salts
  - (C) Alcohol soluble salts of organic acids
  - (D) Insoluble salts of organic acids
  
3. The chill observed in malaria is due to:
  - (A) increase in erythrocyte count.
  - (B) bursting of erythrocyte releasing merozoites.
  - (C) increase in tissue primary schizonts.
  - (D) increase in WBC count.
  
4. While dispensing Pyrantal pamoate, a pharmacist should warn the patient that
  - (A) it causes drowsiness.
  - (B) it should be taken with food.
  - (C) it colours urine blue.
  - (D) it colours faces red.
  
5. In combination with dapsone the drug chosen to be administered for the treatment of leprosy is
  - (A) Clofazimine
  - (B) Streptomycin
  - (C) Penicillin
  - (D) Chloromycetin
  
6. Which of the following is penicillinase resistant penicillin?
  - (A) Amoxycillin
  - (B) Ampicillin
  - (C) Penicillin
  - (D) Methicillin

**JELET-2025 ( 4 )**

**7.** Morphine is present in:

- |                              |                               |
|------------------------------|-------------------------------|
| (A) <i>Atropa belladonna</i> | (B) <i>Papaver somniferum</i> |
| (C) <i>Ricinus communis</i>  | (D) <i>Solanum nigrum</i>     |

**8.** Which is in-vitro test for pyrogen in injectibles?

- |                |                 |
|----------------|-----------------|
| (A) Shyam test | (B) Rabbit test |
| (C) LAL test   | (D) Limit test  |

**9.** Which wavelength of ultra-violet radiation having maximum germicidal activity?

- |              |              |
|--------------|--------------|
| (A) 295 nm   | (B) 230 nm   |
| (C) 253.7 nm | (D) 290.9 nm |

**10.** In tablet manufacturing, granulation is done to increase

- |                    |                     |
|--------------------|---------------------|
| (A) Flow property  | (B) Compressibility |
| (C) Both (A) & (B) | (D) None            |

**11.** Which vaccine is given first to newborn after birth?

- |                 |                 |
|-----------------|-----------------|
| (A) PCV vaccine | (B) BCG vaccine |
| (C) DPT vaccine | (D) Hib vaccine |

**12.** Which of the following is a waterborne disease?

- |               |                  |
|---------------|------------------|
| (A) Leprosy   | (B) Tuberculosis |
| (C) Influenza | (D) Typhoid      |

**13.** Devil's dung is synonym of

- |                |                |
|----------------|----------------|
| (A) Senna      | (B) Clove      |
| (C) Nux vomica | (D) Asafoetida |

## JELET-2025 ( 5 )

14. Bitter test of Kalmegh is due to
- (A) Andrographolide (B) Amygdalin  
(C) Prunasin (D) Arbutin
15. In Drugs Technical Advisory Board (DTAB) the total number of nominated member is:
- (A) 12 (B) 8  
(C) 5 (D) 3
16. Drug marketed under generic name only comes under
- (A) Schedule W (B) Schedule P  
(C) Schedule V (D) Schedule X
17. Which vaccine amongst the following is bacterial?
- (A) Influenza vaccine (B) Rubella vaccine  
(C) Mumps vaccine (D) Whooping cough
18. Which test is used to diagnose Tuberculosis?
- (A) Whatman test (B) Dick test  
(C) Widal test (D) Mantoux test
19. A 2% (w/v) solution means:
- (A) 2 ml solute present in 100 g solvent (B) 2 g solute present in 100 ml solution  
(C) 2 g solute present in 100 g solvent (D) 2 g solute present in 100 ml solvent
20. Following drugs should be administered 1 or 2 hours prior or later the meal excepting
- (A) Amoxicillin (B) Doxycycline  
(C) Erythromycin (D) Naproxen



**JELET-2025 ( 6 )**

- 21.** Following drugs lower G. I. tract motility excepting
- (A) Anti-cholinergics (B) Anti-histaminics  
(C) Antipsychotics (D) Metoclopramide
- 22.** E.D.T.A. forms complexes with most cations in the ratio of
- (A) 1:4 (B) 1:3  
(C) 1:2 (D) 1:1
- 23.** 'MALDI TOF' technique is used for the detection of
- (A) Steroids (B) Peptides  
(C) Flavonoids (D) Tannin
- 24.** Aprotinin is a polypeptide used as
- (A) Antifibrinolytic (B) Hormone  
(C) Antiplatelet (D) Fibrinolytic
- 25.** Which of the following plastic material lead to produce liver cancer when person exposed to its monomer?
- (A) Polyethylene (B) Polypropylene  
(C) Polyvinyl chloride (D) Poly styrene
- 26.** Combination of Sulfamethoxazole & Trimethoprim is selected because
- (A) both have same pKa value.  
(B) both have more or less same biological half life.  
(C) both have bactericidal action.  
(D) both metabolize through the same path.
- 27.** 'Carmine' which is a lake and which is prepared from c-glycoside carminic acid (obtained from Coccus cacti) is obtained when carminic acid is treated by
- (A) Al and Ca - salt (B) Al and Na - salt  
(C) Ca and Na - salt (D) Al and K - salt

**JELET-2025 ( 7 )**

**28.** pH of lachrymal fluid is

- |                   |                       |
|-------------------|-----------------------|
| (A) weakly acidic | (B) neutral           |
| (C) weakly basic  | (D) strongly alkaline |

**29.** Aminoglycosides kill the bacteria by

- |  |   |
|--|---|
| (A) inhibiting protein synthesis.        | (B) inhibiting cell membrane formation. |
| (C) altering cell membrane permeability. | (D) degenerating DNA.                   |

**30.** Which cells produce Insulin in pancreas?

- |                  |                |
|------------------|----------------|
| (A) Alpha cells  | (B) Beta cells |
| (C) Pancreocytes | (D) Lipocytes  |

**31.** Flower buds of which drug have medicinal importance?

- |            |              |
|------------|--------------|
| (A) Clove  | (B) Cardamom |
| (C) Fennel | (D) Caraway  |

**32.** Rebound hyperacidity is associated with the antacid

- |                         |                           |
|-------------------------|---------------------------|
| (A) Calcium carbonate   | (B) Aluminium hydroxide   |
| (C) Sodium bi-carbonate | (D) Magnesium trisilicate |

**33.** The Pharmacy Act was passed in

- |          |          |
|----------|----------|
| (A) 1940 | (B) 1945 |
| (C) 1948 | (D) 1950 |

**34.** In a sieve shaker, the sieves are arranged on the basis of sieve number in

- |   |  |
|---|--|
| (A) ascending order from top to bottom. | (B) descending order from top to bottom. |
| (C) ascending order from bottom to top. | (D) parallel order.                      |

**JELET-2025 ( 8 )**

- 35.** Which of the following dryers is also known as lyophilizer?
- (A) Vacuum dryer (B) Spray dryer  
(C) Freeze dryer (D) Fluidized bed dryer
- 36.** Which one of the following is a unit dosage form?
- (A) Tablet (B) Suspension  
(C) Emulsion (D) Ointment
- 37.** Large volume parenteral solution dosage forms must be
- (A) sterile (B) clear  
(C) isotonic (D) all of these
- 38.** Coronary arteries are present in
- (A) brain (B) heart  
(C) skin (D) liver
- 39.** The total number of amino acid present in the molecule of human insulin is:
- (A) 30 (B) 42  
(C) 109 (D) 51
- 40.** Borosilicate glass is the example of
- (A) Type I (B) Type II  
(C) Type III (D) Type IV
- 41.** While other factors are remaining constant, the chances of autoclaving failure is minimum in case of
- (A) treating with saturated steam. (B) treating with unsaturated steam.  
(C) treating with air and steam mixture. (D) none of these



## JELET-2025 ( 9 )

42. An unequal colour distribution on the surface of the tablet is called
- (A) Chipping (B) Picking  
(C) Motling (D) Cracking
43. The standard for GMP comes under
- (A) Schedule P (B) Schedule M  
(C) Schedule X (D) Schedule G
44. Which one is most abundant in green tea (*Camellia sinensis*)?
- (A) Epicatechin (B) Quercetin  
(C) Curcumin (D) Epigallocatechin gallate
45. The scientific name of Neem tree is
- (A) *Azadirachta indica* (B) *Vinca rosea*  
(C) *Ocimum sanctum* (D) *Rauwolfia serpentina*
46. When 100% alcohol is mixed with equal volume of 100% pure water at constant temperature, the resulting strength of alcohol become
- (A) 50% (v/v) (B) Greater than 50% (v/v)  
(C) Less than 50% (v/v) (D) None of these
47. Psoriasis is characterized by
- (A) granulomatous (B) nodules  
(C) silvery grey scales (D) small red vessel
48. What will happen when a cell is placed in a hypertonic solution?
- (A) The cell swells up (B) The cell shrinks  
(C) There is no change in cell (D) None of these

**49.** Quinidine is

- (A) a cardiac depressant obtained from cinchona.
- (B) a stereo isomer of quinine.
- (C) an anti-arrhythmic used in cardiac arrhythmia.
- (D) all of the above

**50.** The cathartic action of the castor oil is due to the irritant action of:

- (A) Oleic acid
- (B) Ricinoleic acid
- (C) Glutamic acid
- (D) Anthraquinone glycoside

**51.** The pleasant flavour of peppermint oil is due to the presence of

- (A) jasmone and esters
- (B) menthol
- (C) menthofuran
- (D) menthone

**52.** Codeine acts as a cough sedative by

- (A) depressing bronchiolar secretion.
- (B) depressing pulmonary action.
- (C) depressing cough center.
- (D) producing mild nausea.

**53.** Which of the following is classified as a polysaccharide?

- (A) Glucose
- (B) Saccharin
- (C) Maltose
- (D) Starch

**54.** As per Drugs & Cosmetics Rules, 1945, the minimum requirements for the premises, furniture and equipment necessary for the efficient operation of a pharmacy come under

- (A) Schedule N
- (B) Schedule M
- (C) Schedule O
- (D) Schedule P

**55.** The State Pharmacy Council is established by the

- (A) Central Pharmacy Council (P.C.I.).
- (B) Central Government.
- (C) Director of drugs control administration of the state.
- (D) State Government.

**JELET-2025 ( 11 )**

- 56.** Importance of Drugs & Cosmetics (Amendment) Act, 1972 is
- (A) Act has given additional power of Inspector of Drugs
  - (B) Act is extended to Jammu & Kashmir
  - (C) Ayurvedic medicines are brought under the Act
  - (D) None of the above
- 57.** The prevention of Illicit Traffic in Psychotropic Substances Act was enacted in the year
- (A) 1948
  - (B) 1999
  - (C) 1988
  - (D) 2010
- 58.** The term 'organoleptic evaluation' refers to
- (A) evaluation with the help of sensory organs.
  - (B) evaluation of the organic compounds present in the crude drug.
  - (C) evaluation based on organic reactions.
  - (D) evaluation related to organic farming of the crude drugs.
- 59.** Which one of the following is not related to leaf characteristics?
- (A) Annular layers
  - (B) Idioblasts
  - (C) Palisade ratio
  - (D) Vein-islet
- 60.** Hashish is directly related to:
- (A) heroin
  - (B) marijuana
  - (C) opium
  - (D) LSD
- 61.** Lanolin differs from wool fat in that lanolin
- (A) contains less water.
  - (B) contains more water.
  - (C) has been further purified.
  - (D) contains a great quantity of glycerol.
- 62.** An alkaloid present in opium and having smooth muscle relaxant effect is
- (A) codeine
  - (B) morphine
  - (C) papaverine
  - (D) narcotine

**JELET-2025 ( 12 )**

- 63.** The side effect of aluminium hydroxide gel antacid is  
(A) diarrhoea (B) hemorrhage  
(C) constipation (D) vomiting
- 64.** Which of the following is performed to test integrity of HEPA filter?  
(A) LAL test (B) Sterility test  
(C) Limit test (D) DOP test
- 65.** Which of the following pharmacokinetic parameter is closely related to the bio-availability?  
(A) AUC (B)  $C_{\max}$   
(C)  $T_{\max}$  (D)  $V_d$
- 66.** Balsam of Tolu is obtained from the trunk of tree belonging to which family?  
(A) Styraceae (B) Fabaceae  
(C) Berberidaceae (D) Bursuraceae
- 67.** What is the main clinical use for antagonists of the  $\beta_1$ -adrenoceptor?  
(A) Treatment of hypertension (B) Treatment as asthma  
(C) Treatment of constipation (D) Treatment of glaucoma
- 68.** 5ppm in solution is equivalent to  
(A) 5% (w/v) (B) 0.000005% (w/v)  
(C) 0.0005% (w/v) (D) 0.005% (w/v)
- 69.** 1 pint is equal to  
(A) 473.17 ml (B) 100 ml  
(C) 453.56 ml (D) 1000 ml

## JELET-2025 ( 13 )

70. A solution contains 3 grains of a drug per fluid ounce. What is the % (w/v) of the solution?
- (A) 0.3% (w/v) (B) 0.65% (w/v)  
(C) 1.0% (w/v) (D) 0.52% (w/v)
71. How many grams of 2% aluminum paste must be mixed with a 10% aluminum paste to prepare exactly 120 grams of 5% strength?
- (A) 60 g (B) 75 g  
(C) 50 g (D) 80 g
72. The amount of NaCl in 10 microliter( $\mu$ l) of a 1M solution is:
- (A) 58.5 mg (B) 5.85 mg  
(C) 585 mg (D) 0.585 mg
73. The term 'impalpable' refers to a substance that is
- (A) nongreasy (B) tasteless  
(C) not perceptible to the touch (D) bitter
74. Percolation process of extraction excludes
- (A) unorganized drugs (B) organized drugs  
(C) woody drugs (D) thermolabile drugs
75. The form of water most commonly used as a solvent during manufacturing of large volume parenterals is
- (A) demineralized water (B) distilled water  
(C) water for injection USP (D) all of these
76. For drying blood plasma the following technique is used:
- (A) Vacuum drying (B) Freeze drying  
(C) Tray drying (D) Fluid bed drying

**JELET-2025 ( 14 )**

77. Diazepam with alcohol is an example of
  - (A) Physical incompatibility
  - (B) Chemical incompatibility
  - (C) Therapeutical incompatibility
  - (D) No incompatibility
78. What should be dose for a child weighing 40 lb if the adult dose is 50 mg (use Clark's Rule)?
  - (A) 13.3 mg
  - (B) 50 mg
  - (C) 25 mg
  - (D) 30 mg
79. The presence of sodium bi-sulfite in a drug solution implies that the drug
  - (A) is susceptible to oxidation.
  - (B) is heat labile.
  - (C) has poor water solubility.
  - (D) has free acid.
80. Inversion of sucrose in syrup due to heat is known as
  - (A) epimerization
  - (B) polymerization
  - (C) isomerization
  - (D) caramelization
81. Which of the following microorganism is dangerous to the eye?
  - (A) *Bacillus subtilis*
  - (B) *Pseudomonas aeruginosa*
  - (C) *Escherichia coli*
  - (D) *Aspergillus niger*
82. Following is an example of inorganic emulsifying agent:
  - (A) Gelatin
  - (B) Bentonite
  - (C) Acacia
  - (D) Polysorbate
83. Chloramphenicol palmitate is
  - (A) hydrolysed within G.I. tract to produce free base.
  - (B) an ester pro-drug.
  - (C) inactive in-vitro condition.
  - (D) all of the above

## JELET-2025 ( 15 )

84. Rideal Walker test is performed to measure the efficiency of
- (A) vaccines (B) disinfectant fluid  
(C) surfactants (D) suspending agents
85. Vitamin C with iron formulation is responsible for
- (A) reduced absorption due to chelate formation.  
(B) better absorption of iron.  
(C) therapeutic incompatibility.  
(D) inactivation of iron.
86. Small pox vaccine contains
- (A) weakened virus vaccinia. (B) living culture of B. C. G.  
(C) attenuated staphylococcus. (D) none of these
87. The temperature of enema prior to administration should be
- (A) 15°C (B) 8°C  
(C) 37°C (D) 45°C
88. Which of the following drug should be taken after meal for better bio-availability?
- (A) Gentamicin (B) Tetracycline  
(C) Amoxycillin trihydrate (D) All of these
89. Phenolphthalein is a
- (A) buffer (B) chelating agent  
(C) viscosity builder (D) laxative
90. The antibiotic Roxithromycin belongs to the class of
- (A)  $\beta$ -lactum (B) Aminoglycoside  
(C) Macrolide (D) Peptide
91. Epsom salt is
- (A) ferrous sulphate (B) copper sulphate  
(C) magnesium sulphate (D) potassium sulphate

**JELET-2025 ( 16 )**

**92.** Di-sodium hydrogen citrate is

- (A) a systemic alkalizer.
- (B) produced by reacting 1 equivalent weight of citric acid and 2 equivalent weight of NaOH.
- (C) metabolized in the body to produce equivalent amount of bi-carbonate ion.
- (D) all of the above

**93.** An aqueous solution of multiple drugs may be better prepared by

- (A) dissolving the ingredients in ascending order of solubility.
- (B) dissolving the ingredients in descending order of solubility.
- (C) dissolving all the ingredients at a time.
- (D) none of the above

**94.** Which of the following is known as vegetable gelatin?

- (A) Carnauba wax
- (B) Collagen
- (C) Agar
- (D) None of these

**95.** Koch's disease is also known as

- (A) Hepatitis
- (B) Tuberculosis
- (C) AIDS
- (D) Filariasis

**96.** Neural tube defect occurs due to the deficiency of

- (A) Riboflavin
- (B) Vitamin D
- (C) Vitamin B<sub>12</sub>
- (D) Filariasis

**97.** Methyl prednisolone contains

- (A) Cyclopentanoperhydro ring
- (B) Cyclopentanoperhydrophenanthrene ring
- (C) Cyclohexonophenanthrene ring
- (D) Cyclopentanophenanthrene ring



**JELET-2025 ( 17 )**

**98.** Which one is not a live vaccine?

- |         |         |
|---------|---------|
| (A) MMR | (B) BCG |
| (C) OPV | (D) DPT |

**99.** The following is true to Tri-sulfa formulation:

- (A) It is a mixture of three different sulphonamides.
- (B) The solubility of one component in renal environment is not hampered by the presence of other two components.
- (C) Their biological half-lives are more or less equal.
- (D) All of the above

**100.** Usually pre-filter is used before HEPA filter to

- |  |                                   |
|--|-----------------------------------|
| (A) polish the air.                        | (B) arrest the coarser particles. |
| (C) increase the life-span of HEPA filter. | (D) all of these                  |
-

**JELET-2025 ( 18 )**

**SPACE FOR ROUGH WORK**

**JELET-2025 ( 19 )**

**SPACE FOR ROUGH WORK**

**JELET-2025 ( 20 )**

**SPACE FOR ROUGH WORK**