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 free 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 – 2015

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. Which of the following arouse the acquired immunity?
   (1) T<sub>4</sub> Lymphocyte  (2) B Lymphocyte
   (3) Cytotoxic T Lymphocyte  (4) Eosinophils

2. A triple therapy of Zidovudin, Lamivudin & Norvir:
   (1) Can cure AIDS
   (2) Delays the onset of AIDS disease
   (3) Used in the treatment of Hepatitis C
   (4) Used in the treatment of Hepatitis B

3. Which statement is wrong for viruses?
   (1) All are parasites
   (2) All of them have helical symmetry
   (3) Antibiotics have no effect on them
   (4) They have ability to synthesize nucleic acids & proteins

4. Which stage of mitosis is arrested by Colchicine?
   (1) Anaphase  (2) Interphase  (3) Prophase  (4) Metaphase

5. Haemoglobin is:
   (1) Undigested part of blood in trophozoites of Plasmodium
   (2) Blood pigment of Anophels
   (3) Decomposed blood in merozoites
   (4) Granules in blood of infected person

6. Formation of erythrocytes in foetus takes place is:
   (1) Sarcoplasm  (2) Blood plasma
   (3) Liver & Spleen  (4) Red bone marrow

7. Which of the following does not contain taste buds?
   (1) Filiform papillae  (2) Fungiform papillae
   (3) Foliate papillae  (4) Circumvallete papillae

8. Which of the following is not true about human dentition?
   (1) Thecodont  (2) Diphysodont  (3) Heterodont  (4) Isodont
9. The function of Vagus nerve innervating the heart is to:
   (1) Initiate the heartbeat
   (2) Reduce the heartbeat
   (3) Accelerate the heartbeat
   (4) Maintain constant heartbeat

10. Which is true about ADH?
    (1) Synthesises salts
    (2) Increases water absorption
    (3) Decreases water absorption
    (4) Controls sugar level of blood

11. The "golden proportion" was one of many mathematical theorems proposed to supply clinicians with guidelines to determine:
    (1) the relative heights of the six maxillary anterior teeth as viewed directly from palatal.
    (2) the relative widths of the six maxillary anterior teeth as viewed directly from incisal.
    (3) the relative widths of the six maxillary anterior teeth as viewed directly from the anterior.
    (4) the relative widths of the six maxillary anterior teeth as viewed directly from the posterior.

12. Porcelain veneers are frequently the restoration of choice when the goal is:
    (1) to modify tooth quality, position, and/or color.
    (2) to modify tooth form, position, and/or color.
    (3) to modify tooth quantity, position, and/or color.
    (4) to modify tooth form and/or color.

13. The front runner for Shortened Dental Arch (SDA) concept is:
    (1) Schuylar
    (2) Winkler
    (3) Kayser
    (4) Boucher

14. Prevalence is defined as the proportion of:
    (1) the population with the disease or condition at a given time.
    (2) the individual with the diseases or conditions at a given time.
    (3) the rate of onset of the disease to conditions at a given time
    (4) none of the above

15. In systematic reviews, the preferred form of clinical studies to be analyzed:
    (1) are randomized controlled trials (RCT)
    (2) are critically appraised topics (CAT)
    (3) are critically appraised individual (CAI) articles
    (4) None of the above
16. Trauma from occlusion is least likely to affect which of the following?
   (1) Enamel  (2) Cementum  (3) Periodontal ligament  (4) Epithelial attachment

17. Diameter of bristles used in soft tooth brushes is:
   (1) 0.007 inch  (2) 0.012 inch  (3) 0.014 inch  (4) 0.009 inch

18. After flap surgery bone repair reaches its peak at:
   (1) 1-2 weeks  (2) 2-3 weeks  (3) 3-4 weeks  (4) 4-5 weeks

19. According to Stone and church, A toddler age ranges:
   (1) 15 month to 2 years  (2) < 15 month  (3) 2-6 years  (4) > 6 years

20. Master of skills is seen in which stage of Erikson's psychosocial theory:
   (1) Latency stage  (2) Adolescent stage  (3) Oral sensory stage  (4) Muscular anal stage

21. Child showed refusal of treatment, crying forcefully is categorized according to Frankle as:
   (1) Rating 1  (2) Rating 2  (3) Rating 3  (4) Rating 4

22. Enamel hypoplasia absent in:
   (1) Turners teeth  (2) Hutchinson triad  (3) Mottled enamel  (4) Pink tooth

23. Etiology of heck's disease (focal epithelial hypoplasia) is:
   (1) HPV-13 and HPV -32  (2) HPV-6 and HPV- 8  (3) Candida infection  (4) HPV -1 and HPV -2

24. Difference between sebaceous dysplasia and facial hemi hypertrophy is:
   (1) Expansion of jaws  (2) Effect on tooth size  (3) Disturbance in eruption pattern  (4) none

25. Geographic tongue called as:
   (1) Median rhomboid glossitis  (2) Benign Migratory glossitis  (3) Hairy tongue  (4) Fissured tongue

26. Rubinstein Tyabi syndrome associated with:
   (1) Talon cusp  (2) Dilacerations  (3) Dens in dente  (4) Dens evaginatus
27. The recommended soft tissues delivery of local anesthesia is:
   (1) 1 ml/minutes   (2) 2 ml/minutes   (3) 1.5 ml/minutes   (4) 3 ml/minutes

28. Death can be occurred in local anesthesia toxicity mainly due to:
   (1) Medullary depression   (2) Medullary stimulation
   (3) Cortical stimulation   (4) Cortical depression

29. Lingual split technique of 3rd molar impaction is not indicated for:
   (1) Mesoangular impaction   (2) Horizontal impaction
   (3) Distoangular impaction   (4) Bioconversion tooth

30. Which is a complication of inferior alveolar nerve block?
   (1) Trismus   (2) Facial palsy
   (3) Pterigomandibular space infection   (4) Residual infraorbital paresthesia

31. You suspect that your patient has an enlarged submandibular salivary gland. You expect the enlarged gland:
   (1) to be palpable intraorally
   (2) to be palpable extraorally
   (3) to be palpable both intra- and extraorally only
   (4) to be detectable by radiographical examination

32. During an inferior alveolar nerve block the needle ideally passes:
   (1) posterior and medial to medial pterygoid
   (2) anterior and lateral to medial pterygoid
   (3) through medial pterygoid
   (4) inferior to medial pterygoid

33. You notice a lesion on the labial alveolar mucosa of the lower right lateral incisor tooth of one of your patients and decide to take a biopsy to send for oral pathology report, which nerve would require local anaesthesia in order to carry out a pain-free biopsy?
   (1) The incisive nerve   (2) The mental nerve
   (3) The buccal nerve   (4) The lingual nerve

34. Photon induced Photo acoustic Streaming (PIPS) utilizes:
   (1) Er: YAG laser   (2) Nd: YAG laser
   (3) HeNe laser   (4) Ho: YAG laser
35. Supporting cusp can be identified by following characteristic features except:
   (1) They have sharp cusp ridges
   (2) They contact the opposing tooth in MI
   (3) Their outer incline has the potential for contact
   (4) They are nearer the facio-lingual center of the tooth

36. Demineralization of enamel occurs at pH ranges of:
   (1) 3.0 – 4.0     (2) 2.5 – 3.5     (3) 4.0 – 4.5     (4) 5.0 – 5.5

37. In a patient with a normal healthy mouth, you would expect the mucosa covering the alveolar process supporting the mandibular teeth to be:
   (1) light pink in colour on both sides of the mucogingival junction
   (2) light pink below the mucogingival junction and red above it
   (3) red below the mucogingival junction and light pink above it
   (4) red on both sides of the mucogingival junction

38. A tooth can be made to appear shorter by:
   (1) Positioning development depressions further apart
   (2) Positioning gingival height of contour incisally
   (3) Positioning gingival height of contour gingivally
   (4) Positioning mesial and distal line angles closer

39. In labial frenum of maxillary arch fan shaped muscular insertion is because of:
   (1) Zygomaticus major
   (2) Levator anguli oris
   (3) Orbicularis oris
   (4) Septal muscle

40. "Cement trail" is a radiographic feature observed:
   (1) When cement extrudes from a vertical root fracture
   (2) When there is furcal involvement
   (3) When cement extrudes from an accessory canal
   (4) When excess sealer is coated in the canal

RET/15/Test B/671 (6)
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.

1. Hutchinson triad

2. Methods of topical Fluoride Application

3. Odontome

4. Management of Anaphylactic reaction in dental clinics

5. Caries vaccine

6. Biological width and its importance

7. Alara principle

8. WHO's 2020 program

9. Osseointegration of dental implants

10. Role of stem cells in dentistry