



RAN-2006000101020002

First Year M.B.B.S. Examination January - 2023

Physiology : Paper - II

Time: 3 Hours]

[Total Marks: 100

સૂચના : / Instructions

- (1) નીચે દર્શાવેલ નિશાનીવાળી વિગતો ઉત્તરવહી પર અવશ્ય લખવી.
Fill up strictly the details of signs on your answer book
- Name of the Examination:
First Year M.B.B.S.
- Name of the Subject :
Physiology : Paper - II
- Subject Code No.: 2006000101020002

Seat No.:

Student's Signature

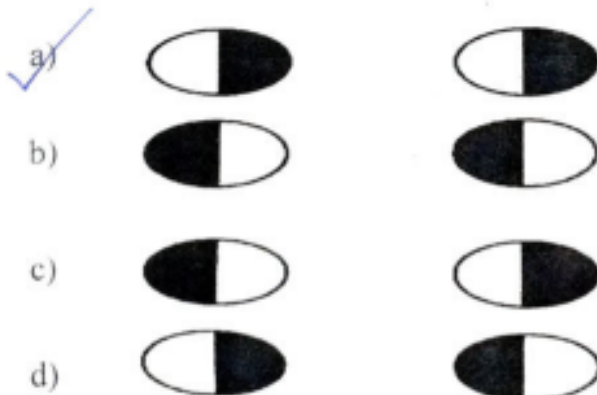
- (2) Section A (MCQ) is given in separate sheet.
(3) Draw diagrams and flow chart wherever required.

Section A (MCQs)

20 Marks

Select the most appropriate choice in each of the following MCQ

1. The absence of sense of taste is known as
a) Anosmia ☒ Ageusia
b) Hypogeusia ☐ Dysgeusia
2. Right homonymous hemianopia means



- www.FirstRanker.com

13. Paracrines are chemical messengers
- ☒ a) Secreted by cells into the extracellular fluid and affect neighbouring target cells of different type
 - b) Secreted by cells into the extracellular fluid and affect the functions of the same cell that produced them
 - c) Secreted by cells but remain inside the cell
 - d) None of the above
14. The most active form of Vitamin D is
- a) Vitamin D3
 - b) 7-Dehydrochole calciferol
 - ☒ c) Calcitriol
 - d) 25-OH vitamin D
15. Lactational amenorrhoea is due to the effect of
- a) Dopamine
 - b) Cortisol
 - ☒ c) Prolactin
 - d) Inhibin
16. IUCD (Intrauterine contraceptive device)
- a) Inhibits ovulation
 - ☒ b) Makes the intrauterine environment hostile to nidation of fertilized ovum
 - c) Prevents menstruation
 - d) Prevents fertilization of ovum
17. The deficiency of hormone which causes Osteoporosis of bone in old age
- a) Progesterone
 - b) Follicle stimulating hormone
 - c) Leutinizing hormone
 - ☒ d) Oestrogen
18. The most commonly used synthetic Oestrogen are
- ☒ a) Ethinyl estradiol
 - b) Norgestrel
 - c) Ethynodiol
 - d) Norethindrone
19. Olympic level endurance fitness is associated with an exceptionally high
- a) Haemoglobin level
 - b) Oxygen saturation of blood
 - c) Vital capacity
 - ☒ d) Resting stroke volume
20. A rise in the osmolality of extracellular fluid may lead to all except
- ☒ a) Suppression of sweat secretion
 - b) Thirst
 - c) Release of Vasopressin
 - d) Fall in intracellular fluid volume

Q.1

SECTION - B

(40 Marks)

An 8 year old child was brought to the OPD by the parents. On enquiry from the parent, the child had outplayed milestones, standing, speech, eruption of teeth etc. On examination, the child appeared dwarf and showed pot belly, umbilical hernia, stunted growth, low IQ and reduced reflex activity.

(10 marks)

- Identify the condition. (1 mark)
- What is the cause of the disorder? (1 mark)
- What tests can be performed to confirm diagnosis? (2 marks)
- Describe the various types of Dwarfism with their causes and features. (6 marks)

Q.2

Answer in Short (Any 5 out of 6)

(5×3=15 marks)

- Responsibilities of a doctor
- Functions of Sertoli cells
- Effects of increase in Serum Calcium levels
- Secretion, Regulation and Function of Melatonin (1+1+1 mark)
- Neuroglia
- Effects of removal of ovaries

Q.3

Short notes (Any 3 out of 4)

(3×5=15 marks)

- Functions and Regulation of Aldosterone (3+2 marks)
- Mechanisms of Heat loss from body to maintain Body Temperature
- Maternal changes during Pregnancy
- Puberty

SECTION - C

(40 Marks)

Q.4

Describe connections and Functions of Hypothalamus.

(3+7) (10 marks)

Q.5

Answer in Short (Any 5 out of 6)

(5×3=15 marks)

- Visual Agnosia
- Sound frequency is determined by place principle. Explain.
- Reduced Eye
- Factors affecting excitability of nerve fibre
- Upper Motor Neurons and Lower Motor Neurons ✓
- Sensory and Association areas of Temporal Lobe.

Q.6

Short notes (Any 3 out of 4)

(3×5=15 marks)

- Sympathetic Nervous system
- Parts and Functions of Middle Ear (2+3marks)
- Properties of Receptors
- Neurons in Retina (including their connections and Functions)