

Question Booklet  
Series:**A****MD/MS/PG Diploma Entrance Test – 2014**  
**QUESTION BOOKLET**  
**Paper - I (Pre-Clinical and Para-Clinical)**

INSTRUCTIONS

Question Booklet  
Number:**510408**

Maximum Time Allowed: 2 Hours

No. of Questions: 150  
Maximum Marks: 150

Roll Number:

Answer Sheet Number:

Please read the following instructions carefully:

1) **Check the booklet thoroughly:** In case of any defect – Misprint, Missing question(s) or duplication of question(s) / Page(s) get the booklet changed with the booklet of the same series from the Room Invigilator. No complaint shall be entertained after the entrance test.

2) Write your Roll Number and the OMR Answer Sheet Number on the question booklet.

3) Mark carefully your Roll Number, Question Booklet Number, Paper Code, Question Booklet Series and Course on the OMR Answer Sheet and sign at the appropriate place. Incomplete and/or incorrect particulars will result in the non-evaluation of your answer sheet.

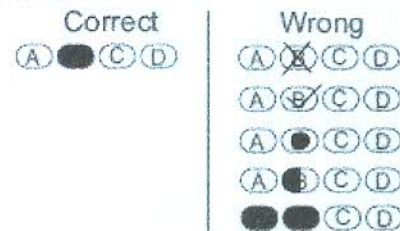
4) Strictly follow the instructions given by the Centre Supervisor / Room Invigilator and those given on the Question Booklet.

5) Candidates are not allowed to carry any papers, notes, books, calculators, cellular phones, scanning devices, pagers etc. to the Examination Hall. Any candidate found using, or in possession of such unauthorized material, indulging in copying or impersonation or adopting unfair means / reporting late / without Admit Card will be debarred from the written test.

6) Please mark the right responses on the OMR Sheet with ONLY a Blue/Black ball point pen. Use of eraser, whitener (fluid) and cutting on the OMR Answer Sheet is NOT allowed.

7) The test is of objective type containing multiple choice questions (MCQs). Each objective question is followed by four responses. Your task is to choose the correct/best response and mark your response on the OMR Answer Sheet and NOT on the Question Booklet.

8) For marking response to a question, completely darken the CIRCLE so that the alphabet inside the CIRCLE is not visible. Darken only ONE circle for each question. If you darken more than one circle, it will be treated as wrong answer. The CORRECT and the WRONG method of darkening the CIRCLE on the OMR Answer Sheet are shown below.



9) Please be careful while marking the response to questions. The response once marked cannot be changed and if done shall be treated as wrong answer.

10) In view of the tight time span, do NOT waste your time on a question which you find to be difficult. Attempt easier questions first and come back to the difficult questions later during the test.

11) DO NOT make any stray marks anywhere on the OMR Answer Sheet. DO NOT fold or wrinkle the OMR answer sheet.

12) Rough work MUST NOT be done on the OMR Answer Sheet. Use your test booklet for this purpose.

13) Candidates are provided carbonless OMR Answer Sheet having original copy and candidate's copy. After completing the examination, candidates are directed to fold at perforation on the top of the sheet, tear it to separate original copy and candidate's copy and then hand over the original copy of OMR Answer Sheet to the Room Invigilator and take candidate's copy with them.

DO NOT OPEN THE SEAL OF THIS BOOKLET UNTIL TOLD TO DO SO

1. Which one of the following statements about the peptide shown below is correct?
  - (A) The peptide contains a majority of amino acids with basic side chains
  - (B) It contains glutamine
  - (C) It can form an internal disulphide bond
  - (D) It is glycosylated
2. The drug that acts primarily on a receptor located in the membrane of the effector nerve or muscle cell is
  - (A) Clonidine
  - (B) Cocaine
  - (C) Tyramine
  - (D) Amphetamine
3. Alkaptonuric patients exhibit
  - (A) Mousy odour of urine
  - (B) Darkening of urine on standing
  - (C) Excretion of imidazole pyruvate in urine
  - (D) Fruity odour of urine
4. *Corynebacterium diphtheriae* can be cultivated on:
  - (A) Neomycin blood agar
  - (B) Loeffler's serum slope
  - (C) Aronson's medium
  - (D) Ashdown's medium
5. Chromosomal pattern of Turner's Syndrome
  - (A) XO
  - (B) XXY
  - (C) XYY
  - (D) XXX
6. As per Fick's law of diffusion, the diffusion of lipid soluble substances across a membrane would increase with an increase in any of the following EXCEPT:
  - (A) Temperature of solution
  - (B) Area of the membrane
  - (C) Size of particles
  - (D) Concentration gradient of the particles
7. The lateral cutaneous nerve of the forearm is the continuation of
  - (A) Axillary nerve
  - (B) Radial nerve
  - (C) Median nerve
  - (D) Musculocutaneous nerve
8. All the following are oncogenic viruses EXCEPT
  - (A) Human papilloma virus
  - (B) Epstein Barr virus
  - (C) Hepatitis B virus
  - (D) Cytomegalovirus
9. The persistent suppression of bacterial growth that may occur following limited exposure to some anti-microbial drugs is called
  - (A) Time dependent killing
  - (B) Sequential blockade
  - (C) Concentration dependent killing
  - (D) The 'post-antibiotic effect'
10. In the intestine and testes, glucose transporter 5 (GLUT 5) is the primary transporter for
  - (A) Glucose
  - (B) Galactose
  - (C) Fructose
  - (D) Mannose
11. The following antimicrobials act on the cell wall of the bacteria
  - (A) Chloramphenicol
  - (B) Ciprofloxacin
  - (C) Imipenem
  - (D) Rifampicin

12. A 63-year-old woman developed severe back pain. On taking an X-ray, it was discovered that she had osteoporosis. The doctor recommended taking calcium and a vitamin. What vitamin was most likely prescribed and what is the mechanism of action?
- (A) Vitamin C decreases the renal excretion of calcium
  - (B) Vitamin D increases the intestinal absorption of calcium
  - (C) Vitamin E activates the calcium in the liver
  - (D) Vitamin K helps calcium influx into the cell
13. Which of the following anti-seizure drugs is likely to elevate the plasma concentration of other concomitantly administered drugs?
- (A) Carbamazepine
  - (B) Phenobarbitone
  - (C) Phenytoin
  - (D) Valproic acid
14. Thiamine pyrophosphate is required as a coenzyme for all of the following enzymes EXCEPT
- (A) Transketolase
  - (B) Sorbitol dehydrogenase
  - (C) Pyruvate dehydrogenase
  - (D) Alpha-ketoglutarate dehydrogenase
15. Primary visual cortex is related to
- (A) Calcarine sulcus
  - (B) Central sulcus
  - (C) Lateral sulcus
  - (D) Collateral sulcus
16. The primary mechanism moving water molecules from the blood plasma to the interstitial fluid is:
- (A) Active transport
  - (B) Facilitated diffusion
  - (C) Co-transport with Na<sup>+</sup>
  - (D) Filtration
17. Which of the following is NOT a prominent effect of atropine at therapeutic doses?
- (A) Dryness of mouth
  - (B) Constriction of pupils
  - (C) Tachycardia
  - (D) Difficulty in micturition
18. The middle cardiac vein lies in
- (A) Anterior atrioventricular sulcus
  - (B) Posterior atrioventricular sulcus
  - (C) Posterior interventricular sulcus
  - (D) Anterior interventricular sulcus
19. The most common cause of fungal meningitis in HIV patients is:
- (A) *Coccidioides immitis*
  - (B) *Candida albicans*
  - (C) *Aspergillus fumigatus*
  - (D) *Cryptococcus neoformans*
20. Which of the following is an androgen receptor antagonist?
- (A) Flutamide
  - (B) Stanozolol
  - (C) Nadrolone
  - (D) Danazol
21. Which of the following fetal abnormalities is most likely to be found when there is a dietary deprivation of green leafy vegetables during pregnancy?
- (A) Anencephaly
  - (B) Diaphragmatic hernia
  - (C) Low birth weight
  - (D) Neuroblastoma
22. The normal brown-red color of feces results from the presence of
- (A) Stercobilinogen
  - (B) Urobilin
  - (C) Bilirubin diglucuronide
  - (D) Coproporphyrin

23. Compared with ICF, ECF has
- (A) Lower sodium ion concentration
  - (B) Lower chloride ion concentration
  - (C) Lower potassium ion concentration
  - (D) Lower calcium ion concentration
24. The dose limiting toxicity of the anti-fungal drug amphotericin B is
- (A) Myelosuppression
  - (B) Infusion related effects
  - (C) Renal tubular acidosis
  - (D) Postural hypotension
25. Which one of the following marker is useful in differentiating mesothelioma from adenocarcinoma?
- (A) CEA
  - (B) Cytokeratins
  - (C) Calretinin
  - (D) TTF
26. The immunoglobulin that crosses the placental barrier is
- (A) IgG
  - (B) IgM
  - (C) IgE
  - (D) IgA
27. A 25-year-old man is to be treated for exercise induced asthma. Which of the following drugs would provide bronchodilation with minimal cardiovascular stimulation?
- (A) Metoprolol
  - (B) Salbutamol
  - (C) Epinephrine
  - (D) Phenoxybenzamine
28. A 27 year old pregnant woman went to the hospital for a regular checkup. On doing the routine investigations, it was found that her fasting blood sugar was 144 mg/dL. A repeat test confirmed this result. What medication would you recommend?
- (A) Insulin
  - (B) Glyburide
  - (C) Pioglitazone
  - (D) Glucagon
29. The enzyme ribonucleotide reductase that converts ribonucleotides to deoxyribonucleotides acts on
- (A) Monophosphate ribonucleotides
  - (B) Diphosphate ribonucleotides
  - (C) Triphosphate ribonucleotides
  - (D) Purine nucleotides only
30. Donnan effect in cells is due to:
- (A) Presence of diffusible cations in the cell
  - (B) Presence of diffusible anions in the cell
  - (C) Presence of indiffusible anions in the cell
  - (D) Presence of indiffusible cations in the cell
31. Monoclonal antibodies are routinely used in all of the following EXCEPT
- (A) The identification and epidemiological study of infectious microorganisms
  - (B) The identification of tumor antigens
  - (C) The classification of leukemias
  - (D) The manipulation of the immune response
32. Cyclophosphamide was administered to a 50-year-old man suffering from cancer, along with other drugs. He complained of blood in his urine and of pain during micturation. Which one of the following drugs will give him relief from this condition?
- (A) Mesna
  - (B) Interferons
  - (C) Interleukins
  - (D) Irinotecan

