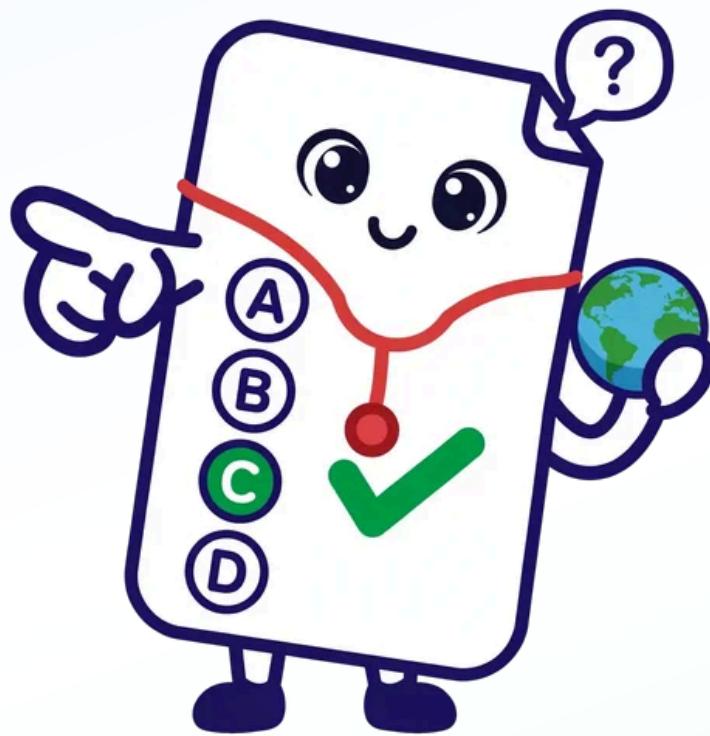




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USMLE Step 1 Preparation Book 2026

A full model paper in the real USMLE Step 1 pattern, with answer key



100 MCQs

Real USMLE Step 1 subject split

Answer key + online explanations

How to use this book

1. Sit each model paper in one go, in 480 minutes, with a pen and the answer sheet of your choice.
2. Mark yourself with the answer key at the back.
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What is in this book

100 MCQs across one paper, each drawn in the same subject split as the real USMLE Step 1 paper:

- Pathology: 25 MCQs per paper
- Physiology: 20 MCQs per paper
- Pharmacology: 17 MCQs per paper
- Microbiology: 13 MCQs per paper
- Biochemistry: 13 MCQs per paper
- General Anatomy: 12 MCQs per paper



MODEL PAPER 1 OF 1

USMLE Step 1

100 MCQs · 480 minutes · answer key at the back

**Pathology**

25 MCQs

1. The fading of cellular chromatin is _____?

- ☐ A Karyolysis
- ☐ B Karyorrhexis
- ☐ C Pyknosis
- ☐ D Cytolysis

2. The drug which is used to treat laryngospasm is _____?

- ☐ A Atropine
- ☐ B Diazepam
- ☐ C Neostigmine
- ☐ D Succinylcholine

3. The type of acute myelogenous leukemia associated with a high incidence of disseminated intravascular coagulation in _____?

- ☐ A Acute erythroleukaemia
- ☐ B Acute promyelocytic leukaemia
- ☐ C Acute megakaryocytic leukaemia
- ☐ D Acute myelomonocytic leukaemia

4. T-Helper cells (TH2) initiates which type of immunity _____?

- ☐ A Induces cell mediated immunity
- ☐ B Induces Humoral immunity
- ☐ C Induces immunity by activation of cytotoxic T-cells
- ☐ D None of the above

5. The process of formation of solid mass in circulation from the constituents of normal flowing blood is called _____?

- ☐ A Clot formation
- ☐ B Thrombosis
- ☐ C Embolism
- ☐ D Infarction

6. Caseating granuloma is commonly seen in _____?

- ☐ A Viral infections
- ☐ B Tuberculosis
- ☐ C Typhoid
- ☐ D Amoebiasis

7. Basal cell carcinoma occurs on _____?

- ☐ A Skin and pilosebaceous adnexa
- ☐ B Skin and mucosa
- ☐ C Skin, lips and tongue
- ☐ D All of the above

8. A infant with cleft lip, palate, polydactyly, microcephaly with holoprosencephaly, ectodermal scalp defect is suffering from ?

- (A) Trisomy 21
- (B) Trisomy 18
- (C) Trisomy 13
- (D) Turner syndrome

9. Disappearance of nuclear chromatin is called as _____?

- (A) Pyknosis
- (B) Karyolysis
- (C) Karyorhexis
- (D) None

10. Which of the following is not an action of epinephrine when administered intravenously in a high dose ?

- (A) Increased liver glycogenolysis
- (B) Causes bronchiolar constriction
- (C) Evokes extrasystoles in the heart
- (D) Produces restlessness and anxiety

11. Hemophilia A is caused due to deficiency of _____?

- (A) Factor X
- (B) Factor XI
- (C) Factor IX
- (D) Factor VIII

12. NK cells are effective against viral infected cells only if the cell with infection _____?

- (A) Express MHC class I proteins
- (B) Unable to express MHC class I proteins
- (C) Express MHC class II proteins
- (D) Unable to express MHC class II proteins

13. Anasarca means _____?

- (A) Abnormal inflammatory process
- (B) Severe generalized swelling
- (C) Absence of proliferation of vessels following inflammation
- (D) Presence of pus

14. Bradykinin causes all the following except _____?

- (A) Smooth muscle contraction
- (B) Dilatation of blood vessels
- (C) Pain
- (D) Opsonisation

15. The most definite feature of a malignant tumour is _____?

- (A) Haemorrhage
- (B) Increased mitoses
- (C) Metastasis
- (D) Necrosis

16. Syndrome associated with increased risk of leukemia is _____?

- (A) Plummer vinson syndrome
- (B) Klinefelter syndrome
- (C) Sturge weber syndrome
- (D) Multiple hamartoma syndrome

17. Dystrophic calcification are calcifications seen in _____?

- (A) Skin layers
- (B) Salivary glands
- (C) Normal tissues
- (D) Dead tissue

18. Usually metastatic lesions are osteolytic, but osteoblastic secondaries occur in cancer of _____?

- (A) Thyroid
- (B) Prostate
- (C) Kidney
- (D) Uterus

19. Bone marrow stem cells differ from differentiated progenitor stem cells in what respect?

- (A) Provide differentiated terminal cells
- (B) Reconstitution of Bone marrow
- (C) Formation of the ovum
- (D) Act as a repair system for the body

20. DiGeorge's syndrome is due to _____?

- (A) Congenital thymic aplasia
- (B) Deficiency of complement factor
- (C) Inborn error of metabolism
- (D) Chromosomal anomaly

21. The commonest site of thrombosis is _____?

- (A) Arteries
- (B) Veins
- (C) Capillaries
- (D) Heart

22. Some micro organisms produce a diffuse spreading inflammatory reaction due to the elaboration of _____?

- (A) Coagulase
- (B) Peroxidase
- (C) Bradykinin
- (D) Hyaluronidase

23. A simple bacterial test for mutagenic carcinogens is _____?

- (A) Ames test
- (B) Redox text
- (C) Bacteriophage
- (D) Gene splicing

24. Which is associated with defect in DNA repair _____?

- (A) Xeroderma pigmentosum
- (B) Albinism
- (C) Ichthyosis
- (D) Sickle cell anaemia

25. Hypoxic death leads to _____?

- (A) Liquefactive necrosis
- (B) Coagulative necrosis
- (C) Caseous necrosis
- (D) Fat necrosis



Physiology

20 MCQs

26. Ammonia in the kidney tubules is excreted in exchange for _____?

- (A) HCO_3^-
- (B) Na^+
- (C) Cl^-
- (D) PO_4^{2-}

27. Trypsin is an activator of all of the following enzymes EXCEPT _____?

- (A) Chymotrypsinogen
- (B) Pepsinogen
- (C) Proelastase
- (D) Procolipase

28. Small packets of acetylcholine released randomly from the nerve cell membrane at rest Produces _____?

- (A) Inhibitory post synaptic potential
- (B) Miniature end plate potential
- (C) Action potential
- (D) End plate potential

29. Blood supply to the brain during moderate exercise _____?

- (A) decreases
- (B) Remains constant
- (C) Increases
- (D) Increases then decreases

30. The most common form of hypoxia is _____?

- (A) Hypoxic
- (B) Stagnant
- (C) Anemic
- (D) Histotoxic

31. Which of them is not affected by vitamin K deficiency _____?

- (A) Factor IX
- (B) Factor VII
- (C) Factor II
- (D) Factor VIII

32. Which of the following hormones is released from the posterior pituitary ?

- (A) ACTH
- (B) Antidiuretic hormone
- (C) Growth hormone
- (D) Luteinizing hormone

33. The major functional difference between DNA and RNA is _____?

- (A) RNA contains ribose
- (B) DNA carries the information in all organizations
- (C) DNA is localized in nucleus
- (D) RNA does not contain thymine

34. Hormone responsible for milk ejection _____?

- (A) Oxytocin
- (B) Estrogen
- (C) Progesterone
- (D) Prolactin

35. To measure renal plasma clearance compound should be _____?

- (A) <70,000 Mol.wt
- (B) Bound to plasma protein
- (C) Secreted by the tubules
- (D) Completely filtered by glomerulus

36. Cephalic phase of gastric secretion can be demonstrated by the following experiment _____?

- (A) Heidenhan's pouch
- (B) Condition reflex
- (C) Pavlov's pouch
- (D) None of the above

37. Following are extrapyramidal tracts except _____?

- (A) Reticulospinal
- (B) Corticospinal
- (C) Rubrospinal
- (D) Vestibulospinal

38. The largest function of the total peripheral resistance is due to _____?

- (A) Venules
- (B) Arterioles
- (C) Capillaries
- (D) Precapillary sphincters

39. Alveolar O₂ tension is _____?

- (A) Increased by hyperventilation
- (B) Decreased by hyperventilation
- (C) Similar to venous O₂ tension
- (D) Not affected by respiratory depression

40. Survival time of platelet is approximately _____?

- (A) 10 hours
- (B) 10 days
- (C) 10 weeks
- (D) 100 days

41. Hormone released during increased stress is _____?

- (A) Cortisol
- (B) Thyroxine
- (C) Growth hormone
- (D) Somatostatin

42. Which one of the following is a regulatory protein of the muscle ?

- (A) Troponin
- (B) Myosin
- (C) Actin
- (D) Protein- C

43. Hormones, which stimulate spermatogenesis, are _____?

- (A) Insulin and glucagon
- (B) Thyroxine and parathormone
- (C) A.D.H. and Oxytocin
- (D) Testosterone and F.S. H

44. Which one of the following is not responsible for concentration of urine in the kidneys _____?

- (A) Aldosterone
- (B) Angiotensin II
- (C) Vasopressin
- (D) Epinephrine

45. Nutrients are mainly absorbed in _____?

- (A) Small intestine
- (B) Large intestine
- (C) Liver
- (D) Stomach



Pharmacology

17 MCQs

46. All are true about metformin except _____?

- (A) Inhibits cellular respiration in mitochondria
- (B) Excreted unchanged in urine
- (C) Reduce hepatic glucose production
- (D) Used in decompensated heart failure

47. Which is not antiemetic ?

- (A) Domperidone
- (B) Phenazocine
- (C) Cyclizine
- (D) Ondanestron

48. This drug reduces blood pressure by acting on vasomotor centers in the CNS:

- (A) Labetalol
- (B) Clonidine
- (C) Enalapril
- (D) Nifedipine

49. 1st generation cephalosporin is _____?

- (A) Cephadroxil
- (B) Cefepime
- (C) Cefotaxime
- (D) Cefoperazone

50. The drug Amifostine is used in subjects undergoing radiotherapy for cancer as it _____?

- ☐ A Scavenges free radicals
- ☐ B Enhances the production of free radicals
- ☐ C Promotes damage of DNA
- ☐ D Prevents repair of damaged DNA

51. Drug efficacy refers to _____?

- ☐ A Range of disease in which the drug beneficial
- ☐ B Maximal intensity of response that can be produced by the drug
- ☐ C The therapeutic dose range of the drug
- ☐ D The therapeutic index of the drug

52. Which of the following is true for carbonic anhydrase inhibitor ?

- ☐ A It causes excretion of Na & Cl
- ☐ B It is used as an adjunct in epilepsy
- ☐ C It is very potent
- ☐ D It causes metabolic alkalosis

53. A patient is having bronchodilation, increased temperature, constipation and tachycardia. The tentative diagnosis is _____?

- ☐ A Organophosphate poisoning
- ☐ B Paracetamol poisoning
- ☐ C Mushroom poisoning
- ☐ D Atropine poisoning

54. All of the following have receptors which are transcription factors except _____?

- ☐ A Insulin
- ☐ B Estrogen
- ☐ C Vitamin D
- ☐ D Glucocorticoid

55. Following analgesic combination should be avoided ?

- ☐ A Aspirin and Codeine
- ☐ B Paracetamol and Dextropropoxyphene
- ☐ C Ibuprofen and Paracetamol
- ☐ D Ibuprofen and Diclofenac

56. Which one of the following drugs is not contraindicated in bronchial asthma ?

- ☐ A Morphine
- ☐ B Propranolol
- ☐ C Stropine
- ☐ D Nitroglycerine

57. Which one of the following drugs is an antipseudomonal penicillin ?

- ☐ A Cephalexin
- ☐ B Cloxacillin
- ☐ C Piperacillin
- ☐ D Dictoxacillin

58. Which among the following is a cell cycle specific anti-neoplastic drug ?

- ☐ A Cyclophosphamide
- ☐ B Doxorubicin
- ☐ C Methotrexate
- ☐ D Cisplatin

59. Tick the feature of the sublingual route:

- ☐ A Pretty fast absorption
- ☐ B A drug is exposed to gastric secretion
- ☐ C A drug is exposed more prominent liver metabolism
- ☐ D A drug can be administrated in a variety of doses

60. The following statements about verapamil are true except _____ ?

- ☐ A It does not produce reflex tachycardia
- ☐ B It is less potent as a coronary vasodilator
- ☐ C It is contraindicated in patients with supraventricular tachycardia
- ☐ D It can cause constipation

61. The most prominent toxic effect associated with acetaminophen use is _____ ?

- ☐ A Respiratory alkalosis
- ☐ B Haemorrhage
- ☐ C Hepatic necrosis
- ☐ D Gastric Ulceration

62. Steroids _____ ?

- ☐ A Steroids reduce the rate of repair of tissues thus delays the healing
- ☐ B Exacerbate the inflammatory response
- ☐ C Can be safely given to immunocompromised patients
- ☐ D Indicated in oral thrush



Microbiology

13 MCQs

63. Anaerobic bacteria grow _____ ?

- ☐ A in the presence of oxygen
- ☐ B in the presence of nitrogen
- ☐ C in the absence of oxygen
- ☐ D differential media

64. The following immunoglobulin is not known to fix complement _____ ?

- ☐ A IgE
- ☐ B IgM
- ☐ C IgA
- ☐ D IgG

65. Both intranuclear and intracytoplasmic inclusions are present in which of the following viruses _____ ?

- ☐ A Pox virus
- ☐ B Measles virus
- ☐ C Hepatitis B virus
- ☐ D HIV

66. All of the following lab tests can be used to distinguish streptococcus mutans from other oral streptococci, except _____?

- ☐ A Gram staining
- ☐ B Fermentation of mannitol and sorbitol
- ☐ C Production of intracellular and extracellular adherent polysaccharide
- ☐ D Colony morphology on saliva agar

67. Rideal Walker test is used to determine the efficiency of the _____?

- ☐ A Disinfectant
- ☐ B Moist heat sterilisation
- ☐ C Antibiotics
- ☐ D Dry heat sterilization

68. Culture media of candida is _____?

- ☐ A Methylene blue dextrose agar
- ☐ B Saboraud's medium
- ☐ C Pingolevin
- ☐ D All of the above

69. All are seen in a cysts of E. histolytica except _____?

- ☐ A Glycogen mass
- ☐ B Chromatid bars
- ☐ C Eccentric nucleus
- ☐ D Refractile nucleus

70. Louis Pasteur is not associated with _____?

- ☐ A Introduction of complex media
- ☐ B Discovery of Rabies Vaccine
- ☐ C Discovery of M. Tuberculosis
- ☐ D Disproved spontaneous regression theory

71. Killer and Helper cells are part of _____?

- ☐ A B cells
- ☐ B T cells
- ☐ C Monocytes
- ☐ D Macrophage

72. Which of the following is not a pox virus ?

- ☐ A Cowpox
- ☐ B Molluscum contagiosum
- ☐ C Small pox
- ☐ D chicken pox

73. Leptospirosis, all are true except _____?

- ☐ A Faeces & urine of rodents is the cause
- ☐ B Onset of IgM in 2 days
- ☐ C Incubation period is 10 days
- ☐ D It is sensitive to penicillin

74. The optimal time and temperature required for sterilization in an autoclave is _____?

- (A) 140°C x 2 hrs. x 10 lbs pr.
- (B) 121°F x 15 mts. x 15 lbs pr.
- (C) 121°F x 15 sec. x 15 lbs pr.
- (D) 121°C 15 mts. x 15 lbs pr.

75. The following statement is true regarding fungal infection _____?

- (A) Dermatophyte infection are exclusively man to animal
- (B) Rhinosporidium causes deep infection in man
- (C) albicans is not pathogenic to lab animals
- (D) Candida infection is usually endogenous



Biochemistry

13 MCQs

76. Ammonia produced by brain is trapped as _____?

- (A) Urea
- (B) Uric Acid
- (C) Creatinine
- (D) Glutamine

77. Iron is present in all, EXCEPT _____?

- (A) Myoglobin
- (B) Cytochrome
- (C) Catalase
- (D) Pyruvate kinase

78. The activity of the following enzyme is affected by biotin deficiency _____?

- (A) Transketolase
- (B) Dehydrogenase
- (C) Oxidase
- (D) Carboxylase

79. Glycemic index of a starchy food is a measure of its _____?

- (A) Energy
- (B) Utility
- (C) Collectivity
- (D) None of the above

80. The normal value of serum potassium level is _____?

- (A) 2.8-3.8 meq/L
- (B) 3.8-5 meq/L
- (C) 5-5.8 meq/L
- (D) 6-7.2 meq/L

81. Codons are present on _____?

- (A) m-RNA
- (B) DNA
- (C) t-RNA
- (D) Ribosomal RNA

82. Ubiquitin is involved in _____?

- (A) Intracellular proteolysis
- (B) Electron transport chain
- (C) Transport of ATP
- (D) Protein folding

83. Non polar lipid act as _____?

- (A) Electrical insulators
- (B) Irons
- (C) Non electrical insulators
- (D) Electrolytes

84. Muscle glycogen cannot contribute directly to blood glucose level because _____?

- (A) Muscle lacks glucose 6 phosphatase
- (B) Muscle lacks phospho gluco isomerase
- (C) Absence of glucokinase
- (D) Muscle does not contain glycogen phosphorylase

85. Xerophthalmia is caused by _____?

- (A) Vitamin A deficiency
- (B) Vitamin D deficiency
- (C) Vitamin C deficiency
- (D) Vitamin K deficiency

86. Michaelis-Menten hypothesis states that _____?

- (A) Rate of enzymatic reaction is independent of substrate concentration
- (B) Rate of non enzymatic reaction is proportional to substrate concentration
- (C) K_m is the enzyme substrate complex association constant
- (D) Enzyme- substrate complex formation is essential in enzymatic reaction

87. An essential for the conversion of glucose to glycogen in liver is _____?

- (A) UTP
- (B) GTP
- (C) Pyruvate Kinase
- (D) Guanosine

88. Normal blood bilirubin level is _____?

- (A) 0.5 - 1 mg%
- (B) 1 - 3 mg%
- (C) 3 - 4 mg%
- (D) 4 - 5.5 mg%



General Anatomy

12 MCQs

89. Space of Disse is seen in _____?

- (A) Spleen
- (B) Kidney
- (C) Liver
- (D) Small intestine

90. All of the following muscles retract scapula except _____?

- (A) Trapezius
- (B) Rhomboid major
- (C) Rhomboid minor
- (D) Levator scapulae

91. All of the following are composite muscles except _____?

- (A) Pectineus
- (B) Rectus femoris
- (C) Adductor magnus
- (D) Biceps femoris

92. The esophagus commences at the following level _____?

- (A) Lower end of cricoid
- (B) C5 vertebra
- (C) 10 cm from incisor teeth
- (D) C7

93. The kidney has _____ segments?

- (A) 11
- (B) 9
- (C) 7
- (D) 5

94. Trigeminal nerve has how many nuclei in CNS _____?

- (A) Three
- (B) Four
- (C) Five
- (D) Six

95. Which of the following is NOT true about paramedian pits _____?

- (A) Found on the lower lip
- (B) Found on the upper lip
- (C) On either side of the midline
- (D) Associated with cleft lip and palate

96. The growth and development in the craniofacial region occurs in following order _____?

- (A) The head first, then width of face and length (or) depth of face after wards.
- (B) the width of face, then head and length (or) depth of face after wards
- (C) The length (or) depth of face then width of face and the head
- (D) The head first , length (or) depth of face and then width of face

97. The slightly movable articulations in which the contiguous bony surfaces are either connected by broad flattened disks of fibrocartilage or united by interosseous ligaments are known as _____?

- (A) Gomphosis
- (B) Enarthroses
- (C) Diarthroses
- (D) Amphiarthroses

98. True about subclavian artery_____?

- (A) Principal artery of upper limb
- (B) Right subclavian artery is a branch of brachiocephalic artery
- (C) Left subclavian artery is a branch of arch of aorta
- (D) Internal thoracic, vertebral and thyro cervical trunk are branches of subclavian artery
- (E) All of the above

99. Superior vena cava is formed by_____?

- (A) Subclavian vein
- (B) Internal jugular vein
- (C) External jugular vein
- (D) Thoracic vein
- (E) Brachiocephalic

100. Liver is divided into_____?

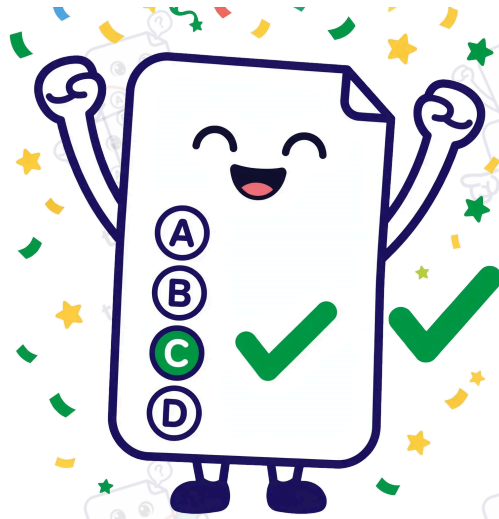
- (A) 8 Couinaud Segments
- (B) 7 Couinaud Segments
- (C) 9 Couinaud Segments
- (D) 10 Couinaud Segments

Answer key

Tap any answer to open its full explanation on TestUstad.

Model Paper 1

1	A	2	D	3	B	4	B	5	B	6	B	7	A	8	C	9	B	10	B
11	D	12	B	13	B	14	D	15	C	16	B	17	D	18	B	19	B	20	A
21	B	22	D	23	A	24	A	25	B	26	B	27	B	28	B	29	B	30	A
31	D	32	B	33	B	34	A	35	D	36	C	37	B	38	B	39	A	40	B
41	A	42	A	43	D	44	D	45	A	46	D	47	B	48	B	49	A	50	A
51	B	52	B	53	D	54	A	55	D	56	D	57	C	58	C	59	A	60	C
61	C	62	A	63	C	64	A	65	B	66	A	67	A	68	B	69	D	70	C
71	B	72	D	73	B	74	D	75	D	76	D	77	D	78	D	79	D	80	B
81	A	82	A	83	A	84	A	85	A	86	D	87	A	88	A	89	C	90	D
91	B	92	A	93	D	94	B	95	B	96	A	97	D	98	E	99	E	100	A



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