

Question Booklet No.

(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 changes 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 page 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.

FOR ROUGH WORK

Research Entrance Test – 2014

No. of Questions : 50

Time : 2 Hours

Full Marks : 200

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

(ii) 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.

(iii) 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.

1. Decrease in biodiversity in tropical countries is mainly due to :
(1) Urbanization (2) Deforestation (3) Pollution (4) Soil erosion
2. Where does glycolysis occur in a cell ?
(1) Chloroplast (2) Mitochondria (3) Cytoplasm (4) Golgibody
3. The process that accounts for transfer of genetic information from DNA to RNA is called as :
(1) Translocation (2) Translation (3) Transformation (4) Transcription
4. Leydig's cells produce :
(1) Thyroxine (2) Growth hormone
(3) Testosterone (4) Progesterone
5. A tumor suppressor gene which is known as "Guardian of the genome" is :
(1) myc (2) p⁵³ (3) Sr C (4) H-Ras
6. Which is the function of interleukins ?
(1) Stimulation of wound healing
(2) Treatment of infertility
(3) Dissolving blood clot
(4) Enhancement of action of immune system
7. Which of the following is not an anticoagulant ?
(1) Heparin (2) Protamine sulphate
(3) Warfarin (4) Hirudin
8. Which of the following is not a part of triple response ?
(1) White reaction (2) Red reaction (3) Wheal (4) Flare
9. Virus envelope is known as :
(1) Capsid (2) Virion (3) Nucleoprotein (4) Core
10. Peptide synthesis inside a cell takes place in :
(1) Mitochondria (2) Chloroplast
(3) Ribosomes (4) Chromoplast

11. Acute dystonia is due to :
- (1) Acute acetylcholine antagonism (2) Acute dopamine antagonism
(3) Chronic acetylcholine antagonism (4) Chronic dopamine antagonism
12. Long term effects of antidepressant drugs include all EXCEPT :
- (1) Increased receptor G protein coupling
(2) Increase neurogenesis in Hippocampus
(3) Increased induction of neurotrophic factors
(4) Increased neurogenesis in Pons
13. Hallucination is :
- (1) Disorder of perception (2) Disorder of thought form
(3) Disorder of thought content (4) Disorder of thought process
14. Which of the following is not a part of 4 A's of Schizophrenia ?
- (1) Autism (2) Affect
(3) Anhedonia (4) Ambivalence
15. Adverse effects of Lithium include all EXCEPT :
- (1) Tremor (2) Hyperthyroidism
(3) Renal dysfunction (4) Dysarrhythmias
16. Which of the following is not an indication of anti-depressants ?
- (1) Alcohol toxicity (2) Pain disorder
(3) Premenstrual dysphoria (4) Smoking cessation
17. Which one of the drugs is not used in diseases of bone mineral homeostasis ?
- (1) Teriparatide (2) Raloxifene
(3) Cinacalcet (4) Tamoxifene

- 18.** The most common DNA-binding motif is :
- (1) Helix-turn-helix (2) Zinc finger
(3) Helix-loop-helix (4) Leucine zipper
- 19.** Ulipristal is :
- (1) Selective estrogen receptor modulator
(2) Selective androgen receptor modulator
(3) Selective progesterone receptor modulator
(4) Estrogen
- 20.** Which of the following action is not attributed to Morphine ?
- (1) Mydriasis (2) Biliary colic
(3) Respiratory depression (4) Truncal rigidity
- 21.** Which is not a drug effect on heart ?
- (1) Nootropic (2) Proarrhythmic
(3) Bathmotropic (4) Ionotropic
- 22.** Which of the following poisons can stop heart as an early effect ?.
- (1) Strychnine (2) Amanita muscaria
(3) Cobra venom (4) Belladonna
- 23.** The ion most important in determining the force of cardiac contraction is :
- (1) Sodium (2) Potassium (3) Calcium (4) Magnesium
- 24.** One of the following is useful in treating a disease of heart :
- (1) Tecomella undulata (2) Brahmi
(3) Anona squamosa (4) Digitalis purpurea

25. Raised blood pressure can be lowered by all EXCEPT :
- (1) Raising sympathetic activity (2) Decreasing sympathetic activity
(3) Raising parasympathetic activity (4) Decreasing cardiac activity
26. The effect of ordinary diuretic drug decreases on continuation due to all EXCEPT :
- (1) Decreased blood volume (2) Decreased blood sodium
(3) Reflex adjustments (4) Insensitivity of receptors
27. Penile ejaculation is a function of :
- (1) Parasympathetic system (2) Sympathetic system
(3) Substance P (4) Serotonergic system
28. When responsiveness of a drug diminishes rapidly after administration, the response is said to be subject to :
- (1) Hyperactive (2) Variability (3) Tachyphylaxis (4) Idiosyncratic
29. Number of half life considered adequate for total elimination of drugs from the body is :
- (1) 3 (2) 5 (3) 7 (4) 9
30. Which of the drug is microsomal enzyme inhibitor ?
- (1) Phenytoin (2) Rifapin (3) Phenobarbital (4) Cimetidine
31. The risk of bleeding in patients receiving heparin is increased by aspirin because aspirin :
- (1) Inhibits heparin anticoagulant activity
(2) Displaces heparin from plasma protein-binding sites
(3) Inhibits platelet function
(4) Inhibits prothrombin formation

Roll No. :

Q. No. :

Roll No. :

Q. No. :

Roll No. :

Q. No. :

Roll No. :

Q. No. :



Cal. 1000

FOR ROUGH WORK

