1. In in-vitro Drug Dissolution Testing models as per USP, Rotating Basket apparatus is considered as

(A) Apparatus 1
(B) Apparatus 2
(C) Apparatus 3
(D) Apparatus 4
(E) Answer not known

2. Disintegration time limit for uncoated tablets as per IP is _____.

(A) 5 minutes
(B) 10 minutes
(C) 15 minutes
(D) 30 minutes
(E) Answer not known

3. The acceptable percentage weight loss in friability test should be _____.

(A) Not more than 5%
(B) Not more than 1%
(C) Not more than 2%
(D) Not more than 0.1%
(E) Answer not known

4. Lipstick belongs to which category of cosmetics _____.

(A) Therapeutic
(B) Protective
(C) Curative
(D) Decorative
(E) Answer not known

5. Type I glass is known as

(A) Soda-lime glass
(B) Borosilicate glass
(C) Flint glass
(D) Treated glass
(E) Answer not known

6. Select the appropriate kinetic equation for first order decay process, shelf life (t 10%)

(A) $\frac{0.105}{K_1}$ (B) $\frac{0.693}{K_1}$

(C) $\frac{1}{\alpha K_1}$ (D) $\frac{\alpha}{2K_1}$

(E) Answer not known

7. Find the correct statement, related to partition co-efficient.

(i) $\log P = 0$ means that the compound is inequally soluble in water and partitioning solvent.

(ii) $\log P = -2$ then the compound is 100 times more soluble in water.

(iii) $\log P$ is defined as the ratio ionized drug distributed between the organic and aqueous phases, at equilibrium.

(A) (i) only (B) (ii) only

(C) (ii) and (iii) only (D) (iii) only

(E) Answer not known

8. Which of the following is incorrect?

(1) BET – Brunaver, Emmett Tyndall

(2) HIAC – High Accuracy

(3) SEM – Scanning electron microscopy

(A) (1) only (B) (2) only

(C) (1) and (2) only (D) (1) and (3) only

(E) Answer not known

9. The drug that is moderately weak acid like aspirin, ibuprofen of PKa value 2.5 to 7.5, the drug is

(A) Mostly absorbed from Intestine

(B) Mostly absorbed from stomach

(C) Ionized in gastric pH

(D) Unionized in intestinal pH

(E) Answer not known

10. Find the correct statement related to the deflocculated particles.

(A) They are weakly bonded, settle rapidly, do not form a cake

(B) They settle slowly and eventually form a sediment

(C) They form hard cake that is difficult to resuspend

(D) Both (B) and (C)

(E) Answer not known

11. Find the INCORRECT statement related to micro emulsion.

(i) Micro emulsion region is usually characterized by constructing ternary phase diagram.

(ii) Micro emulsion appears by visual observation as an isotropic, optically turbid liquid system.

(iii) Brij 96 is a non-ionic surfactant commonly used in the preparation of micro emulsion

(A) (i) and (ii)

(B) (ii) only

(C) (i) and (iii)

(D) (iii) only

(E) Answer not known

12. Micro emulsions contain droplets of oil in a water phase or droplets of water in oil with diameter of about _____.

(A) Less than 10 nm
(B) 200 – 400 nm
(C) 10 – 200 nm
(D) 250 – 300 nm
(E) Answer not known

13. The flow pattern of paddle type of impeller is

(A) Axial and tangential
(B) Radial and tangential
(C) Axial and radial
(D) Axial only
(E) Answer not known

14. An example of Minimum boiling point azeotrophic solution is

(A) Water and methanol
(B) Water and ethanol
(C) Benzene and ethanol
(D) Water and nitric acid
(E) Answer not known

15. Sedimentation rate decrease with _____.

(A) High density difference
(B) High viscosity
(C) High radius
(D) Large particle
(E) Answer not known

16. Schedule M under Drugs and cosmetics rules deals with

(A) Narcotics
(B) Drug pricing
(C) Cosmetics import
(D) GMP requirement
(E) Answer not known

17. A child Body Surface Area (BSA) is 0.8 m^2. The adult dose of a medication is 500 mg and the average adult dose BSA is 1.73 m^2. What is pediatric dose using BSA – based calculation?

(A) 200 mg
(B) 225 mg
(C) 230 mg
(D) 250 mg
(E) Answer not known

18. The first pharmacy school in India was established in _____ in Goa.

(A) 1842
(B) 1901
(C) 1932
(D) 1950
(E) Answer not known

19. The Legal enforceability of Indian pharmacopoeia standards in India arises from

(A) Pharmacy Act 1948
(B) Drug & Cosmetics Act 1940
(C) IPC Resolution
(D) CDSCO notification
(E) Answer not known

20. Calculate to prepare 500 ml of a solution containing 4 percent of formalin.

(A) 10 ml
(B) 15 ml
(C) 20 ml
(D) 25 ml
(E) Answer not known

21. Which one of the following is not a method of Inoculum preservation?

(A) Storage by freezing
(B) Storage at low (2-6°C) temperature
(C) Storage by lyophilization
(D) Storage in formaldehyde solution
(E) Answer not known

22. An example of obligate aerobes that requires molecular oxygen to meet their energy demands for growth.

(A) Salmonella
(B) Clostridium
(C) E.Coli
(D) Vibrio
(E) Answer not known

23. Transdermal absorption of drug primarily depends on

(A) Physico chemical properties of drug
(B) Therapeutic efficacy of the drug
(C) Side effects of the drug
(D) Adverse reactions of the drug
(E) Answer not known

24. The first amino acid produced by microorganism is

(A) L – lysine
(B) L – Threonine
(C) L – Glutamic acid
(D) L – Tryptophan
(E) Answer not known

25. The pharmacist's major role in OTC sale is _____.

(A) Diagnosis of serious illness

(B) Provide satisfactory service, counselling and through directions

(C) Prescribing schedule H drugs

(D) Performing Lab tests

(E) Answer not known

26. In drug store management, analysis of drug expenditure is mainly used to

(A) Promote expensive brands

(B) Replace generic drugs with brands

(C) Monitor consumption, identify high-cost items and control budget

(D) Eliminate formulary system

(E) Answer not known

27. Economic Order Quantity (EOQ) helps to:

(A) Maximum total cost

(B) Increase expiry

(C) Reduced demand

(D) Minimize inventory cost

(E) Answer not known

28. IRB full form is

(A) Internal Review Body

(B) International Review Board

(C) Indian Review Body

(D) Institutional Review Board

(E) Answer not known

29. NABL laboratory certificate accreditation to the organization is a means to improve

(A) Comparability of biotechnological products

(B) Customer confidence in the test reports

(C) Stability data

(D) Quality risk management

(E) Answer not known

30. Match correctly the Quality Guidelines :

(a)	Q8	1.	Quality Risk Management
(b)	Q9	2.	Development and manufacture of drug substances
(c)	Q10	3.	Pharmaceutical development
(d)	Q11	4.	Pharmaceutical quality system

	(a)	(b)	(c)	(d)
(A)	2	4	1	3
(B)	4	3	2	1
(C)	2	3	4	1
(D)	3	1	4	2

(E) Answer not known

31. 21 CFR part 600 is a regulation for

(A) General biological products standard

(B) Current good manufacturing practice for finished pharmaceuticals

(C) Biological products

(D) Current GMP in manufacturing, processing, packing or holding of drugs

(E) Answer not known

32. Good manufacturing guide for active pharmaceutical ingredients is in which ICH guidelines.

(A) Q_3 (B) Q_2

(C) Q_7 (D) Q_5

(E) Answer not known

33. In one compartment open model IV infusion, the time to reach steady state concentration is dependent upon the

(A) Infusion rate (B) Volume of distribution

(C) Clearance (D) Elimination half-life

(E) Answer not known

34. Which of the following pharmacokinetic parameter is used to evaluate the bioavailability of a drug from its dosage form?

(A) Peak Plasma Concentration (C_{max})

(B) Time of Peak Concentration (T_{max})

(C) Area under the Curve (AUC)

(D) Both (A) and (B)

(E) Answer not known

35. Which model assumes that the body act as a single compartment for drug distribution?

(A) Physiological models
(B) One compartment open model
(C) Two compartment model
(D) Delayed distribution model
(E) Answer not known

36. Assertion (A) : Cryptosporidiosis is a re-emerging infection.

Reason (R) : Increased use of immunosuppressive agents.

(A) (A) is true but (R) is false
(B) (A) is true but (R) is not correct explanation of (A)
(C) (A) is true and (R) is correct explanation of (A)
(D) Both (A) and (R) are false
(E) Answer not known

37. Choose the statements about surrogate antibiotics and organisms for Antimicrobial susceptibility testing that are <u>correctly paired</u>.

1. Cefotaxime – Klebsiella/E.Coli
2. Ampicillin – Pseudomonas sp.
3. Cefoxitin – Staphylococcus aureus
4. Colistin – Enterococcus

(A) 1 & 2 are correct
(B) 1 & 3 are correct
(C) 2 & 4 are correct
(D) 3 & 4 are correct
(E) Answer not known

38. The component required for the proper function of Taq DNA polymerase in polymerase chain reaction is

(A) Manganese
(B) Calcium
(C) Iron
(D) Magnesium
(E) Answer not known

39. The most sensitive technique available for detecting messenger RNA (mRNA)

(A) Real time PCR
(B) Nested PCR
(C) Reverse transcriptase PCR
(D) Multiplex PCR
(E) Answer not known

40. Human anatomical waste is treated by

(A) Autoclaving
(B) Disinfection
(C) Incineration
(D) Microwaving
(E) Answer not known

41. Assertion (A) : Microbes as source of Single Cell Protein (SCP).
Reason (R) : Microbes reproduce foster and can quickly generate huge quantities of protein.

(A) Both (A) and (R) are false
(B) (A) is true and (R) is false
(C) Both (A) and (R) are true
(D) (A) is false and (R) is true
(E) Answer not known

42. Match the following of food borne illness :

	Organism		Incubation period
(a)	Staphylococcus aureus	1.	24-72 hours
(b)	Clostridium Perfringens	2.	2-10 days
(c)	Vibrio cholerae	3.	1-6 hours
(d)	Campylobacter jejuni	4.	8-16 hours

	(a)	(b)	(c)	(d)
(A)	2	3	4	1
(B)	4	1	3	2
(C)	2	3	4	1
(D)	3	4	1	2

(E) Answer not known

43. Culture media used in Antimicrobial susceptibility testing is

(A) MacConkey agar
(B) Mueller – Hinton agar
(C) Deoxycholate citrate agar
(D) Thiosulfate citrate bile salt sucrose agar
(E) Answer not known

44. Expired cytotoxic drugs are disposed in

(A) Blue
(B) Red
(C) Yellow
(D) White
(E) Answer not known

45. Hemorrhagic fever with renal syndrome, a triad of fever, renal failure and hemorrhage is caused by

(A) Ebola virus
(B) Lassa virus
(C) Hanta virus
(D) Marburg virus
(E) Answer not known

46. The following statements are true about chagas' disease

1. Transmitted by Tsetse fly.
2. Commonly called as African trypanosomiasis.
3. Nifurtimox is used for treatment.
4. Cardiomyopathy is a complication of chaga's disease.

(A) 2 & 3
(B) 1 & 2
(C) 3 & 4
(D) 1 & 4
(E) Answer not known

47. Which one of the following type of plague is highly infectious and highly fatal?

(A) Bubonic plague
(B) Pneumonic plague
(C) Septicemic plague
(D) Non human plague
(E) Answer not known

48. Eschar is seen in the following skin infections, except

(A) Cutaneous anthrax
(B) Impetigo contagiosa
(C) Scrub typhus
(D) Rickettsial pox
(E) Answer not known

49. The test used to check the adequacy of pasteurisation is

(A) Phosphatase test
(B) Methylene blue reduction test
(C) Resazurin test
(D) Turbidity test
(E) Answer not known

50. Honey comb – like crusts seen in _____.

(A) Impetigo
(B) Erysipelas
(C) Necrotizing Fasciitis
(D) Erysipeloid
(E) Answer not known

51. Henderson Paterson bodies seen in which one of the following viral skin infection,

(A) Molluscum contagiosum virus
(B) Human papilloma virus
(C) Herpes virus
(D) Varicella zoster virus
(E) Answer not known

52. Ergotism is caused by the toxic alkaloids produced by the fungus

(A) Aspergillus flavus
(B) Aspergillus fumigatus
(C) Fusarium graminearum
(D) Claviceps purpurea
(E) Answer not known

53. Urease breath test is used in the diagnosis of which of the following infections

(A) Clostridium difficile
(B) Vibrio cholerae
(C) Helicobacter pylori
(D) Enteropathogenic E.Coli
(E) Answer not known

54. Match the following parasite with their habitat

(a)	Giardia intestinalis	1.	Small intestine
(b)	Trypanasoma brucei	2.	Large intestine
(c)	Entameba histolytics	3.	Central nervous system
(d)	Toxoplasma gondi	4.	Reticulo endothelial system

	(a)	(b)	(c)	(d)
(A)	1	4	3	2
(B)	1	3	2	4
(C)	2	3	1	4
(D)	4	2	1	3

(E) Answer not known

55. Intracellular survival and direct cell to cell spread is the characteristic feature of which of the following infection.

(A) Mycobacterium tuberculosis
(B) Haemophilus influenza
(C) Listeria monocytogenes
(D) Streptococcus pneumoniae
(E) Answer not known

56. The following an antiarrhythmic drug causes marked decrease in dv/dt of 0 phase

(A) Propafenone
(B) Lidocaine
(C) Quinidine
(D) Disopyramide
(E) Answer not known

57. The following statement is wrong regarding Amiloride

(A) 10 times more potent than triamterene
(B) Bound to plasma proteins
(C) ¼ of an oral dose is absorbed
(D) Augments hypercalcaemic action of thiazides
(E) Answer not known

58. The following drug is a selective β_1 blocker given as i.v.bolus injection followed by I.V. infusion in Aortic dissection along with Nicardipine.

(A) Propranolol
(B) Carvedilol
(C) Labetalol
(D) Esmolol
(E) Answer not known

59. Assertion [A] : Intravenous furosemide is responsible for quick relief in left ventricular failure and pulmonary edema.

Reason [R] : Left ventricular filling pressure is decreased due to prompt increase in systemic venous capacitance by intravenous furosemide.

(A) [A] is true but [R] is false

(B) Both [A] and [R] are true; and [R] is the correct explanation of [A]

(C) [A] is false, [R] is true

(D) Both [A] and [R] are true, but [R] is not the correct explanation of [A] is correct

(E) Answer not known

60. The transport protein that carries iron across the basolateral membrane of mucosal cell is

(A) DMT - 1

(B) Heme carrier protein – 1 (HCP – 1)

(C) Ferroprotein

(D) Transferrin

(E) Answer not known

61. A 26 year old woman in labour requires pain relief but must be able to actively bear down during contractions. Which local anaesthetic is most suitable for continuous epidural analgesia?

(A) Lidocaine

(B) Bupivacaine

(C) Procaine

(D) Cocaine

(E) Answer not known

62. A patient with status epilepticus is given IV diazepam. Which mechanism explain its muscle relaxant effect?

(A) Potentiation of GABA-A receptor chloride influx
(B) GABA-B receptor stimulation
(C) Blockade of NMDA receptor
(D) Presynaptic inhibition of glutamate release
(E) Answer not known

63. Netarsudial lowers intraocular presence by

(A) Increasing Aqueous humour secretion
(B) Inhibiting carbonic anhydrase
(C) Inhibiting Rho Kinase and NET
(D) Stimulating B_2 receptors
(E) Answer not known

64. True about Baclofen

(A) It is $GABA_A$ receptor agonist
(B) It is $GABA_B$ receptor agonist
(C) It is blocked by bicuculline
(D) It increases Cl^- conductance
(E) Answer not known

65. All the following are features of Amide local anaesthetics EXCEPT.

(A) Build to α_1 acid glycoprotein in plasma

(B) Hydrolysed by plasma esterases

(C) Produce longer lasting anaesthesia compared to ester LAs

(D) Rarely cause hypersensitivity

(E) Answer not known

66. The following criteria makes felodipine different from Nifedepine to be used as antianginal drug.

(A) Smaller tissue distribution

(B) Shorter $t\,{}^{1}\!/_{2}$

(C) Faster absorption

(D) Greater vascular selectivity

(E) Answer not known

67. Which of the following intravenous agent is contraindicated in patients with acute intermittent porphyria.

(A) Etomidate

(B) Thiopentone

(C) Propofol

(D) Ketamine

(E) Answer not known

68. The first drug of choice in Myoclonic seizure

(A) Sodium valproate

(B) Clobazam

(C) Clonazepam

(D) Rufinamide

(E) Answer not known

69. Assertion [A] : Naltrexone helps prevent relapse in opioid and alcohol dependence.

Reason [R] : Naltrexone is a long acting competitive opioid receptor antagonist.

(A) Both [A] and [R] are true [R] is the correct explanation

(B) Both [A] and [R] are true and [R] is not the correct explanation

(C) [A] is true and [R] is false

(D) [A] is false and [R] is true

(E) Answer not known

70. Which is the ultra short acting Barbiturates?

(A) Pentobarbitone

(B) Methohexitone

(C) Butobarbitone

(D) Phenobarbitone

(E) Answer not known

71. Which alkaloid in opium is non analgesic but produces smooth muscle relaxation?

(A) Codeine

(B) Papaverine

(C) Morphine

(D) Thebaine

(E) Answer not known

72. Tizanidine acts by

(A) Central α_2 antagonist

(B) Central α_2 agonist

(C) GABA agonist

(D) GABA antagonist

(E) Answer not known

73. Which among the following is the greatest advantage of controlled release formulation?

(A) Frequency of drug administration is reduced
(B) Improved patient compliance
(C) Uses non-permeable membrane
(D) Fluctuation in plasma drug level is maintained
(E) Answer not known

74. Following is the most reliable evidence in the hierarchical pyramid of evidence based medicine.

(A) Systematic reviews/metaanalysis
(B) Cohort studies
(C) Case-control studies/case series
(D) Preclinical studies
(E) Answer not known

75. The following object drug action is altered by the precipitant drug like ampicillin that affects the enterohepatic circulation.

(A) 6-mercaptopurine
(B) Aspirin
(C) Phenytoin
(D) Oral contraceptives
(E) Answer not known

76. Synonym for carnauba wax, which is used in the preparation of herbal cosmetics is

1. Brazil wax
2. Bees wax
3. Palm wax
4. Paraffin wax

(A) (1) only
(B) (2) and (3) only
(C) (1) and (3) only
(D) (3) and (4) only
(E) Answer not known

77. Identify the essential oil from the following, which is used in herbal cosmetics.

(A) Castor oil
(B) Sesame oil
(C) Peppermint oil
(D) Coconut oil
(E) Answer not known

78. A marine drug Alpha-Kainic acid isolated from the red algae, _____ which is used as antiparasitic agents.

(A) *Digenia simplex*
(B) *Derris elliptica*
(C) *Bergenia ligulata*
(D) *Rubia cordifolia*
(E) Answer not known

79. Nereistoxin an insecticidal compound, has been isolated from the marine annelid

(A) *Clavularia viridis* (B) *Helix pomatia*

(C) *Lumbriconereis heteropoda* (D) *Rivularia firma*

(E) Answer not known

80. Match the following botanical source of the plants with their part used in herbal skin care products.

(a)	*Allium sativum*	1.	*stigma*
(b)	*Aloe vera*	2.	*roots*
(c)	*Crocus sativus*	3.	*leaf*
(d)	*Asparagus racemosus*	4.	*bulb*

	(a)	(b)	(c)	(d)
(A)	1	2	4	3
(B)	4	3	1	2
(C)	3	1	2	4
(D)	2	4	1	3

(E) Answer not known

81. The skin care products improve the functioning/texture of the skin by the mechanism of

(i) By encouraging collagen growth

(ii) By combating harmful effects of free radicals

(iii) By penetrating inside the body and causes oxidation

(A) (i) only correct

(B) (i) and (ii) only correct

(C) (ii) and (iii) only correct

(D) (i) and (iii) only correct

(E) Answer not known

82. The part of the plant "*Cinchona calisaya*" used for the isolation of quinine and quinidine is

(A) Leaf

(B) Flower

(C) Seed

(D) Bark

(E) Answer not known

83. Decaffeination of coffee has been efficiently done using

(A) Continuous hot percolation

(B) Chromatographic fractionation

(C) Micro wave assisted technique

(D) Super-critical fluid extraction

(E) Answer not known

84. Which of the following statements are true about glycyrrhetinic acid?

(i) Glycyrrhizin is hydrolysed to glycyrrhetinic acid during extraction with sulphuric acid.

(ii) Glycyrrhizin is hydrolysed to glycyrrhetinic acid during extraction with hydrochloric acid.

(iii) Glycyrrhetinic acid is hydrolysed to glycyrrhizin during extraction with sulphuric acid.

(iv) Glycyrrhetinic acid is hydrolysed to glycyrrhizin during extraction with hydrochloric acid.

(A) (i) only
(B) (i) and (ii) only
(C) (iii) only
(D) (iii) and (iv) only
(E) Answer not known

85. The common method used for isolation of menthol from fresh above ground parts just before flowering is

(A) Steam distillation
(B) Maceration
(C) Percolation
(D) Soxhlet extraction
(E) Answer not known

86. The roots and rhizomes of Rauwolfia has been used in ayurvedic medicine under the Sanskrit name _____.

(A) Gokshura
(B) Sarpagandha
(C) Triphala
(D) Athi mathuram
(E) Answer not known

87. The pungency of compound gingerol present in ginger, is destroyed by boiling with _____.

(A) 2% sodium nitrate

(B) 2% potassium permanganate

(C) 2% potassium hydroxide

(D) 2% potassium dichromate

(E) Answer not known

88. A volatile oil containing drug with a high phenol content is _____.

(A) Clove (B) Fennel

(C) Lemon (D) Bitter almond

(E) Answer not known

89. The alkaloid "papaverine" present in opium is used as _____ mainly.

1. Anti-Tussive
2. Analgesic
3. Emetic
4. Smooth muscle relaxant

(A) 1 only (B) 2 & 3 only

(C) 4 only (D) 3 & 4 only

(E) Answer not known

90. The constituent barbaloin present in crude drug aloes is _____

1. Anthraquinone & O – Glycoside
2. Aldehyde & S – Glycoside
3. Flavanoid & N – Glycoside
4. Anthraquinone & C – Glycoside

(A) 1 & 2 (B) 2 only
(C) 3 & 4 (D) 4 only
(E) Answer not known

91. The method of classification of crude drugs which is more convenient for practical study of the drugs, especially when chemical constituents are not known is _____

(A) Morphological classification (B) Alphabetical classification
(C) Chemical classification (D) Therapeutic classification
(E) Answer not known

92. Hydathodes refers to a special type of _____

(A) Stomata (B) Starch grains
(C) Calcium oxalate crystals (D) Trichomes
(E) Answer not known

93. The crude drug digitalis contains _____ type of stomata.

(A) Rubiaceous (B) Caryophyllaceous
(C) Cruciferous (D) Ranunculaceous
(E) Answer not known

94. According to WHO quality control guidelines, determination of foreign organic matter refers to which of the following?

1. Parts of medicinal plant materials other than those named.
2. Insects, molds
3. Soil, sand and dust
4. Mineral admixtures of inorganic materials

(A) 2 & 3 only
(B) 1, 3 & 4 only
(C) 1 and 4 only
(D) 1, 2, 3 & 4
(E) Answer not known

95. In lycopodium spore method, the percentage purity of ginger sample is calculated using the authentic ginger standard value of _____ starch grains.

(A) 2,84,000
(B) 2,84,600
(C) 2,86,400
(D) 2,86,000
(E) Answer not known

96. The following are live attenuated vaccines except

(A) BCG vaccine
(B) Pertussis vaccine
(C) Measles vaccine
(D) Chickenpox vaccine
(E) Answer not known

97. Match the following :

(a)	Alpha-Fetoprotein	1.	Multiple myeloma
(b)	CA 125	2.	Hydatideform mole
(c)	Beta 2 microglobulin	3.	Hepatoma
(d)	Beta submit of Chorionic Gonadotropin	4.	Ovarian cancer

	(a)	(b)	(c)	(d)
(A)	4	2	3	1
(B)	3	4	1	2
(C)	2	3	4	1
(D)	1	4	2	3

(E) Answer not known

98. Assertion [A] : Rh Antibodies do not agglutinate Rh positive cells in saline.

Reason [R] : Most Rh antibodies are of IgG class and being "incomplete antibodies".

(A) [A] is true and [R] is false
(B) Both [A] and [R] are false
(C) Both [A] and [R] are true
(D) [A] is false and [R] is true
(E) Answer not known

99. The following are contraindication for using live attenuated vaccines

(1) Immunodeficiency states

(2) Preterm babies

(3) Pregnancy

(4) Elderly individuals

(A) 1 and 2 are correct
(B) 1 and 3 are correct
(C) 3 and 4 are correct
(D) 2 and 3 are correct
(E) Answer not known

100. Chediak-Higashi syndrome is due to defective immune mechanism of _____

(A) Congenital aplasia of the thymus
(B) Defective phagocytosis
(C) Defective IFN-8 and IL-12 receptor
(D) Defective encoding for NADPH oxidase
(E) Answer not known

101. All of the following statements are correct about IGRA (Interferon Gamma Release Assay) Except

(A) Used for Diagnosis of latent tuberculosis
(B) Uses non specific TB - antigens
(C) Modification of ELISA test
(D) Used for the diagnosis of active tuberculosis
(E) Answer not known

102. All of the following tests are used to detect antigen in the serum, except

(A) Direct ELISA
(B) Indirect ELISA
(C) Sandwich ELISA
(D) Reverse passive Agglutination test
(E) Answer not known

103. Endoscopes and Cystoscopes are sterilised by the following method

(A) Autoclave
(B) Hot air oven
(C) Glutaraldehyde
(D) Ethylene oxide
(E) Answer not known

104. Biosafety level – 3 (BSL-3) is used for which of the following organisms

1. Mycobacterium tuberculosis
2. Nipah virus
3. Bacillus anthracis
4. Ebola virus

(A) 1 & 2
(B) 2 & 4
(C) 1 & 3
(D) 3 & 4
(E) Answer not known

105. The best protection is achieved if the first dose of post exposure prophylaxis for HIV is taken within

(A) 2 hours of exposure
(B) 6 hours of exposure
(C) 12 hours of exposure
(D) 72 hours of exposure
(E) Answer not known

106. The physical agents of sterilisation include which of the following :

1. Filtration
2. UV radiation
3. Hot air oven
4. Plasma sterilisation

(A) 1, 2 & 3
(B) 2, 3 & 4
(C) 3, 4 & 1
(D) 1, 2 & 4
(E) Answer not known

107. Which one of the following is an example of transport media, except?

(A) Stuart's medium
(B) Amie's medium
(C) Carry-Blair medium
(D) CLED Agar medium
(E) Answer not known

108. Mesophilic bacteria grows best at temperatures of

(A) 25 – 40°C
(B) 10 – 20°C
(C) 55 – 80°C
(D) Above 100°C
(E) Answer not known

109. Live micro organisms (part of normal flora) which, when administered in adequate amounts, confer a health benefit to the host is called as

(A) Probiotics
(B) Antibiotics
(C) Prebiotics
(D) Postbiotics
(E) Answer not known

110. The cytopathic effect of syncytium formation is seen in

(A) Adeno virus
(B) Measles virus
(C) Herpes virus
(D) Entero virus
(E) Answer not known

111. Which year was the United Nations single convention on Norcotic drugs?

(A) 1972
(B) 1973
(C) 1961
(D) 1985
(E) Answer not known

112. What is the role of District Opium Officer in Opium Cultivation?

(A) Regulate Cannabis Cultivation
(B) To Issue license for Opium Cultivation
(C) Control Psychotropic substances
(D) Control Illicit trafic of Opium to Inter State
(E) Answer not known

113. Separated resin from Cannabis is known as

(A) Poppy straw
(B) Cannabis ganja
(C) Charas
(D) Poppy straw concentrate
(E) Answer not known

114. Penalty for a person falsely claiming to be registered pharmacist under Pharmacy Act, 1948 on first conviction

(A) One thousand rupees
(B) Five hundred rupees
(C) Two thousand rupees
(D) One hundred rupees
(E) Answer not known

115. The treatment of certain ailments diseases and disorders may prohibition

(A) Schedule J
(B) Schedule H
(C) Schedule P
(D) Schedule X
(E) Answer not known

116. Which schedule of NDPS Act 1985 lists psychotropic substances?

(A) Schedule I of sec-2 clause XXIII
(B) Schedule I of clause XIII sec-2
(C) Schedule I of clause XII sec-3
(D) Schedule I of clause XXI sec-3
(E) Answer not known

117. Who was the first president of pharmacy council of India?

(A) M.L. Schroff
(B) Rao Bahadur Dr. K.C.K.E. Raja
(C) R.N. Chopra
(D) Purabi Mukopadhay
(E) Answer not known

118. Which of the following is not related Cannabis?

(A) Morphine
(B) Ganja
(C) Hashish
(D) Charas
(E) Answer not known

119. The Contravention involves commercial quantity, with rigorous imprisonment for a term which shall not less than

(A) 10 years
(B) 5 years
(C) 1 year
(D) 3 years
(E) Answer not known

120. During the clinical trial Death Occurrence is known as

(A) Post-trial Error
(B) Serious orphan drug
(C) Serious Adverse Event
(D) Investigational Adverse Event
(E) Answer not known

121. A definitive study, in which evidence is gathered to support safety & effectiveness evaluation of the Medical Devices for its intended use is

(A) Pilot clinical investigation
(B) Post marketing clinical investigation
(C) Global clinical investigation
(D) Povital clinical investigation
(E) Answer not known

122. Match correctly with their corresponding clinical trial fees structure.

(a)	Application for Registration – Bioavailability & Bioequivalence study centre	1.	3,00,000
(b)	Application for Permission – Conduct clinical trial phase I	2.	1,00,000
(c)	Application for Permission Conduct phase II	3.	5,00,000
(d)	Application – Reconsideration of registration for a Bioavailability/ Bioequivalence	4.	2,00,000

	(a)	(b)	(c)	(d)
(A)	3	1	4	2
(B)	1	2	3	4
(C)	2	4	1	3
(D)	4	3	2	1

(E) Answer not known

123. In Dermal Toxicity Studies Test material should be applied on shared skin covering _____ of the total body surface area.

(A) Not more than 20%
(B) Not less than 10%
(C) Not less than 20%
(D) Not more than 30%
(E) Answer not known

124. A Drug intended to treat a conditions which affects not more than 5 lakh persons in India is called as

(A) Sustained release drugs
(B) Prevented drugs
(C) Generic drugs
(D) Orphan drugs
(E) Answer not known

125. Annual wholesale price index of all commodities as announced by the department of

(A) Pharmacopoeial commission, Govt. of India
(B) Pharmaceutical Industry Association, Govt. of India
(C) Industrial policy and promotion, Govt. of India
(D) Pharmacovigilence, Govt. of India
(E) Answer not known

126. What is the punishment of First contravenes in objectionable Advertisement Act 1954?

(A) Imprisonment upto one year
(B) Imprisonment upto three months
(C) Imprisonment upto six months
(D) Imprisonment upto two years
(E) Answer not known

127. The Government consider the price fixing of a Bulk drug related to

(A) Post Tax Return of 14% on net worth (18% if production is from Basic stage)

(B) Post tax return of 10% on net worth (10% of production is from basic stage)

(C) Internal rate return 12%

(D) Post tax return of 16% only

(E) Answer not known

128. How much square feet area requirement for infants skin powder preparation?

(A) 15 square meters

(B) 10 square meters

(C) 20 square meters

(D) 25 square meters

(E) Answer not known

129. The hood clinical practices Guidelines in India formulated by

(A) The central drugs standard control organisation combined with The Drugs Technical Advisory Board

(B) Central testing laboratory

(C) Drug consultative committee

(D) The Drug Controller of India Combined with Central testing Laboratory

(E) Answer not known

130. Permission for import or manufacture of new cosmetic shall apply to

(A) Form COS-8

(B) Form COS-12

(C) Form COS-13

(D) Form COS -5

(E) Answer not known

131. Schedule P related to

(A) Life Period of drugs
(B) Pack sizes of drugs
(C) Standards for disinfectant fluids
(D) Records of Raw materials
(E) Answer not known

132. What must be mention in the labeled of Raw materials packaging?

(A) Under Test or Approved
(B) Storage
(C) Raw Product
(D) Preserved
(E) Answer not known

133. The adulterated drugs means

(A) Drugs appear of better quality
(B) Misbranded drugs
(C) Misleading claims
(D) Drugs containing filthy, putrid or decomposed substances
(E) Answer not known

134. The "Udupa Committee" appointed and regulate the standards for

(A) Import of schedule 'x' drugs
(B) Ayurvedic and Unani drugs
(C) Homeophathic drugs
(D) Investigational new drugs
(E) Answer not known

135. Match correctly with their corresponding chemical names :

(a)	Phthalocyanine Blue	1.	2-(4-chloro-2-nitrophenyl)-azo-N-(-2-chlorophenyl) 3-oxobutamide
(b)	Citrus Red No. 2	2.	Poly chloro copper Phthalocyanine
(c)	Pigment Yellow - 3	3.	Phthalocyainate-(2-) copper
(d)	Aqueous green paste	4.	1, –2 (2, 5 – dimethoxy Phenyl azo)-2-Naphthol

	(a)	(b)	(c)	(d)
(A)	3	4	1	2
(B)	1	2	3	4
(C)	4	3	2	1
(D)	2	1	4	3

(E) Answer not known

136. Methods of test for safety evaluation of cosmetics by the Bureau of Indian standards as specified in

(A) IS 4711 : 2019
(B) IS 4721 : 2018
(C) IS 4011 : 2018
(D) IS 4110 : 2019
(E) Answer not known

137. The platelets are collected from one unit of blood and resuspended in an appropriate volume of original plasma is called as

(A) Platelet rich plasma
(B) Resuspended serum
(C) Platelet concentrates
(D) Buffy coat plasma
(E) Answer not known

138. An Inspection fee of in the case of Testing of drugs specified in schedules C and C(1) is

(A) Six Thousand Rupees

(B) Rupees five thousand

(C) Rupees one thousand five hundred

(D) Rupees two thousand

(E) Answer not known

139. Import of drugs by a Government Hospital or Autonomous Medical Institution for the treatment of patients under sect. and rule of

(A) 33 A – Rule – 122 E(10)

(B) 33 B – Rule – 120 (11)

(C) 34 – Rule 140 – (10)

(D) 35 – Rule 122 E (10)

(E) Answer not known

140. List of high ended antibiotics and anti T.B. Drugs & other Drugs Rules in

(A) Schedule – H

(B) Schedule – U

(C) Schedule – E(1)

(D) Schedule – H1

(E) Answer not known

141. A solution contains 1g molecule of the reagent in 1000 ml of the solution is known as _____.

(A) Tenth – Molar

(B) Standard Solution

(C) Molar Solution

(D) 0.1 Molar Solution

(E) Answer not known

142. Each ml of 0.1 M silver nitrate is equivalent to _____ of NaCl in standardisation of 0.1 M silver nitrate.

(A) 0.005844 g
(B) 0.05844 g
(C) 584.4 g
(D) 58.44 gm
(E) Answer not known

143. Sodium fluoride, anticaries agent should be stored in well-closed container made up of _____ glass.

(A) Soda
(B) Pyrex
(C) Hard
(D) Borosilicate
(E) Answer not known

144. Match the following :

(a)	Calcium carbonate	1.	Mouthwash
(b)	Strontium chloride	2.	Anticaries
(c)	Zinc chloride	3.	Desensitizer
(d)	Sodium fluoride	4.	Dentifrices

	(a)	(b)	(c)	(d)
(A)	1	2	3	4
(B)	2	4	3	1
(C)	3	1	2	4
(D)	4	3	1	2

(E) Answer not known

145. Assertion [A] : Addition of fluoride to the municipal water supply known as fluoridation is able to help in reducing and preventing dental caries.

Reason [R] : Those who receive slow continued ingestion of fluoride may suffer from mottling of teeth increased density of bones.

(A) [A] is true but [R] is false

(B) [A] is false, [R] is true

(C) Both [A] & [R] are true and [R] is correct explanation of [A]

(D) Both [A] and [R] are true but [R] is not correct explanation of [A]

(E) Answer not known

146. _____ is used in making capsules opaque by mixing with gelatin.

(A) Titanium oxide

(B) Zinc stearate

(C) Titanium dioxide

(D) Zinc glycerate

(E) Answer not known

147. Sodium phosphate is strongly _____ so, it is stored in air tight closed container.

(A) Hygroscopic

(B) Deliquescent

(C) Decomposed

(D) Efflorescent

(E) Answer not known

148. The essential vitamins which are necessary for proper tooth formation

(A) Vitamin A, C, D

(B) Vitamin A, B_1, D

(C) Vitamin B_2, A, D

(D) Vitamin A, Vitamin D, Calceiferol

(E) Answer not known

149. Bismuth carbonate should be stored in a container made of dark glass as per I.P. Justify.

(A) Protect from extreme temperature

(B) Gets decomposed by absorbing oxygen

(C) Undergoes colour change from yellow to red colour

(D) Turns dark on exposure to sunlight

(E) Answer not known

150. Monographs may give some or all the details in relation to official drugs except

(A) Biological assay

(B) Brand names

(C) Identification test

(D) Systematic chemical name

(E) Answer not known

151. The results of an analysis are found to be 36.89% compared with true value of 36.98%. What is the relative error in parts per thousand.

(A) 36.98 ppt

(B) –0.09 ppt

(C) –2.7 ppt

(D) –0.027 ppt

(E) Answer not known

152. When an electron of mass 'm' moving with a velocity 'v' should be associated with a wave having wave length, λ, related by $\lambda = \frac{h}{mv}$ is

(A) Planck equation
(B) de-Broglie's equation
(C) Heisenberg equation
(D) Bohr's equation
(E) Answer not known

153. Gamma rays are found to be ———————— in nature.

(A) high energy electrons
(B) short wave, high energy electromagnetic waves
(C) low energy electrons
(D) high energy protons
(E) Answer not known

154. During Nuclear transformations, other than α, β, γ particle emissions, other three particles are also emitted like

(A) Electrons, Positrons and Neutrinos
(B) Positrons, Neutrino and Antineutrinos
(C) Positrons, X-rays and λ Particles
(D) Neutrinos, λ particles and Positrons
(E) Answer not known

155. Match the following

(a)	SPECT	1.	Neutron source
(b)	Targeted Alpha Therapy	2.	Radioisotopes
(c)	PET – Positron Emission Tomography	3.	Gamma emission source
(d)	RIA – Radio Immuno Assay	4.	Positron

	(a)	(b)	(c)	(d)
(A)	3	1	4	2
(B)	2	3	4	1
(C)	3	2	1	4
(D)	2	4	3	1

(E) Answer not known

156. ———————— validation is defined as establishing documented evidence that a system performs as purported by reviewing the historical data that had been collected during the manufacturing and testing stages.

(A) Retro specific validation
(B) Concurrent validation
(C) Retrospective validation
(D) Conjoint validation
(E) Answer not known

157. Match the following.

(a)	Specificity	1.	How reliable a given analytical method is during normal usage
(b)	Linearity	2.	Interval between lower and upper concentrations of analyte in the sample
(c)	Range	3.	Slope, Y-intercept and residual sum
(d)	Robustness	4.	Ability to assess unequivocally a analyte in the presence of other components

	(a)	(b)	(c)	(d)
(A)	4	3	1	2
(B)	4	2	1	3
(C)	4	1	2	3
(D)	4	3	2	1

(E) Answer not known

158. Which of the following adjustment is usually adjusted first in an instrument requiring calibration?

(A) Dead band
(B) Span
(C) Hysteresis
(D) Zero
(E) Answer not known

159. The technique in which the weight of a substance is recorded as a function of time or temperature is ————————.

(A) Differential Scanning Calorimetry
(B) Differential Thermal Analysis
(C) Polarimetry
(D) Thermogravimetric Analysis
(E) Answer not known

160. The following statement is incorrect about flame photometry.

(A) It is used for estimation of metal ions

(B) It involves measurement of absorbed light

(C) Ionisation interference occurs

(D) It is used for analysis of biological fluids

(E) Answer not known

161. The signals obtained for CH_3CH_2Br in NMR system are

(A) Two singlets

(B) Three singlets

(C) Three proton triplet and two proton quartet

(D) Two doublets and one triplet

(E) Answer not known

162. The Nitrogen Rule states that a molecule of even numbered molecular mass must contain

(A) Odd number of nitrogen atoms

(B) No nitrogen atom

(C) Even number of nitrogen atoms

(D) Both (B) and (C)

(E) Answer not known

163. In derivative spectrophotometry, the second derivative spectrum is a plot of ————————.

(A) A vs λ

(B) $dA/d\lambda$ vs λ

(C) $d^2A/d^2\lambda$ vs λ

(D) $d^2A/d\lambda^2$ vs λ

(E) Answer not known

164. In which technique, (e.g) atropine forms a fluorescent chloroform soluble complex with eosin. This technique is very useful in solving very difficult analytical problems.

(A) Acid-dye technique

(B) Simultaneous equations

(C) Derivative spectrofluorimetry

(D) Photodecomposition

(E) Answer not known

165. Arrange the following electronic transitions in order of the energy requirement (highest to lowest)

1. $\pi \rightarrow \pi^*$

2. $n \rightarrow \sigma^*$

3. $\sigma \rightarrow \sigma^*$

4. $n \rightarrow \pi^*$

(A) 3 1 2 4

(B) 3 2 1 4

(C) 2 1 3 4

(D) 4 3 2 1

(E) Answer not known

166. In nitrogen rule of mass spectrometry, Assess the molecular weight of two compounds

(i) $C_3H_5NO_2$

(ii) $C_6H_7BrN_2$

(A) (i) odd (ii) even

(B) (i) even (ii) even

(C) (i) odd (ii) odd

(D) (i) even (ii) odd

(E) Answer not known

167. Which technique essentially proves a rapid, specific, sensitive and reliable technique for the determination of Barbiturates in plasma level upto 5 mg without making use of any sort of extraction procedures?

(A) Radio immuno Assay
(B) Differential Scanning Calorimetry (DSC)
(C) Differential Thermal Analysis (DTA)
(D) Atomic absorption spectroscopy
(E) Answer not known

168. The separation of 17α Ketosteroids also known as 17-Oxosteroids such as androsterone is achieved by which chromatography.

(A) Column chromatography
(B) Thin layer chromatography
(C) Paper chromatography
(D) Gas chromatography
(E) Answer not known

169. The order of electron energy produced with the various carrier gases is

(A) Nitrogen > Argon > Carbondioxide
(B) Carbondioxide > Nitrogen > Argon
(C) Argon > Carbondioxide > Nitrogen
(D) Argon > Nitrogen > Carbondioxide
(E) Answer not known

170. Which detector is employed for the measurement of intensity of reflected beam in HPTLC?

(A) Bolometer
(B) Photomultiplier tubes
(C) Photovoltaic cell
(D) Photo cell
(E) Answer not known

171. In Gel Chromatography, the removal of Phenol from nuclei acid preparations, monosaccharides from polysaccharides and amino acids from proteins is done by which method

(A) Purification
(B) Dialysis
(C) Molecular weight determinations
(D) Desalting
(E) Answer not known

172. The microporous supports are preferred over pellicular system of column packing in high performance liquid chromatography because pellicular system have

(1) High efficiency but low sample capacity
(2) Low sample capacity only
(3) Low efficiency
(4) Low efficiency and high sample capacity

(A) (1) only
(B) (2) only
(C) (2) and (3) only
(D) (4) only
(E) Answer not known

173. Which analytical technique measures the difference in temperature between the sample and the thermally inert reference material as a function of sample temperature?

(A) Differential Scanning Calorimetry (DSC)
(B) Polarimetry
(C) Refractometry
(D) Differential Thermal Analysis (DTA)
(E) Answer not known

174. The primary standard for standardization of tetrabutyl ammonium hydroxide is ————————.

(A) C_6H_5COOH
(B) CH_3COOH
(C) $C_8H_5O_4K$
(D) $C_2H_2O_4$
(E) Answer not known

175. The primary standard used for standardization of Perchloric acid is ————————.

(A) $C_8H_5O_4K$
(B) C_6H_5COOH
(C) AS_2O_3
(D) $C_6H_5NH_2$
(E) Answer not known

176. Bismuth rapidly produces a high stable complex [Bi-EDTA]. Which indicator is used for the titration to locate the exact end point?

(A) Mordant Black II
(B) Xylenol Orange
(C) Murexide
(D) Dithizone
(E) Answer not known

177. In the neutralisation reactions of conductimetric titrations of sodium hydroxide with HCl, beyond the equivalence point, the increase in conductivity is due to

(A) High ionic molar conductivity if excess hydrogen ions
(B) Replacement of hydroxyl groups
(C) Removal of hydrogen ions
(D) Loss of hydroxyl groups
(E) Answer not known

178. Which of the following is an Oxidation – reduction indicator, a bright red complex formed by combination of the base, 1,10-phenanthroline with iron (II) sulphate.

(A) Potassium Permanganate
(B) Cerium (IV) sulphate
(C) Ferroin Sulphate
(D) Potassium dichromate
(E) Answer not known

179. Which indicator in complexometric titration has a wide application. If is blue at about pH 10 and most of its complex are reddish in colour. It is necessary to carry out titration in the presence of buffer at pH 10.

(A) Murexide
(B) Alizarin fluorine blue
(C) Mordant black II
(D) Methyl Thynol blue
(E) Answer not known

180. For successful titrations with EDTA, the stability constants of the complex formed must be

(A) One
(B) Less than 8
(C) Greater than 8
(D) 0 (zero)
(E) Answer not known

181. The following seasons shows greater antidiuretic action of Vasopressin in rats.

(A) Spring and Summer
(B) Spring and Winter
(C) Summer only
(D) Spring only
(E) Answer not known

182. Assertion [A] : Glucocorticoids are used topically for a large variety of dermatological condition.

Reason [R] : Benefit of Glucocorticoids is by virtue of their antiinflammatory, immunosuppressive, Vasoconstrictor and antiproliferative actions

(A) [A] is true but [R] is false
(B) Both [A] and [R] are true and [R] is the correct explanation of [A]
(C) [A] is false, [R] is true
(D) Both [A] and [R] are true, but [R] is not the correct explanation of [A] is correct
(E) Answer not known

183. Following statement is wrong about Calamine.

(A) Is native zinc carbonate tinted pink with ferric oxide.
(B) Mild astringent and Antiseptic
(C) Not used for contact dermatitis
(D) Good soothening and protective agent
(E) Answer not known

184. The following statement is wrong about polyvalent Antisnake venom.

(A) Active against Cobra, Krait, Russels viper and Saw Scalded Viper.

(B) Infused IV slowly over 60-100 min.

(C) Dose is different for children and adult

(D) Should be stopped when signs of envenomation subside

(E) Answer not known

185. Match the following active substances and their biological tissues used for evaluation of drug action

(a)	Histamine	1.	Guinea Pig Vas deferens
(b)	Acetyl Choline	2.	Rat uterus
(c)	Oxytocin	3.	Isolated guinea pig ileum
(d)	Papaverine	4.	Frog rectus muscle

	(a)	(b)	(c)	(d)
(A)	2	1	3	4
(B)	3	4	2	1
(C)	4	3	2	1
(D)	3	1	4	2

(E) Answer not known

186. Among the following carbapenems which one has the highest propensity to induce seizure?

(A) Imipenem (B) Meropenem

(C) Faropenem (D) Doripenem

(E) Answer not known

187. Which among the following is the feature of Quinine?

(A) Quinine is cumulative

(B) It is 70 % bound to α_1 acid glycoprotein

(C) It has no effect on hypnozoites of relapsing malaria

(D) It directly increases contractile power of skeletal muscle fibre

(E) Answer not known

188. Cisplatin induced nephrotoximity is ameliovated by

(A) Folinic acid

(B) Amifostine

(C) Acetyl Cysterine

(D) Sargramostim

(E) Answer not known

189. Optimal synergistic action of co-trimoxazole is achieved at what ratio in plasma.

(A) 1 : 1

(B) 20 : 1

(C) 5 : 1

(D) 10 : 1

(E) Answer not known

190. Among the following which fluoroquinolones does not prolong the Q-Te interval.

(A) Lomefloxacin

(B) Moxifloxacin

(C) Prulifloxacin

(D) Gemifloxacin

(E) Answer not known

191. Match the prostaglandins correctly with their drugs

(a)	PGE_2	1.	Dinoprost
(b)	$PGF_{2\alpha}$	2.	Alprostadil
(c)	15-methyl $PGF_{2\alpha}$	3.	Dinoprostone
(d)	PGE_1	4.	Cartoprost

	(a)	(b)	(c)	(d)
(A)	3	1	4	2
(B)	4	2	3	1
(C)	1	4	3	2
(D)	1	3	4	2

(E) Answer not known

192. Drug that cause inverse agonism at 5HT2A receptor is

(A) Ritanserin
(B) Cyproheptadine
(C) Methyurgide
(D) Clozapine
(E) Answer not known

193. Partially COX-2 selective inhibitor is

(A) Meloxicam
(B) Piroxicam
(C) Ketorolac
(D) Mephenamic acid
(E) Answer not known

194. Which among the following is not indicated for labyrinthine suppression?

(A) Diphenhydramine
(B) Prochlorperazine
(C) Hyoscine
(D) Mizolastine
(E) Answer not known

195. All the statements related to chronic obstructive pulmonary disease are true

1. LAMA is preferred over LABA
2. SAMA is the first choice initial drug for majority of mild/early cases
3. Long term systemic steroid is of benefit in COPD.
4. Roflumilast is used as an adjuvant in management of COPD.

(A) 1, 2 & 3 (B) 1, 2 & 4

(C) 2, 3, & 4 (D) 1, 3 & 4

(E) Answer not known

196. Assertion [A] : If a patient on corticosteroid therapy develops an infection, steroid should not be discontinued.

Reason [R] : Propensity to weaken host defence & delay healing

(A) [A] is true but [R] is false

(B) Both [A] and [R] are true and [R] is the correct explanation of [A]

(C) [A] is false, [R] is true

(D) Both [A] and [R] are true, but [R] is not the correct explanation of [A]

(E) Answer not known

197. Which of the following statements are true about Growth hormone inhibitors?

(i) Octreotide is 40 times more potent in suppressing GH secretion

(ii) Hyperglycemia is infrequent

(iii) Somatostatin is preferred over octreotide for acromegaly & secretory diarrhoeas associated with carcinoid.

(A) (i) only
(B) (ii) & (iii)
(C) (i) & (ii)
(D) (i) & (iii)
(E) Answer not known

198. Which among the following is an efficacious uterine relaxant?

(A) Halothane
(B) Thiopentone sodium
(C) Midazolam
(D) Fentanyl
(E) Answer not known

199. Which among the following is used as intranasal spray?

(A) Nafarelin
(B) Goserelin
(C) Triptorelin
(D) Leuprolide
(E) Answer not known

200. Match correctly the drugs with their mechanism of action

(a)	Pirenzepine	1.	Systemic antacid
(b)	Misoprostol	2.	Prostaglandin analogue
(c)	Sodium bicarbonate	3.	Anticholinergic
(d)	Calcium carbonate	4.	Non-systemic antacid

	(a)	(b)	(c)	(d)
(A)	1	2	3	4
(B)	2	3	1	4
(C)	3	2	1	4
(D)	3	1	2	4

(E) Answer not known