

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.

Total No. of Printed Pages : 15

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. The foremost expounder of Ayurveda is :
(1) Indra (2) Brahma (3) Agnivesha (4) Dhanvantari
2. Ayurveda is the upaveda of which veda ?
(1) Rigveda (2) Samaveda (3) Atharvaveda (4) Yajurveda
3. Which is *not* a type of Sharirika Dosha ?
(1) Vata (2) Tama (3) Kapha (4) Pitta
4. The latin name of Amla is :
(1) Emblica ribes (2) Embelia officinalis
(3) Embelia ribes (4) Emblica officinalis
5. The sixth step of Ashtanga Yoga is :
(1) Pratyahara (2) Dhyana (3) Dharana (4) Samadhi
6. World Health Organization day is celebrated on :
(1) 1st March (2) 7th April (3) 1st April (4) 7th March
7. DOTs strategy is related with management of which disease ?
(1) Leprosy (2) Tuberculosis
(3) Bronchial asthma (4) Whooping Cough
8. The recommended daily intake of Vitamin A for an adult man is :
(1) 800 micrograms (2) 600 micrograms
(3) 950 micrograms (4) 900 micrograms
9. The vitamin involved in blood clotting process is :
(1) Vitamin B (2) Vitamin K (3) Vitamin E (4) Vitamin A
10. Which one is the involuntary muscle ?
(1) Biceps (2) Deltoid (3) Cardiac muscle (4) Trapezius
11. Which one of the following statement is *not* correct in reference to vital capacity ?
(1) Vital capacity is maximum in standing posture
(2) Vital capacity is least in supine position
(3) Vital capacity increases in old age
(4) Vital capacity is low in emphysema

12. तन्वङ्गा बलवन्तः स्निग्धवर्णस्वराः स्थूलदीर्घवृत्तसन्धयश्च ।
ते दीर्घायुषो बलवन्तः श्रुतवित्तविज्ञानापत्यसंमानभाजश्च भवन्ति ॥ are the features of :
- (1) Kapha Vriddhi (2) Mazza Saar Individuals
(3) Meda Saar Individuals (4) Mansa Saar Individuals
13. पिपासा बाधते चास्य मुखं च परिशुष्यति are the features of :
- (1) Vata Kshaya (2) Mazza Kshaya
(3) Mutra Kshaya (4) Pureesha Kshaya
14. Who has explained kapha as sheeta, guru, snigdha, balvana and bahu ?
- (1) Dalhana (2) Kashyapa (3) Sharangadhar (4) Chakrapani
15. Implantation of the fertilized ovum occurs on about the :
- (1) Second to fourth day after ovulation
(2) Fifth to seventh day after ovulation
(3) Tenth to thirteenth day after ovulation
(4) After fifteen days of ovulation
16. Conn's Syndrome is associated with :
- (1) Hypoaldosteronism (2) Hyperaldosteronism
(3) Hyperthyroidism (4) Hypothyroidism
17. Which one of the following hormone secretion does not increase at night ?
- (1) ACTH (2) Insulin
(3) Prolactin (4) Growth Hormone
18. Persistence of lactation and amenorrhea in women who do not nurse after delivery is known as :
- (1) Wolf Chaikoff effect (2) Chiari- Frommel Syndrome
(3) Adissonian Crisis (4) Conn's Syndrome
19. Inability to recognize face is known as :
- (1) Prosopagnosia (2) Dyslexia (3) Stuttering (4) Aphasia
20. रजोगुणमयः सूक्ष्मः शीतो रूक्षो लघुक्ष्वलः खरः, which one of the following Acharya has described these qualities of Vayu ?
- (1) Kashyapa (2) Sharangadhar (3) Bhela (4) Sushruta

21. यो गले चोषमुत्पादयति मुखं वंशध्यम् जन्याति, भक्तरूचिं चापादयति हर्षश्च स is the features of which one of the following rasa ?
 (1) Katu Rasa (2) Tikta Rasa (3) Lavana Rasa (4) Kashaya Rasa
22. Female Athlete Triad have :
 (1) Disordered eating, Amenorrhea, Premature osteoporosis
 (2) Depression, Hypertension, Amenorrhea
 (3) Indigestion, Amenorrhea, Vomitting
 (4) Hypertension, Vomitting, Anxiety
23. The individuals having unctuous urine, sweat and voice, large size body and who are intolerant to hard work are called as :
 (1) Medasaar (2) Mazzasaar (3) Shukrasaar (4) Rasasaar
24. According to Acharya Susruta, due to excess of vata and shleshma Kotha is called :
 (1) Mridu (2) Madhya (3) Sama (4) Krura
25. Vandenberg's test is done for the diagnosis of :
 (1) Anemia (2) Cerebral Palsy (3) Jaundice (4) Hemiplegia
26. Dermatitis, Diarrhoea and Dementia is present in :
 (1) Nightblindness (2) Scurvy (3) Pellagra (4) Tuberculosis
27. The dicrotic notch on the aortic pressure curve is caused by :
 (1) closure of the mitral valve (2) closure of the tricuspid valve
 (3) closure of the pulmonary valve (4) closure of the aortic valve
28. Which one of the following is *not* the Test for ovulation ?
 (1) BBT and Vaginal Cytology (2) BBT and Fern Test
 (3) Fern Test and Endometrial Biopsy (4) HSG
29. Vata Prakopa in Pravrita Ritu and Pitta Sanchaya in Varsha Ritu is described in which one of the following samhita ?
 (1) Charak Samhita (2) Sharangadhar Samhita
 (3) Kashyapa Samhita (4) Bhela Samhita
30. Disease characterized by episodic sudden loss of muscle tone and an eventual irresistible urge to sleep during day time activities is :
 (1) Somnabulism (2) Nystagmus (3) Narcolepsy (4) Epilepsy

31. Which one of the following is *not* true regarding Cross-Sectional Study ?
- (1) takes place at a single point in time.
 - (2) involves a series of measurements taking over a period of time
 - (3) takes a 'slice' of its target group
 - (4) data of cross sectional study can be used to assess the prevalence of acute or chronic conditions in a population.
32. Which one of the following is *not* correct for Phase-I clinical trial ?
- (1) assesses the safety of a drug or device
 - (2) number of volunteers are 20 to 100
 - (3) also investigates the side effects that occur as dosage levels are increased
 - (4) involves several hundred to several thousand patients
33. According to Sushruta Pavanottam is :
- (1) Prana Vata (2) Samana Vata (3) Udana Vata (4) Vyan Vata
34. Dhamni Shaithallya is characteristic feature of :
- (1) Mans Dhatu Kshaya (2) Medo Dhatu Kshaya
 - (3) Rakta Kshaya (4) Pitta Kshaya
35. Normal Value of HDL in male is :
- (1) 30-60 mg/dl (2) 40-80 mg/dl (3) 20-30 mg/dl (4) 80-100 mg/dl
36. ELISA stands for :
- (1) Ethyl Linked Immuno Substitute Assay
 - (2) Ethyl Linked Immuno Sorbent Assay
 - (3) Enzyme Linked Immuno Solution Assay
 - (4) Enzyme Linked Immuno Sorbent Assay
37. Anjali Pramana of Mutra as per Charaka is :
- (1) 1 (2) 8 (3) 4 (4) 3
38. Which one of the following statement regarding Fast muscle fibers have is not correct ?
- (1) Extensive sarcoplasmic reticulum for rapid release of calcium ions to initiate contraction
 - (2) Large amounts of glycolytic enzymes for rapid release of energy by the glycolytic process
 - (3) Less extensive blood supply
 - (4) More extensive blood vessel system and capillaries

39. The velocity of conduction of the excitatory action potential signal along both atrial and ventricular muscle fibers is about :
- (1) 0.3 to 0.5 m/sec (2) 0.3 to 0.5 cm/sec
(3) 3-5 m/sec (4) 3-5 cm/sec
40. Which one of the following statement is *not* correct in relation to atrial pressure waves ?
- (1) *a wave* is caused by atrial contraction
(2) *c wave* occurs when the ventricles begin to contract
(3) *v wave* occurs toward the end of ventricular contraction
(4) *a wave* is caused by atrial relaxation

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. Transliterate the following verse as per the International Alphabet of Sanskrit Transliteration (I.A.S.T.) rule :

नाभिस्थः प्राणपवनः स्पृष्ट्वा हृत्कमलान्तरम् ।
कण्ठाद्बहिर्विनिर्याति पातुं विष्णुप्रदामृतम् ।
पीत्वाचांबरपीयूषं पुनरायाति वेगतः ।
प्रीणयन् देहमखिलं जीवं च जठरानलम् ।

2. Go through the following summary of a study proposal received for approval by the institutional ethical committee :

This is a study that aims at evaluating the effect of an Ayurveda formulation on moderate to severe hypertension. There will be two groups : Control and Experimental. The control group will be kept on a placebo and the experimental group will be kept on the trial drug for six months. 20 cases of freshly diagnosed 'moderate to severe hypertension' aged between 50 to 60 years of age of both the gender will be included in each group. Both essential and secondary cases of hypertension will be included in the study. After six months of time, the mean difference between the blood pressure readings taken 'before treatment' and 'after treatment' will be calculated for each group. One-way ANOVA will be applied to compare the mean readings in both the groups.

Now, give your comments on :

- a. Ethical issues
b. Statistical tests
c. Inclusion and exclusion criteria
d. Sample size

3. According to Vāgbhata, the enlargement of spleen is a feature of *Meda Kṣaya* as well as *Rakta Vrddhi*. Write your interpretation regarding this explanation. Support your arguments with clinically observed physiological/pathological conditions in both the cases.
4. Charaka explains physiological/anatomical/psychological features of an individual belonging to a specific Prakṛti on the basis of the attributes (Guna) of that Doṣa. Do you find this kind of explanation reasonable? If yes, why? Give your own understanding regarding the reasons for other subsequent authors (Suśruta, Vāgbhaṭa etc.) having ignored this aspect.
5. Describe the physiology of blood circulation as per Ayurveda classical textbooks. Is this explanation relevant in today's context? If yes, how?
6. Describe the physiology of respiration as per Ayurveda classical textbooks. Is this explanation relevant in today's context? If yes, how?
7. Complete the following verses :
 - a. स्वेददोषांबुवाहीनि स्रोतांसि
 - b. स्थानं प्राणस्य मूर्धोरः
 - c. हृदो रसो निःसरति
 - d. व्यानेन रसधातुर्हि
 - e. स (रसः) शब्दार्चिर्जल
8. Define the following unethical publication practices :
 - a. Duplicate publication
 - b. Plagiarism
 - c. Fabrication of data
 - d. Salami Slicing
9. Define the following in the context of research :
 - a. Survey
 - b. Double blind study
 - c. Longitudinal study
 - d. Case-control study
10. Translate the following verse into English/Hindi :

पित्तं पञ्चात्मकं तत्र पक्वामाशयमध्यगम् ।
 पञ्चभूतात्मकत्वेऽपि यत्तैजसगुणोदयात् ।
 त्यक्तद्रवत्वं पाकादिकर्मणाऽनलसंज्ञितम् ।
 पचत्यन्नं विभजते सारकिट्टौ पृथक्त्था ।
 तत्रस्थमेवपित्तानां शेषाणामप्यनुग्रहम् ।
 करोति बलदानेन पाचकं नाम तत्स्मृतम् ।

Roll No. :

Q. No. :

Roll No. :

Q. No. :

Roll No. :

Q. No. :

Roll No. :

Q. No. :

Roll No. :

Q. No. :

FOR ROUGH WORK

