



Date of issue :

Centre :

Sup. Sign. :

Seat No. :

ND-2006000101020002-O Seat No. _____

First Year M. B. B. S. Examination

January - 2022

Physiology : Paper - 2

Time : Hours]

[Total Marks : 20

Instruction :

નીચે દર્શાવેલ નિશાનીવાળી વિગતો ઉત્તરપત્રી પર અવશ્ય લખવી.
Fillup 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 - 2

Section No. (1, 2,.....): Nil

Subject Code No. :

2 0 0 6 0 0 0 1 0 1 0 2 0 0 0 2

Seat No. :

Student's Signature

Section A MCQs

20 marks

- Which taste sensation is the most sensitive (has the lowest stimulation threshold)?
a. Acid b. Bitter c. Salty d. Sour
- Which of the following best describes the "blind spot" of the eye?
a. Located 5 degrees lateral to the central point of vision
b. The exit point of the optic nerve
c. Contains only rods and thus has monochromatic vision
d. Contains no blood vessels
- After olfactory receptor cells bind odor molecules, a sequence of intracellular events occurs that culminates in the entrance of specific ions that depolarize the olfactory receptor cell. Which ions are involved?
a. Calcium b. Chloride c. Hydrogen d. Sodium
- Which of the following middle ear ossicle is attached to the tympanic membrane?
a. Columella b. Incus c. Malleus d. Modiolus

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[Contd...

14. What accompanies sloughing of the endometrium during the endometrial cycle in a normal woman?
- An increase in progesterone
 - The LH "surge"
 - A decrease in both progesterone and estrogen
 - An increase in estradiol
15. Which of the following increases secretion of GH?
- Senescence
 - Insulin-like growth factor-1
 - Somatostatin
 - Hypoglycemia
16. Which hormone is largely unbound / least bound to plasma proteins?
- Cortisol
 - T4
 - ADH
 - Estradiol
17. A 24-year-old student goes hiking in the Thar Desert during summer break. The environmental temperature is 105°F and the relative humidity is 20 percent. Which option best describes the major mechanism of heat loss in this student?
- Conduction to air
 - Conduction to objects
 - Convection
 - Evaporation
18. Most of the energy for strenuous exercise that lasts for more than 5 to 10 seconds but less than 1 to 2 minutes comes from what source?
- ATP
 - Anaerobic glycolysis
 - Oxidation of carbohydrates
 - Oxidation of lactic acid
19. Parasympathetic neurons
- Originate in the brain stem and then run via the vagus to the paravertebral ganglia
 - Release noradrenaline at their terminals which in turn activates adrenergic receptors
 - Cause vasodilatation in the blood vessels of the external genitalia
 - Coordinate the so-called 'flight or fight' response
20. The neurotransmitter released by axon terminals of preganglionic sympathetic fibre is
- Acetylcholine
 - Noradrenaline
 - Epinephrine
 - Dopamine
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