

Set No. : 1

RET/15/TEST-B

42

Question Booklet No. **00016**

642 Medicine

(To be filled up by the candidate by blue/black ball point pen)

Roll No.

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Roll No. (Write the digits in words)

Serial No. of OMR Answer Sheet

Day and Date

(Signature of Invigilator)

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

SEAL

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ROUGH WORK

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

12. Protein is purified using ammonium sulfate by :
- (1) Salting out
 - (2) Ion exchange chromatography
 - (3) Mass chromatography
 - (4) Molecular size exclusion
13. Gene for major histocompatibility complex is located on which chromosome ?
- (1) Chromosome 13
 - (2) Chromosome 11
 - (3) Chromosome 6
 - (4) Chromosome 16
14. Nested case control study is a type of :
- (1) Retrospective study
 - (2) Descriptive study
 - (3) Cross sectional study
 - (4) Prospective study
15. Which co enzyme is responsible for carboxylation reaction ?
- (1) Biotin
 - (2) NADH
 - (3) FAD
 - (4) Thiamine pyrophosphate
16. The best marker to diagnose thyroid related disorder :
- (1) T3
 - (2) T4
 - (3) TSH
 - (4) Thyroglobulin
17. Most common cause of hyperparathyroidism :
- (1) Iatrogenic
 - (2) Medullary carcinoma
 - (3) Parathyroid adenoma
 - (4) Parathyroid hyperplasia
18. Which of the following is Not a tumour marker ?
- (1) Tartrate-resistant acid phosphatase
 - (2) Carcinoembryonic antigen
 - (3) Alfa fetoprotein
 - (4) Alfa-1 antitrypsin

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- 19.** Which type diabetes is HLA associated ?
(1) Type I diabetes (2) Type II diabetes
(3) Malnutrition related diabetes (4) Pregnancy related diabetes
- 20.** Which is not carcinogenic ?
(1) Benzpyrine (2) Aniline dye
(3) Vitamin A (4) Aflatoxin B1
- 21.** An example of a tumour suppressor gene is :
(1) myc (2) fos
(3) ras (4) p53
- 22.** Which of the following is an occupational disease ?
(1) Malaria (2) Diabetes
(3) Hypothyroidism (4) Pncumoconiosis
- 23.** Renin is secreted from the cells of -
(1) Liver (2) Kidney
(3) Intestines (4) Bones
- 24.** Wearing of gloves is a part of :
(1) Disinfection (2) Sanitation
(3) Operation (4) Universal precautions
- 25.** DOTS program is related with :
(1) HIV (2) Tuberculosis
(3) Leprosy (4) Polio
- 26.** Smallest cell organelle is :
(1) Vacuole (2) Ribosome
(3) Golgi body (4) Cytoplasm

27. Trypsinogen an inactive enzyme secreted by the pancreas is activated by :
- (1) Enterokinase (2) Pepsin of stomach
(3) Bile (4) Chymotrypsin
28. Oxygen dissociation curve is :
- (1) Sigmoid (2) Straight
(3) Parabola (4) Slope
29. The respiratory centre in brain which controls respiration ?
- (1) Hypothalamus (2) Cerebellum
(3) Medulla oblongata (4) Spinal cord
30. Blood circulation that starts in capillaries and end in capillaries :
- (1) Hepatic circulation (2) Portal circulation
(3) Cardiac circulation (4) Pulmonary circulation
31. All are screening test for Down syndrome except -
- (1) Low maternal serum α - fetoprotein
(2) Elevated human chorionic gonadotropin
(3) Low unconjugated estriol.
(4) Progesterone
32. ALL are the Turner Syndrome genotypes except :
- (1) 45,X (2) 45,X/46,XX
(3) 45,X/47,XXX (4) 47,XXY

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- 33.** Assisted reproductive technology, IVF involves transfer of :
- (1) Zygote into the uterus
 - (2) Embryo with 16 blastomeres into fallopian tube
 - (3) Ovum into the fallopian tube
 - (4) Zygote into fallopian tube
- 34.** *Wuchereria bancrofti* is transmitted by :
- (1) Sand fly
 - (2) Tse-tse fly
 - (3) *Culex*
 - (4) Anophelese mosquitoes
- 35.** The first human hormone produced by recombinant DNA technology.
- (1) Insulin
 - (2) Thyroxin
 - (3) Estrogen
 - (4) Prolactin
- 36.** Analysis of chromosomal DNA using the southern hybridization technique does not use
- (1) Autoradiography
 - (2) PCR
 - (3) Electrophoresis
 - (4) Blotting
- 37.** HIV principally infects and reduces :
- (1) All T cells
 - (2) T-helper cells
 - (3) B cells only
 - (4) Both B and T cells
- 38.** Universal donors are :
- (1) O Rh +
 - (2) AB Rh +
 - (3) O Rh -
 - (4) AB Rh -
- 39.** Pacemaker of the heart is :
- (1) SA node
 - (2) AV node
 - (3) Bundle of His
 - (4) Purkinje fibre

40. Hypothalamus of the brain is not involved in this function :

- (1) Sleep-wake cycle
- (2) Osmoregulation
- (3) Temperature control
- (4) Accuracy of muscular movement

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. Proto-oncogene
02. Complications of diabetes
03. Life cycle of malaria
04. Classify the lymphocytes of blood and mention their key functions.
05. Meiosis - I
06. What are the components of metabolic syndrome ?
07. Enumerate the differences between DNA and RNA.
08. Interferons
09. Western blotting
10. Microchip Electrophoresis.

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Page for Short Answer

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अभ्यर्थियों के लिए निर्देश

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

1. प्रश्न पुस्तिका मिलने के 10 मिनट के अन्दर ही देख लें कि प्रश्नपत्र में सभी पृष्ठ मौजूद हैं और कोई प्रश्न छूटा नहीं है। पुस्तिका दोषयुक्त पाये जाने पर इसकी सूचना तत्काल कक्ष-निरीक्षक को देकर सम्पूर्ण प्रश्नपत्र की दूसरी पुस्तिका प्राप्त कर लें।
2. परीक्षा भवन में लिफाफा रहित प्रवेश-पत्र के अतिरिक्त, लिखा या सादा कोई भी खुला कागज साथ में न लायें।
3. उत्तर-पत्र अलग से दिया गया है। इसे न तो मोड़ें और न ही विकृत करें। दूसरा उत्तर-पत्र नहीं दिया जायेगा। केवल उत्तर-पत्र का ही मूल्यांकन किया जायेगा।
4. अपना अनुक्रमांक तथा उत्तर-पत्र का क्रमांक प्रथम आवरण-पृष्ठ पर पेन से निर्धारित स्थान पर लिखें।
5. उत्तर-पत्र के प्रथम पृष्ठ पर पेन से अपना अनुक्रमांक निर्धारित स्थान पर लिखें तथा नीचे दिये वृत्तों को गाढ़ा कर दें। जहाँ-जहाँ आवश्यक हो वहाँ प्रश्न-पुस्तिका का क्रमांक तथा सेट का नम्बर उचित स्थानों पर लिखें।
6. ओ० एम० आर० पत्र पर अनुक्रमांक संख्या, प्रश्नपुस्तिका संख्या व सेट संख्या (यदि कोई हो) तथा प्रश्नपुस्तिका पर अनुक्रमांक और ओ० एम० आर० पत्र संख्या की प्रविष्टियों में उपरिलेखन की अनुमति नहीं है।
7. उपर्युक्त प्रविष्टियों में कोई भी परिवर्तन कक्ष निरीक्षक द्वारा प्रमाणित होना चाहिये अन्यथा यह एक अनुचित साधन का प्रयोग माना जायेगा।
8. प्रश्न-पुस्तिका में प्रत्येक प्रश्न के चार वैकल्पिक उत्तर दिये गये हैं। प्रत्येक प्रश्न के वैकल्पिक उत्तर के लिए आपको उत्तर-पत्र की सम्बन्धित पंक्ति के सामने दिये गये वृत्त को उत्तर-पत्र के प्रथम पृष्ठ पर दिये गये निर्देशों के अनुसार पेन से गाढ़ा करना है।
9. प्रत्येक प्रश्न के उत्तर के लिए केवल एक ही वृत्त को गाढ़ा करें। एक से अधिक वृत्तों को गाढ़ा करने पर अथवा एक वृत्त को अपूर्ण भरने पर वह उत्तर गलत माना जायेगा।
10. ध्यान दें कि एक बार स्याही द्वारा अंकित उत्तर बदला नहीं जा सकता है। यदि आप किसी प्रश्न का उत्तर नहीं देना चाहते हैं, तो संबंधित पंक्ति के सामने दिये गये सभी वृत्तों को खाली छोड़ दें। ऐसे प्रश्नों पर शून्य अंक दिये जायेंगे।
11. रफ कार्य के लिए प्रश्न-पुस्तिका के मुखपृष्ठ के अंदर वाला पृष्ठ तथा उत्तर-पुस्तिका के अंतिम पृष्ठ का प्रयोग करें।
12. परीक्षा के उपरान्त केवल ओ एम आर उत्तर-पत्र परीक्षा भवन में जमा कर दें।
13. परीक्षा समाप्त होने से पहले परीक्षा भवन से बाहर जाने की अनुमति नहीं होगी।
14. यदि कोई अभ्यर्थी परीक्षा में अनुचित साधनों का प्रयोग करता है, तो वह विश्वविद्यालय द्वारा निर्धारित दंड का/की, भागी होगा/होगी।