

URG-PH-4001
Pharmaceutical Sciences

A	Answer Key	B	Answer Key	C	Answer Key	D	Answer Key	
1	A	1	A	1	C	1	C	
2	D	2	D	2	A	2	C	
3	C	3	C	3	B	3	C	
4	C	4	C	4	C	4	B	
5	A	5	C	5	A	5	D	
6	B	6	A	6	C	6	D	
7	C	7	B	7	B	7	D	
8	C	8	B	8	B	8	B	
9	C	9	C	9	D	9	A	
10	D	10	C	10	C	10	D	
11	A	11	B	11	C	11	D	
12	D	12	B	12	C	12	C	
13	C	13	A	13	D	13	B	
14	C	14	C	14	C	14	B	
15	C	15	A	15	C	15	A	
16	A	16	B	16	C	16	D	
17	B	17	C	17	B	17	C	
18	B	18	A	18	D	18	C	
19	C	19	C	19	D	19	A	
20	C	20	B	20	D	20	B	
21	B	21	B	21	B	21	C	
22	B	22	D	22	A	22	C	
23	A	23	C	23	D	23	C	
24	C	24	C	24	D	24	D	
25	A	25	C	25	C	25	A	
26	B	26	D	26	B	26	D	
27	C	27	C	27	B	27	C	
28	A	28	C	28	A	28	C	
29	C	29	C	29	D	29	C	
30	B	30	B	30	C	30	A	
31	B	31	D	31	C	31	B	
32	D	32	D	32	A	32	B	
33	C	33	D	33	B	33	C	
34	C	34	B	34	C	34	C	
35	C	35	A	35	C	35	B	
36	D	36	D	36	C	36	B	
37	C	37	D	37	D	37	A	
38	C	38	C	38	A	38	C	
39	C	39	B	39	D	39	A	
40	B	40	B	40	C	40	B	
41	D	41	A	41	C	41	C	
42	D	42	D	42	C	42	A	

URG-PH-4001
Pharmaceutical Sciences

43	D	43	C	43	A	43	C	
44	B	44	C	44	B	44	B	
45	A	45	A	45	B	45	B	
46	D	46	B	46	C	46	D	
47	D	47	C	47	C	47	C	
48	C	48	C	48	B	48	C	
49	B	49	C	49	B	49	C	
50	B	50	D	50	A	50	D	

PHARMACEUTICAL SCIENCES

1. Which of the following cells contain haemoglobin ?

(A) RBC	(B) WBC
(C) Both (A) and (B)	(D) None of these

2. Cyclone separator is used for :

(A) Drying	(B) Distillation
(C) Evaporation	(D) Size Separation

3. In a hospital setup PTC stand for :

(A) Pharmacy Teacher Committee
(B) Pharmaceutical Technical Committee
(C) Pharmacy Therapeutic Committee
(D) Potent Therapeutic Committee

4. Dip tube is an important part of :

(A) Syrup packaging
(B) Injection packaging
(C) Aerosol packaging
(D) Tablet packaging

5. A preparation containing live or attenuated viruses is called :
- (A) Vaccine
 - (B) Antiserum
 - (C) Toxin
 - (D) Toxoid
6. Which of the following tests is used for detection of glycosides ?
- (A) Benedict's test
 - (B) Borntrager's reagent test
 - (C) Hager's reagent test
 - (D) Glucose tolerance test
7. Which type of incompatibility best describes the formation of a eutectic mixture when menthol and camphor are triturated together ?
- (A) Therapeutic Incompatibility
 - (B) Chemical Incompatibility
 - (C) Physical Incompatibility
 - (D) All of the above

8. Injection, syringe and needle are covered under which Schedule of D & C Act ?
- (A) Schedule A
 - (B) Schedule B
 - (C) Schedule C
 - (D) Schedule D
9. Erythromycin is an antibiotic. It belongs to the class of :
- (A) Beta lactam
 - (B) Aminoglycosides
 - (C) Macrolides
 - (D) Peptide
10. Ergot is an alkaloid produced by :
- (A) *Ricinus communis*
 - (B) *Commiphora molmol*
 - (C) *Agaricus campestris*
 - (D) *Claviceps purpurea*

11. Vitamin B₆ deficiency may occur during tuberculosis therapy with :
- (A) Isoniazid
 - (B) Rifampicin
 - (C) Sulpha drugs
 - (D) Ethambutol
12. Bloom strength is used to check the quality of :
- (A) Lactose
 - (B) Ampoules
 - (C) Avicel
 - (D) Gelatin
13. Which of the following antiparkinsonian drugs is known to act by inhibition of enzyme peripheral decarboxylase ?
- (A) Levodopa
 - (B) Piribedil
 - (C) Carbidopa
 - (D) Selegiline

14. Diabetic patients who are on biguanide drugs are required to abstain from alcohol because :
- (A) Alcohol has hypoglycemic effect
 - (B) Biguanides interact with alcohol causing lactic acidosis
 - (C) Both (A) and (B)
 - (D) There is no need to abstain
15. Radiopharmaceutical used in the study of thyroid uptake is :
- (A) K-42
 - (B) Cr-51
 - (C) I-131
 - (D) S-35
16. In the process of extraction, ethanol is used as a solvent for :
- (A) Alkaloids
 - (B) Gums
 - (C) Waxes
 - (D) Sucrose

17. The drug CAPTOPRIL belongs to which class of antihypertensive drugs ?
- (A) Rennin inhibitor
 - (B) ACE Inhibitor
 - (C) Angiotensin-II Antagonist
 - (D) Calcium Channel Blocker
18. The primary aim of using atropine prior to administration of inhalant anaesthetics is to reduce :
- (A) Muscle tone
 - (B) Secretions
 - (C) Nausea and vomiting
 - (D) Appetite
19. Dilatant flow is characterized as a reverse phenomenon of :
- (A) Newtonian flow
 - (B) Plastic flow
 - (C) Psuedoplastic flow
 - (D) Rheopexy
20. Which of the following amino acids is basic in nature ?
- (A) Histidine
 - (B) Methionine
 - (C) Arginine
 - (D) Hydroxyproline

21. Which one is true synonym of *Withania somnifera* ?

(A) Poison gooseberry

(B) Winter Cherry

(C) Indian Ginseng

(D) All of the above

22. One of the detectors used in gas chromatography is :

(A) Bolometer

(B) Thermal Conductivity Detector

(C) Golay Detector

(D) Geiger Counter

23. A naturally occurring carminative is :

(A) Asafoetida

(B) Asoka

(C) Arjuna

(D) Agar

24. Beta imidazolyl ethylamine is popularly known as :
- (A) Cycloserine (B) Threonine
(C) Histamine (D) Reserpine
25. In which of the following techniques the sample is kept below triple point ?
- (A) Lyophilization (B) Spray Drying
(C) Spray Congealing (D) Centrifugation
26. Tropane alkaloids can be identified by :
- (A) Thalloquin test
(B) Vitali test
(C) Biuret test
(D) Millon's test
27. Which of the following statements is *true* for flocculated suspensions ?
- (A) Hard cake is formed
(B) They are difficult to re-disperse
(C) Rate of sedimentation is high
(D) Suspension is pleasing in appearance

28. Which of the following is *not* a benzodiazepine ?

(A) Zolpidem

(B) Nitrazepam

(C) Diazepam

(D) Triazolam

29. The first edition of Indian Pharmacopoeia was published in the year :

(A) 1947

(B) 1950

(C) 1955

(D) 1960

30. An elixir essentially consists of :

(A) Methanol and water

(B) Ethanol and water

(C) Propanol and water

(D) Butanol and water

31. Which of the following methods is used to sterilize metal syringes ?

- (A) Moist heat
- (B) Gamma radiation
- (C) Dry heat
- (D) Ethylene oxide

32. A spontaneous reaction proceeds with decrease in :

- (A) Entropy
- (B) Enthalpy
- (C) Internal energy
- (D) Free energy

33. Preferred route of insulin is :

- (A) Oral
- (B) Sublingual
- (C) Subcutaneous
- (D) Topical

34. Which of the following non-narcotic agents is salicylic acid derivative ?

(A) Phenylbutazone

(B) Ketamine

(C) Aspirin

(D) Tramadol

35. Which of the following plants is a bitter drug ?

(A) *Valeriana officinalis*

(B) *Saraca indica*

(C) *Andrographis peniculata*

(D) *Ocimum sanctum*

36. Which of the following is *not* a primary standard used in acid base titrations ?

(A) Potassium hydrogen phthalate

(B) Anhydrous sodium carbonate

(C) Sodium tetraborate

(D) Sodium hydroxide

37. Gutzeit apparatus is used in the limit test of :

- (A) Iron
- (B) Sulphate
- (C) Arsenic
- (D) Chloride

38. Which of the following is *not* a disease related to carbohydrate metabolism ?

- (A) Diabetic ketoacidosis
- (B) Hyperosmolar coma
- (C) Hematuria
- (D) Hypoglycemia

39. Which of the following is *not* a valve in the human heart ?

- (A) Tricuspid valve
- (B) Mitral valve
- (C) Anaerobic valve
- (D) Pulmonary valve

40. Which of the following is an auto-immune disease ?

- (A) Syphilis
- (B) Diabetes
- (C) Plague
- (D) Typhoid

41. Alkaloids are *not* precipitated by :

- (A) Mayer's reagent
- (B) Dragendorff's reagent
- (C) Picric acid
- (D) Millon's reagent

42. Black Catechu is used in medicine as :

- (A) Antidiabetic
- (B) Anticancer
- (C) Antipyretic
- (D) Astringent

43. World AIDS Day is celebrated on :

- (A) May 1
- (B) August 1
- (C) October 1
- (D) December 1

44. Which of the following is used to calculate theoretical absorption maxima values of drugs ?
- (A) Beer Lambert Law
 - (B) Feiser Woodward Rules
 - (C) Charles Law
 - (D) Phase Rule
45. Which of the following is used to evaluate disinfectants ?
- (A) Chick Martin Test
 - (B) Widal Test
 - (C) VRDL Test
 - (D) None of the above
46. Which of the following is *correct* stability order of alkenes ?
- (A) Trans-2-butene > Cis-2-Butene > Isobutene > but-1-ene
 - (B) Cis-2-Butene > Trans-2-butene > Isobutene > but-1-ene
 - (C) Isobutene > but-1-ene > Cis-2-Butene > Trans-2-butene
 - (D) Isobutene > Trans-2-butene > Cis-2-Butene > but-1-ene

47. Which of the following alkaloids are found as salts of meconic acid ?
- (A) Rauwolfia Alkaloid (B) Tropane Alkaloid
- (C) Ergot Alkaloid (D) Opium Alkaloid
48. Which of the following is serving as a national coordination centre for Pharmacovigilance Programme of India ?
- (A) AIIMS, New Delhi
- (B) National Medical Library, New Delhi
- (C) The Indian Pharmacopoeia Commission, Ghaziabad
- (D) WHO Office, New Delhi
49. Which PDE 4 inhibitor is used in COPD ?
- (A) Montelukast (B) Theophylline
- (C) Cromoglicate (D) Omalizumab
50. Which of the following is *correct* number of stereoisomers of 3-bromo-2-butanol ?
- (A) 2 (B) 4
- (C) 6 (D) 8

PHARMACEUTICAL SCIENCES

1. Vitamin B₆ deficiency may occur during tuberculosis therapy with :
 - (A) Isoniazid
 - (B) Rifampicin
 - (C) Sulpha drugs
 - (D) Ethambutol

2. Bloom strength is used to check the quality of :
 - (A) Lactose
 - (B) Ampoules
 - (C) Avicel
 - (D) Gelatin

3. Which of the following antiparkinsonian drugs is known to act by inhibition of enzyme peripheral decarboxylase ?
 - (A) Levodopa
 - (B) Piribedil
 - (C) Carbidopa
 - (D) Selegiline

4. Diabetic patients who are on biguanide drugs are required to abstain from alcohol because :
- (A) Alcohol has hypoglycemic effect
 - (B) Biguanides interact with alcohol causing lactic acidosis
 - (C) Both (A) and (B)
 - (D) There is no need to abstain
5. Radiopharmaceutical used in the study of thyroid uptake is :
- (A) K-42
 - (B) Cr-51
 - (C) I-131
 - (D) S-35
6. In the process of extraction, ethanol is used as a solvent for :
- (A) Alkaloids
 - (B) Gums
 - (C) Waxes
 - (D) Sucrose

7. The drug CAPTOPRIL belongs to which class of antihypertensive drugs ?
- (A) Rennin inhibitor
 - (B) ACE Inhibitor
 - (C) Angiotensin-II Antagonist
 - (D) Calcium Channel Blocker
8. The primary aim of using atropine prior to administration of inhalant anaesthetics is to reduce :
- (A) Muscle tone
 - (B) Secretions
 - (C) Nausea and vomiting
 - (D) Appetite
9. Dilatant flow is characterized as a reverse phenomenon of :
- (A) Newtonian flow
 - (B) Plastic flow
 - (C) Psuedoplastic flow
 - (D) Rheopexy
10. Which of the following amino acids is basic in nature ?
- (A) Histidine
 - (B) Methionine
 - (C) Arginine
 - (D) Hydroxyproline

11. Which one is true synonym of *Withania somnifera* ?

(A) Poison gooseberry

(B) Winter Cherry

(C) Indian Ginseng

(D) All of the above

12. One of the detectors used in gas chromatography is :

(A) Bolometer

(B) Thermal Conductivity Detector

(C) Golay Detector

(D) Geiger Counter

13. A naturally occurring carminative is :

(A) Asafoetida

(B) Asoka

(C) Arjuna

(D) Agar

14. Beta imidazolyl ethylamine is popularly known as :
- (A) Cycloserine (B) Threonine
(C) Histamine (D) Reserpine
15. In which of the following techniques the sample is kept below triple point ?
- (A) Lyophilization (B) Spray Drying
(C) Spray Congealing (D) Centrifugation
16. Tropane alkaloids can be identified by :
- (A) Thalloquin test
(B) Vitali test
(C) Biuret test
(D) Millon's test
17. Which of the following statements is *true* for flocculated suspensions ?
- (A) Hard cake is formed
(B) They are difficult to re-disperse
(C) Rate of sedimentation is high
(D) Suspension is pleasing in appearance

18. Which of the following is *not* a benzodiazepine ?
- (A) Zolpidem
 - (B) Nitrazepam
 - (C) Diazepam
 - (D) Triazolam
19. The first edition of Indian Pharmacopoeia was published in the year :
- (A) 1947
 - (B) 1950
 - (C) 1955
 - (D) 1960
20. An elixir essentially consists of :
- (A) Methanol and water
 - (B) Ethanol and water
 - (C) Propanol and water
 - (D) Butanol and water

21. Which of the following methods is used to sterilize metal syringes ?

- (A) Moist heat
- (B) Gamma radiation
- (C) Dry heat
- (D) Ethylene oxide

22. A spontaneous reaction proceeds with decrease in :

- (A) Entropy
- (B) Enthalpy
- (C) Internal energy
- (D) Free energy

23. Preferred route of insulin is :

- (A) Oral
- (B) Sublingual
- (C) Subcutaneous
- (D) Topical

24. Which of the following non-narcotic agents is salicylic acid derivative ?

(A) Phenylbutazone

(B) Ketamine

(C) Aspirin

(D) Tramadol

25. Which of the following plants is a bitter drug ?

(A) *Valeriana officinalis*

(B) *Saraca indica*

(C) *Andrographis peniculata*

(D) *Ocimum sanctum*

26. Which of the following is *not* a primary standard used in acid base titrations ?

(A) Potassium hydrogen phthalate

(B) Anhydrous sodium carbonate

(C) Sodium tetraborate

(D) Sodium hydroxide

27. Gutzeit apparatus is used in the limit test of :

- (A) Iron
- (B) Sulphate
- (C) Arsenic
- (D) Chloride

28. Which of the following is *not* a disease related to carbohydrate metabolism ?

- (A) Diabetic ketoacidosis
- (B) Hyperosmolar coma
- (C) Hematuria
- (D) Hypoglycemia

29. Which of the following is *not* a valve in the human heart ?

- (A) Tricuspid valve
- (B) Mitral valve
- (C) Anaerobic valve
- (D) Pulmonary valve

30. Which of the following is an auto-immune disease ?

- (A) Syphilis
- (B) Diabetes
- (C) Plague
- (D) Typhoid

31. Alkaloids are *not* precipitated by :

- (A) Mayer's reagent
- (B) Dragendorff's reagent
- (C) Picric acid
- (D) Millon's reagent

32. Black Catechu is used in medicine as :

- (A) Antidiabetic
- (B) Anticancer
- (C) Antipyretic
- (D) Astringent

33. World AIDS Day is celebrated on :

- (A) May 1
- (B) August 1
- (C) October 1
- (D) December 1

34. Which of the following is used to calculate theoretical absorption maxima values of drugs ?
- (A) Beer Lambert Law
 - (B) Feiser Woodward Rules
 - (C) Charles Law
 - (D) Phase Rule
35. Which of the following is used to evaluate disinfectants ?
- (A) Chick Martin Test
 - (B) Widal Test
 - (C) VRDL Test
 - (D) None of the above
36. Which of the following is *correct* stability order of alkenes ?
- (A) Trans-2-butene > Cis-2-Butene > Isobutene > but-1-ene
 - (B) Cis-2-Butene > Trans-2-butene > Isobutene > but-1-ene
 - (C) Isobutene > but-1-ene > Cis-2-Butene > Trans-2-butene
 - (D) Isobutene > Trans-2-butene > Cis-2-Butene > but-1-ene

37. Which of the following alkaloids are found as salts of meconic acid ?
- (A) Rauwolfia Alkaloid (B) Tropane Alkaloid
- (C) Ergot Alkaloid (D) Opium Alkaloid
38. Which of the following is serving as a national coordination centre for Pharmacovigilance Programme of India ?
- (A) AIIMS, New Delhi
- (B) National Medical Library, New Delhi
- (C) The Indian Pharmacopoeia Commission, Ghaziabad
- (D) WHO Office, New Delhi
39. Which PDE 4 inhibitor is used in COPD ?
- (A) Montelukast (B) Theophylline
- (C) Cromoglicate (D) Omalizumab
40. Which of the following is *correct* number of stereoisomers of 3-bromo-2-butanol ?
- (A) 2 (B) 4
- (C) 6 (D) 8

41. Which of the following cells contain haemoglobin ?

- (A) RBC
- (B) WBC
- (C) Both (A) and (B)
- (D) None of these

42. Cyclone separator is used for :

- (A) Drying
- (B) Distillation
- (C) Evaporation
- (D) Size Separation

43. In a hospital setup PTC stand for :

- (A) Pharmacy Teacher Committee
- (B) Pharmaceutical Technical Committee
- (C) Pharmacy Therapeutic Committee
- (D) Potent Therapeutic Committee

44. Dip tube is an important part of :

- (A) Syrup packaging
- (B) Injection packaging
- (C) Aerosol packaging
- (D) Tablet packaging

45. A preparation containing live or attenuated viruses is called :
- (A) Vaccine
 - (B) Antiserum
 - (C) Toxin
 - (D) Toxoid
46. Which of the following tests is used for detection of glycosides ?
- (A) Benedict's test
 - (B) Borntrager's reagent test
 - (C) Hager's reagent test
 - (D) Glucose tolerance test
47. Which type of incompatibility best describes the formation of a eutectic mixture when menthol and camphor are triturated together ?
- (A) Therapeutic Incompatibility
 - (B) Chemical Incompatibility
 - (C) Physical Incompatibility
 - (D) All of the above

48. Injection, syringe and needle are covered under which Schedule of D & C Act ?
- (A) Schedule A
 - (B) Schedule B
 - (C) Schedule C
 - (D) Schedule D
49. Erythromycin is an antibiotic. It belongs to the class of :
- (A) Beta lactam
 - (B) Aminoglycosides
 - (C) Macrolides
 - (D) Peptide
50. Ergot is an alkaloid produced by :
- (A) *Ricinus communis*
 - (B) *Commiphora molmol*
 - (C) *Agaricus campestris*
 - (D) *Claviceps purpurea*

PHARMACEUTICAL SCIENCES

1. Beta imidazolyl ethylamine is popularly known as :
(A) Cycloserine (B) Threonine
(C) Histamine (D) Reserpine
2. In which of the following techniques the sample is kept below triple point ?
(A) Lyophilization (B) Spray Drying
(C) Spray Congealing (D) Centrifugation
3. Tropane alkaloids can be identified by :
(A) Thalloquin test
(B) Vitali test
(C) Biuret test
(D) Millon's test
4. Which of the following statements is *true* for flocculated suspensions ?
(A) Hard cake is formed
(B) They are difficult to re-disperse
(C) Rate of sedimentation is high
(D) Suspension is pleasing in appearance

5. Which of the following is *not* a benzodiazepine ?
- (A) Zolpidem
 - (B) Nitrazepam
 - (C) Diazepam
 - (D) Triazolam
6. The first edition of Indian Pharmacopoeia was published in the year :
- (A) 1947
 - (B) 1950
 - (C) 1955
 - (D) 1960
7. An elixir essentially consists of :
- (A) Methanol and water
 - (B) Ethanol and water
 - (C) Propanol and water
 - (D) Butanol and water

8. Which of the following methods is used to sterilize metal syringes ?

- (A) Moist heat
- (B) Gamma radiation
- (C) Dry heat
- (D) Ethylene oxide

9. A spontaneous reaction proceeds with decrease in :

- (A) Entropy
- (B) Enthalpy
- (C) Internal energy
- (D) Free energy

10. Preferred route of insulin is :

- (A) Oral
- (B) Sublingual
- (C) Subcutaneous
- (D) Topical

11. Which of the following non-narcotic agents is salicylic acid derivative ?

(A) Phenylbutazone

(B) Ketamine

(C) Aspirin

(D) Tramadol

12. Which of the following plants is a bitter drug ?

(A) *Valeriana officinalis*

(B) *Saraca indica*

(C) *Andrographis peniculata*

(D) *Ocimum sanctum*

13. Which of the following is *not* a primary standard used in acid base titrations ?

(A) Potassium hydrogen phthalate

(B) Anhydrous sodium carbonate

(C) Sodium tetraborate

(D) Sodium hydroxide

14. Gutzeit apparatus is used in the limit test of :

- (A) Iron
- (B) Sulphate
- (C) Arsenic
- (D) Chloride

15. Which of the following is *not* a disease related to carbohydrate metabolism ?

- (A) Diabetic ketoacidosis
- (B) Hyperosmolar coma
- (C) Hematuria
- (D) Hypoglycemia

16. Which of the following is *not* a valve in the human heart ?

- (A) Tricuspid valve
- (B) Mitral valve
- (C) Anaerobic valve
- (D) Pulmonary valve

17. Which of the following is an auto-immune disease ?

- (A) Syphilis
- (B) Diabetes
- (C) Plague
- (D) Typhoid

18. Alkaloids are *not* precipitated by :

- (A) Mayer's reagent
- (B) Dragendorff's reagent
- (C) Picric acid
- (D) Millon's reagent

19. Black Catechu is used in medicine as :

- (A) Antidiabetic
- (B) Anticancer
- (C) Antipyretic
- (D) Astringent

20. World AIDS Day is celebrated on :

- (A) May 1
- (B) August 1
- (C) October 1
- (D) December 1

21. Which of the following is used to calculate theoretical absorption maxima values of drugs ?
- (A) Beer Lambert Law
 - (B) Feiser Woodward Rules
 - (C) Charles Law
 - (D) Phase Rule
22. Which of the following is used to evaluate disinfectants ?
- (A) Chick Martin Test
 - (B) Widal Test
 - (C) VRDL Test
 - (D) None of the above
23. Which of the following is *correct* stability order of alkenes ?
- (A) Trans-2-butene > Cis-2-Butene > Isobutene > but-1-ene
 - (B) Cis-2-Butene > Trans-2-butene > Isobutene > but-1-ene
 - (C) Isobutene > but-1-ene > Cis-2-Butene > Trans-2-butene
 - (D) Isobutene > Trans-2-butene > Cis-2-Butene > but-1-ene

24. Which of the following alkaloids are found as salts of meconic acid ?
- (A) Rauwolfia Alkaloid (B) Tropane Alkaloid
- (C) Ergot Alkaloid (D) Opium Alkaloid
25. Which of the following is serving as a national coordination centre for Pharmacovigilance Programme of India ?
- (A) AIIMS, New Delhi
- (B) National Medical Library, New Delhi
- (C) The Indian Pharmacopoeia Commission, Ghaziabad
- (D) WHO Office, New Delhi
26. Which PDE 4 inhibitor is used in COPD ?
- (A) Montelukast (B) Theophylline
- (C) Cromoglicate (D) Omalizumab
27. Which of the following is *correct* number of stereoisomers of 3-bromo-2-butanol ?
- (A) 2 (B) 4
- (C) 6 (D) 8

28. Which of the following cells contain haemoglobin ?

- (A) RBC
- (B) WBC
- (C) Both (A) and (B)
- (D) None of these

29. Cyclone separator is used for :

- (A) Drying
- (B) Distillation
- (C) Evaporation
- (D) Size Separation

30. In a hospital setup PTC stand for :

- (A) Pharmacy Teacher Committee
- (B) Pharmaceutical Technical Committee
- (C) Pharmacy Therapeutic Committee
- (D) Potent Therapeutic Committee

31. Dip tube is an important part of :

- (A) Syrup packaging
- (B) Injection packaging
- (C) Aerosol packaging
- (D) Tablet packaging

32. A preparation containing live or attenuated viruses is called :
- (A) Vaccine
 - (B) Antiserum
 - (C) Toxin
 - (D) Toxoid
33. Which of the following tests is used for detection of glycosides ?
- (A) Benedict's test
 - (B) Borntrager's reagent test
 - (C) Hager's reagent test
 - (D) Glucose tolerance test
34. Which type of incompatibility best describes the formation of a eutectic mixture when menthol and camphor are triturated together ?
- (A) Therapeutic Incompatibility
 - (B) Chemical Incompatibility
 - (C) Physical Incompatibility
 - (D) All of the above

35. Injection, syringe and needle are covered under which Schedule of D & C Act ?

(A) Schedule A

(B) Schedule B

(C) Schedule C

(D) Schedule D

36. Erythromycin is an antibiotic. It belongs to the class of :

(A) Beta lactam

(B) Aminoglycosides

(C) Macrolides

(D) Peptide

37. Ergot is an alkaloid produced by :

(A) *Ricinus communis*

(B) *Commiphora molmol*

(C) *Agaricus campestris*

(D) *Claviceps purpurea*

38. Vitamin B₆ deficiency may occur during tuberculosis therapy with :
- (A) Isoniazid
 - (B) Rifampicin
 - (C) Sulpha drugs
 - (D) Ethambutol
39. Bloom strength is used to check the quality of :
- (A) Lactose
 - (B) Ampoules
 - (C) Avicel
 - (D) Gelatin
40. Which of the following antiparkinsonian drugs is known to act by inhibition of enzyme peripheral decarboxylase ?
- (A) Levodopa
 - (B) Piribedil
 - (C) Carbidopa
 - (D) Selegiline

41. Diabetic patients who are on biguanide drugs are required to abstain from alcohol because :
- (A) Alcohol has hypoglycemic effect
 - (B) Biguanides interact with alcohol causing lactic acidosis
 - (C) Both (A) and (B)
 - (D) There is no need to abstain
42. Radiopharmaceutical used in the study of thyroid uptake is :
- (A) K-42
 - (B) Cr-51
 - (C) I-131
 - (D) S-35
43. In the process of extraction, ethanol is used as a solvent for :
- (A) Alkaloids
 - (B) Gums
 - (C) Waxes
 - (D) Sucrose

44. The drug CAPTOPRIL belongs to which class of antihypertensive drugs ?
- (A) Rennin inhibitor
 - (B) ACE Inhibitor
 - (C) Angiotensin-II Antagonist
 - (D) Calcium Channel Blocker
45. The primary aim of using atropine prior to administration of inhalant anaesthetics is to reduce :
- (A) Muscle tone
 - (B) Secretions
 - (C) Nausea and vomiting
 - (D) Appetite
46. Dilatant flow is characterized as a reverse phenomenon of :
- (A) Newtonian flow
 - (B) Plastic flow
 - (C) Psuedoplastic flow
 - (D) Rheopexy
47. Which of the following amino acids is basic in nature ?
- (A) Histidine
 - (B) Methionine
 - (C) Arginine
 - (D) Hydroxyproline

48. Which one is true synonym of *Withania somnifera* ?

(A) Poison gooseberry

(B) Winter Cherry

(C) Indian Ginseng

(D) All of the above

49. One of the detectors used in gas chromatography is :

(A) Bolometer

(B) Thermal Conductivity Detector

(C) Golay Detector

(D) Geiger Counter

50. A naturally occurring carminative is :

(A) Asafoetida

(B) Asoka

(C) Arjuna

(D) Agar

PHARMACEUTICAL SCIENCES

1. Gutzeit apparatus is used in the limit test of :

(A) Iron	(B) Sulphate
(C) Arsenic	(D) Chloride

2. Which of the following is *not* a disease related to carbohydrate metabolism ?

(A) Diabetic ketoacidosis	(B) Hyperosmolar coma
(C) Hematuria	(D) Hypoglycemia

3. Which of the following is *not* a valve in the human heart ?

(A) Tricuspid valve
(B) Mitral valve
(C) Anaerobic valve
(D) Pulmonary valve

4. Which of the following is an auto-immune disease ?

(A) Syphilis	(B) Diabetes
(C) Plague	(D) Typhoid

5. Alkaloids are *not* precipitated by :
- (A) Mayer's reagent
 - (B) Dragendorff's reagent
 - (C) Picric acid
 - (D) Millon's reagent
6. Black Catechu is used in medicine as :
- (A) Antidiabetic
 - (B) Anticancer
 - (C) Antipyretic
 - (D) Astringent
7. World AIDS Day is celebrated on :
- (A) May 1
 - (B) August 1
 - (C) October 1
 - (D) December 1

8. Which of the following is used to calculate theoretical absorption maxima values of drugs ?
- (A) Beer Lambert Law
 - (B) Feiser Woodward Rules
 - (C) Charles Law
 - (D) Phase Rule
9. Which of the following is used to evaluate disinfectants ?
- (A) Chick Martin Test
 - (B) Widal Test
 - (C) VRDL Test
 - (D) None of the above
10. Which of the following is *correct* stability order of alkenes ?
- (A) Trans-2-butene > Cis-2-Butene > Isobutene > but-1-ene
 - (B) Cis-2-Butene > Trans-2-butene > Isobutene > but-1-ene
 - (C) Isobutene > but-1-ene > Cis-2-Butene > Trans-2-butene
 - (D) Isobutene > Trans-2-butene > Cis-2-Butene > but-1-ene

11. Which of the following alkaloids are found as salts of meconic acid ?
- (A) Rauwolfia Alkaloid (B) Tropane Alkaloid
- (C) Ergot Alkaloid (D) Opium Alkaloid
12. Which of the following is serving as a national coordination centre for Pharmacovigilance Programme of India ?
- (A) AIIMS, New Delhi
- (B) National Medical Library, New Delhi
- (C) The Indian Pharmacopoeia Commission, Ghaziabad
- (D) WHO Office, New Delhi
13. Which PDE 4 inhibitor is used in COPD ?
- (A) Montelukast (B) Theophylline
- (C) Cromoglicate (D) Omalizumab
14. Which of the following is *correct* number of stereoisomers of 3-bromo-2-butanol ?
- (A) 2 (B) 4
- (C) 6 (D) 8

15. Which of the following cells contain haemoglobin ?

- (A) RBC
- (B) WBC
- (C) Both (A) and (B)
- (D) None of these

16. Cyclone separator is used for :

- (A) Drying
- (B) Distillation
- (C) Evaporation
- (D) Size Separation

17. In a hospital setup PTC stand for :

- (A) Pharmacy Teacher Committee
- (B) Pharmaceutical Technical Committee
- (C) Pharmacy Therapeutic Committee
- (D) Potent Therapeutic Committee

18. Dip tube is an important part of :

- (A) Syrup packaging
- (B) Injection packaging
- (C) Aerosol packaging
- (D) Tablet packaging

19. A preparation containing live or attenuated viruses is called :
- (A) Vaccine
 - (B) Antiserum
 - (C) Toxin
 - (D) Toxoid
20. Which of the following tests is used for detection of glycosides ?
- (A) Benedict's test
 - (B) Borntrager's reagent test
 - (C) Hager's reagent test
 - (D) Glucose tolerance test
21. Which type of incompatibility best describes the formation of a eutectic mixture when menthol and camphor are triturated together ?
- (A) Therapeutic Incompatibility
 - (B) Chemical Incompatibility
 - (C) Physical Incompatibility
 - (D) All of the above

22. Injection, syringe and needle are covered under which Schedule of D & C Act ?

- (A) Schedule A
- (B) Schedule B
- (C) Schedule C
- (D) Schedule D

23. Erythromycin is an antibiotic. It belongs to the class of :

- (A) Beta lactam
- (B) Aminoglycosides
- (C) Macrolides
- (D) Peptide

24. Ergot is an alkaloid produced by :

- (A) *Ricinus communis*
- (B) *Commiphora molmol*
- (C) *Agaricus campestris*
- (D) *Claviceps purpurea*

25. Vitamin B₆ deficiency may occur during tuberculosis therapy with :
- (A) Isoniazid
 - (B) Rifampicin
 - (C) Sulpha drugs
 - (D) Ethambutol
26. Bloom strength is used to check the quality of :
- (A) Lactose
 - (B) Ampoules
 - (C) Avicel
 - (D) Gelatin
27. Which of the following antiparkinsonian drugs is known to act by inhibition of enzyme peripheral decarboxylase ?
- (A) Levodopa
 - (B) Piribedil
 - (C) Carbidopa
 - (D) Selegiline

28. Diabetic patients who are on biguanide drugs are required to abstain from alcohol because :
- (A) Alcohol has hypoglycemic effect
 - (B) Biguanides interact with alcohol causing lactic acidosis
 - (C) Both (A) and (B)
 - (D) There is no need to abstain
29. Radiopharmaceutical used in the study of thyroid uptake is :
- (A) K-42
 - (B) Cr-51
 - (C) I-131
 - (D) S-35
30. In the process of extraction, ethanol is used as a solvent for :
- (A) Alkaloids
 - (B) Gums
 - (C) Waxes
 - (D) Sucrose

31. The drug CAPTOPRIL belongs to which class of antihypertensive drugs ?
- (A) Rennin inhibitor
 - (B) ACE Inhibitor
 - (C) Angiotensin-II Antagonist
 - (D) Calcium Channel Blocker
32. The primary aim of using atropine prior to administration of inhalant anaesthetics is to reduce :
- (A) Muscle tone
 - (B) Secretions
 - (C) Nausea and vomiting
 - (D) Appetite
33. Dilatant flow is characterized as a reverse phenomenon of :
- (A) Newtonian flow
 - (B) Plastic flow
 - (C) Psuedoplastic flow
 - (D) Rheopexy
34. Which of the following amino acids is basic in nature ?
- (A) Histidine
 - (B) Methionine
 - (C) Arginine
 - (D) Hydroxyproline

35. Which one is true synonym of *Withania somnifera* ?

(A) Poison gooseberry

(B) Winter Cherry

(C) Indian Ginseng

(D) All of the above

36. One of the detectors used in gas chromatography is :

(A) Bolometer

(B) Thermal Conductivity Detector

(C) Golay Detector

(D) Geiger Counter

37. A naturally occurring carminative is :

(A) Asafoetida

(B) Asoka

(C) Arjuna

(D) Agar

38. Beta imidazolyl ethylamine is popularly known as :
- (A) Cycloserine (B) Threonine
(C) Histamine (D) Reserpine
39. In which of the following techniques the sample is kept below triple point ?
- (A) Lyophilization (B) Spray Drying
(C) Spray Congealing (D) Centrifugation
40. Tropane alkaloids can be identified by :
- (A) Thalloquin test
(B) Vitali test
(C) Biuret test
(D) Millon's test
41. Which of the following statements is *true* for flocculated suspensions ?
- (A) Hard cake is formed
(B) They are difficult to re-disperse
(C) Rate of sedimentation is high
(D) Suspension is pleasing in appearance

42. Which of the following is *not* a benzodiazepine ?

(A) Zolpidem

(B) Nitrazepam

(C) Diazepam

(D) Triazolam

43. The first edition of Indian Pharmacopoeia was published in the year :

(A) 1947

(B) 1950

(C) 1955

(D) 1960

44. An elixir essentially consists of :

(A) Methanol and water

(B) Ethanol and water

(C) Propanol and water

(D) Butanol and water

45. Which of the following methods is used to sterilize metal syringes ?

- (A) Moist heat
- (B) Gamma radiation
- (C) Dry heat
- (D) Ethylene oxide

46. A spontaneous reaction proceeds with decrease in :

- (A) Entropy
- (B) Enthalpy
- (C) Internal energy
- (D) Free energy

47. Preferred route of insulin is :

- (A) Oral
- (B) Sublingual
- (C) Subcutaneous
- (D) Topical

48. Which of the following non-narcotic agents is salicylic acid derivative ?

(A) Phenylbutazone

(B) Ketamine

(C) Aspirin

(D) Tramadol

49. Which of the following plants is a bitter drug ?

(A) *Valeriana officinalis*

(B) *Saraca indica*

(C) *Andrographis peniculata*

(D) *Ocimum sanctum*

50. Which of the following is *not* a primary standard used in acid base titrations ?

(A) Potassium hydrogen phthalate

(B) Anhydrous sodium carbonate

(C) Sodium tetraborate

(D) Sodium hydroxide