INSTRUCTIONS TO CANDIDATES

(Use only blue/black ball-point pen in the space above and on both sides of the Answer Sheet)

1. Within 10 minutes of the issue of the Question Booklet, Please ensure that you have got the correct booklet and it contains all the pages in correct sequence and no page/question is missing. In case of faulty Question Booklet, Bring it to the notice of the Superintendent/Invigilators immediately to obtain a fresh Question Booklet.

2. Do not bring any loose paper, written or blank, inside the Examination Hall except the Admit Card without its envelope.

3. A separate Answer Sheet is given. It should not be folded or mutilated. A second Answer Sheet shall not be provided.

4. Write your Roll Number and Serial Number of the Answer Sheet by pen in the space provided above.

5. On the front page of the Answer Sheet, write by pen your Roll Number in the space provided at the top, and by darkening the circles at the bottom. Also, wherever applicable, write the Question Booklet Number and the Set Number in appropriate places.

6. No overwriting is allowed in the entries of Roll No., Question Booklet No. and Set No. (if any) on OMR sheet and Roll No. and OMR sheet no. on the Question Booklet.

7. Any change in the aforesaid entries is to be verified by the invigilator, otherwise it will be taken as unfair means.

8. This Booklet contains 40 multiple choice questions followed by 10 short answer questions. For each MCQ, you are to record the correct option on the Answer Sheet by darkening the appropriate circle in the corresponding row of the Answer Sheet, by pen as mentioned in the guidelines given on the first page of the Answer Sheet. For answering any five short Answer Questions use five Blank pages attached at the end of this Question Booklet.

9. For each question, darken only one circle on the Answer Sheet. If you darken more than one circle or darken a circle partially, the answer will be treated as incorrect.

10. Note that the answer once filled in ink cannot be changed. If you do not wish to attempt a question, leave all the circles in the corresponding row blank (such question will be awarded zero marks).

11. For rough work, use the inner back pages of the title cover and the blank page at the end of this Booklet.

12. Deposit both OMR Answer Sheet and Question Booklet at the end of the Test.

13. You are not permitted to leave the Examination Hall until the end of the Test.

14. If a candidate attempts to use any form of unfair means, he/she shall be liable to such punishment as the University may determine and impose on him/her.

Total No. of Printed Pages: 16
No. of Questions : 50

Time : 2 Hours

Full Marks : 200

Note: (1) This Question Booklet contains 40 Multiple Choice Questions followed by 10 Short Answer Questions.

(2) Attempt as many MCQs as you can. Each MCQ carries 3 (Three) marks. 1 (One) mark will be deducted for each incorrect answer. Zero mark will be awarded for each unattempted question. If more than one alternative answers of MCQs seem to be approximate to the correct answer, choose the closest one.

(3) Answer only 5 Short Answer Questions. Each question carries 16 (Sixteen) marks and should be answered in 150-200 words. Blank 5 (Five) pages attached with this booklet shall only be used for the purpose. Answer each question on separate page, after writing Question No.

01. Which of the following is pluripotent cell
   (1) Stem cell (2) Sertoli cells
   (3) Memory t cells (4) Langerhans cells

02. Which of the following is NOT a lymphoid organ
   (1) Lymphnodes (2) Tonsils
   (3) Thyroid (4) Spleen

03. Enzymes for kreb cycle are located in
   (1) Mitochondria (2) Cytoplasm
   (3) Peroxisomes (4) Nucleus

04. Which of the following is a non communicable disease
   (1) HIV (2) Tuberculosis
   (3) Measles (4) Tetanus
655/Pharmacology

05. Which of the following is NOT a part of immune system of the body?
   (1) Langerhans cells  (2) Helper T cells
   (3) Histiocytes  (4) Reticulocytes

06. Ovulation occurs at
   (1) 5th day of menstrual cycle
   (2) 14th day of menstrual cycle
   (3) 21st day of menstrual cycle
   (4) 28th day of menstrual cycle

07. Amount of growth hormone secretion reach its peak by
   (1) 8 am  (2) 8 pm
   (3) 12 am  (4) 12 pm

08. Which of the following is false?
   (1) Bones are attached to other bones by means of tendon
   (2) Bones are attached to muscles by means ligaments
   (3) Bones are joined to other bones by mean of articular cartilage
   (4) Bones are joint to each other by mean of fibrous tissue

09. Regulators of thirst and hunger centre is present in
   (1) Medulla  (2) Midbrain
   (3) Hypothalamus  (4) Cortex

10. Which of the following is NOT included in the stages of embryological development?
    (1) Insemination  (2) Gastrulation
    (3) Blastula formation  (4) Morula formation
11. Toxicology includes study of
   (1) Urbanization           (2) Deforestation
   (3) Pollution              (4) Soil erosion

12. Antidiabetic drug may improve function mainly of
   (1) Mitochondria           (2) Cell membrane
   (3) Golgibody              (4) Microtubules

13. Which of the following is endocrine substance
   (1) Glucagon               (2) Prostaglandin
   (3) Interleukin            (4) Carbon monoxide

14. Blood Clotting is prominently seen with
   (1) Cobra bite             (2) Viper bite
   (3) Scorpion bite          (4) Spider bite

15. Tripple Response in skin is mediated by
   (1) Adrenalin              (2) Acetylcholin
   (3) Histamine              (4) Prostaglandin

16. Which is not known as mechanism of antibiotic
   (1) Blocking cell respiration (2) Blocking Protein synthesis
   (3) Blocking cell wall synthesis (4) Bolcking enzyme function

17. Antagonist of acetylcholine are useful in treating
   (1) Headache               (2) Stomach ache
   (3) Muscle cramp           (4) Anginal pain
655/Pharmacology

18. A nootropic drug is
   (1) Reserpine
   (3) Piracetam
   (2) Scopolamine
   (4) Caffein

19. Which is not found in morphine poisoning
   (1) Myosis
   (3) Vomiting
   (2) Fever
   (4) Respiratory depression

20. Drug useful in cardiac arrest is
   (1) Morphine
   (3) Adrenaline
   (2) Atropine
   (4) Quinidene

21. Commonest ionic imbalance causing arrhythmia is
   (1) Sodium
   (3) Calcium
   (2) Potassium
   (4) Magnesium

22. Diminution of response to repeated dose of a drug within short time is called
   (1) Variability
   (3) Resistance
   (2) Tachyphylaxis
   (4) Idiosyncrasy

23. Steady state drug concentration in plasma is attainable by repeating a dose every half life for
   (1) 2 half lives
   (3) 6 half lives
   (2) 4 half lives
   (4) 8 half lives

24. Which of the following is useful in bronchial asthma
   (1) Nicotine
   (3) Ephedrine
   (2) Digoxin
   (4) Quinidine
25. Which is useful in treating acute myocardial infarction
   (1) Morphine  (2) Adrenaline
   (3) Terbutaline (4) Histamine

26. Which is an adverse effect of phenytoin
   (1) Bad taste in mouth  (2) Hypotension
   (3) Cataract  (4) Hirsuitism

27. Which of the following has antidotal value against atropine poisoning
   (1) Morphine  (2) Physostigmine
   (3) Neostigmine (4) Lobeline

28. Which are the commonest antiallergic drugs
   (1) Antihistamines  (2) Anticholinergics
   (3) Anti prostaglandins (4) Anti adrenergics

29. Identify the antibiotic agent
   (1) Vincristine  (2) Emetine
   (3) Trimethoprim (4) None of above

30. A drug inhibiting hepatic microsomal enzymes is
   (1) Glucocorticosteroids  (2) Cimetidine
   (3) Phenytoin (4) All of the above

31. Drug Producing headache is
   (1) Varapamil  (2) Nitrate
   (3) Digoxin (4) Cannabis
655/Pharmacology

32. A hormone not derived in kidney is
   (1) Progestin
   (2) Erythropoietin
   (3) Vitamin D-3
   (4) All of the above

33. A drug used against HIV infection is
   (1) Zidovudin
   (2) Nalidixic acid
   (3) Tobramycin
   (4) None of the above

34. Generally ineffective drug against falciparum malaria
   (1) Chloroquin
   (2) Mefloquin
   (3) Artesunate
   (4) All of the above

35. Drug impairing water homeostasis is
   (1) Oxytocin
   (2) Atropine
   (3) Adrenalene
   (4) None of the above

36. Hormone determining metabolic rate is
   (1) Thyroid hormone
   (2) Insulin
   (3) Glucocorticosteroid
   (4) Growth hormone

37. Which of the following is a neurohormone
   (1) Insuline
   (2) Oxytocin
   (3) Thyroxine
   (4) Growth hormone

38. Life saving antidote in organophosphate poisoning is
   (1) Morphine
   (2) PAM
   (3) Atropine
   (4) Nikethamide
39. Common public health risk of DDT is
   (1) Blindness       (2) Abortions
   (3) Asthma          (4) All of the above

40. Thrifty gene hypothesis relates to
   (1) Obesogenesity   (2) Hypertension
   (3) Mental disorder (4) None of the above
655/Pharmacology

Short Answer Questions

Note: Attempt any five questions. Write answer in 150-200 words. Each question carries 16 marks. Answer each question on separate page after writing Question Number.

01. Explain how different basic sciences are related to pharmacokinetics.

02. Why structure of drug molecule may be important in action?

03. How can alcoholic habit affect treatments with other drug?

04. What are types of drug antagonism?

05. Explain the effects of organophosphorus poisoning.

06. Enumerate adverse effects of glycocorticosteroids.

07. Enumerate the types of sulphonamide drugs.

08. Describe the types of epilepsy and give names of one useful drug for each.

09. What is a placebo?

10. What is the role of Vitamin D in body?
<table>
<thead>
<tr>
<th>Question No.</th>
<th>Page for Short Answer</th>
</tr>
</thead>
</table>

14
अध्यक्षियों के लिए निर्देश

(इस पुस्तिका के प्रथम आवरण पृष्ठ पर तथा उत्तर-पत्र के दोनों पृष्ठों पर
केवल शीर्ष-काली बाल-वाइट पेन से ही लिखें)

1. प्रस्तुत पुस्तिका मिलने के 10 मिनट के अंदर ही देख लें कि प्रस्ताव में सभी पृष्ठ मौजूद हैं और कोई प्रस्तुत छुट्टी नहीं है। पुस्तिका दोपुलक पत्रों जाने पर इसको सुनचना तत्काल वजन-निरीक्षक को दें कर देशीय प्रस्तुत की दूसरी पुस्तिका प्राप्त कर ली।

2. परीक्षा भवन में लिखने राहत प्रवेश-पत्र के अंतरिक्ष लिखा या सादों कोई भी खुला क्षेत्र साथ में न लाये।

3. उत्तर-पत्र अलग से दिया गया है। इसे न तो पीछे और न ही विकृत करें। दूसरा उत्तर-पत्र नहीं दिया जायेगा।

4. केवल उत्तर-पत्र का ही पूरुपाक किया जायेगा।

5. अपना अनुमोदक तथा उत्तर-पत्र का क्रमांक प्रथम आवरण-पृष्ठ पर पेन से निरीक्षित स्थान पर लिखें।

6. उत्तर-पत्र के प्रथम पृष्ठ के पेन से अपना अनुमोदक निरीक्षित स्थान पर लिखें तथा नीचे दिये वृत्तों को गाड़ा कर दें। जहाँ-जहाँ आवश्यक हो वही प्रस्तुत-पुस्तिका का क्रमांक तथा सेट का नम्बर आच्छादित स्थानों पर लिखें।

7. अपने प्रति में कोई भी परिवर्तन क्रम निरीक्षक द्वारा प्रमाणित होना चाहिये अन्यथा वह एक अनुसंधान का प्रयोग माना जायेगा।

8. प्रस्तुत-पुस्तिका में प्रयोक्त प्रश्न के चार वैकल्पिक उत्तर दिये गये हैं। प्रत्येक प्रश्न के वैकल्पिक उत्तर के लिए आपको उत्तर-पत्र की समस्तित पंक्ति के सामने दिये गये वृत्त को उत्तर-पत्र के प्रथम पृष्ठ पर दिये गये निर्देशों के अनुसार पेन से गड़ा दें।

9. प्रत्येक प्रश्न के उत्तर के लिए केवल एक ही वृत्त को गाड़ा करें। एक से अधिक वृत्तों को गाड़ा करने पर अपना एक वृत्त की अपूर्ण भरने पर वह उत्तर गलत माना जायेगा।

10. अमल में कि एक बार स्थायी द्वारा अंकित उत्तर बदल नहीं जा सकता है। यदि आप किसी प्रश्न का उत्तर नहीं देना चाहें तो संबंधित पंक्ति के सामने दिये गये वृत्तों को खाली छोड़ दें। ऐसे प्रश्नों पर शून्य अंक दिये जायेंगे।

11. यदि कार्य के लिए प्रस्तुत-पुस्तिका के मुखपृष्ठ के अंदर वाला पृष्ठ तथा उत्तर-पुस्तिका के अंतिम पृष्ठ का प्रयोग करें।

12. परीक्षा के उपरांत केवल एम आर उत्तर-पत्र परीक्षा भवन में मामला कर दें।

13. परीक्षा समाप्त होने पर पहले परीक्षा भवन से बाहर जाने की अनुमति नहीं होगी।

14. यदि कोई अवज्ञा परीक्षा में अनुमंडल साधनों का प्रयोग करता है, तो वह विचारविधालय द्वारा निरीक्षित दंड का/की भारी होगा/होगी।