AGA KHAN UNIVERSITY EXAMINATION BOARD SECONDARY SCHOOL CERTIFICATE

CLASS X

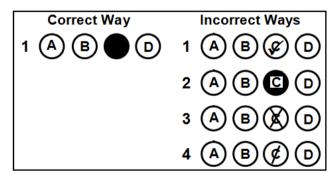
ALTERNATE TO PRACTICAL (ATP)

MODEL EXAMINATION PAPER 2021

Biology Paper III

Time: 20 minutes Marks: 10

- Answer the questions on the separate question paper.
 There are 100 answer
 In each 2. Answer the questions on the separate answer sheet provided. DO NOT write your answers on the
- 3. There are 100 answer numbers on the answer sheet. Use answer numbers 1 to 10 only.
- 4. In each question, there are four choices A, B, C, D. Choose ONE. On the answer grid, black out the circle for your choice with a pencil as shown below.



Candidate's Signature

- 5. If you want to change your answer, ERASE the first answer completely with a rubber, before blacking out a new circle.
- 6. DO NOT write anything in the answer grid. The computer only records what is in the circles.
- 7. You may use a simple calculator if you wish.

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1. If a student observes a dividing animal cell under an electron microscope, which of the following observations would indicate that the observed cell is undergoing prophase II of meiosis?



2. If a student observes a cell under an electron microscope and observes the following, which stage of mitosis is the observed cell undergoing?



- A. Prophase
- B. Anaphase
- C. Metaphase
- D. Telophase
- 3. The given image represents model of the human ear.

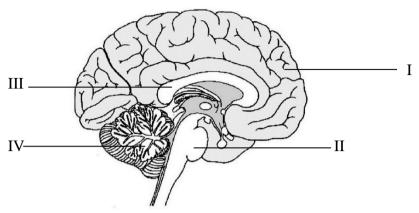


Which of the labelled parts connects the middle ear with the nasal cavity?

- A. I
- B. II
- C. III
- D. IV

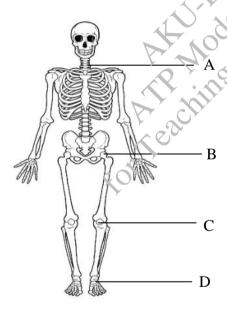
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4. The given diagram represents model of the longitudinal section of the human brain.



The part of brain which controls the body movement and posture is labelled as

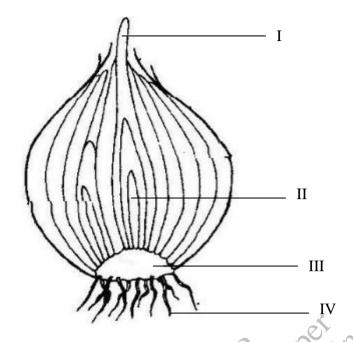
- A. I.
- B. II.
- C. III.
- D. IV
- 5. In the given model of the human skeleton, a joint which can move 360° is labelled as



- 6. Hilum is a scar on the seed coat which indicates the point where the
 - A. new shoot emerges out.
 - B. pollen tube enters the ovule.
 - C. seed is attached to the ovary wall.
 - D. two cotyledons are attached together.

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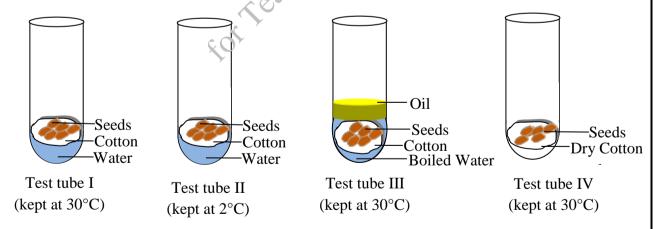
7. The given diagram represents transverse section of an onion bulb.



In the given diagram, stem is labelled as

- A. I.
- B. II.
- C. III.
- D. IV.

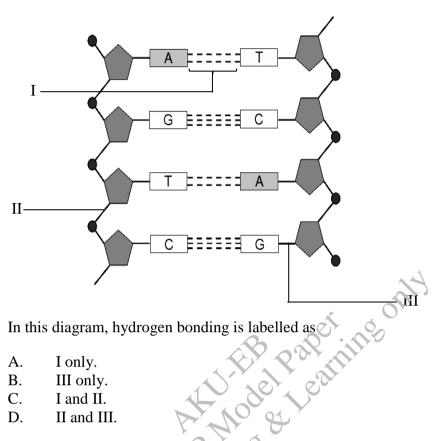
8. The given diagram represents different experimental set-ups for seed germination.



The experimental set-up which contains all necessary conditions for the seed germination is test tube

- A. I.
- B. II.
- C. III.
- D. IV.

9. The given diagram represents the structure of a DNA molecule.



- Given is the data of height (cm) of a sample of the human population. 10.

148.6 149.5 151.9 140 144 152 153.7 155 155.5 157.9

160.1 158.1 158.5 159.9 160 164 164.1 165.5 166.9 168.8

The class boundary which has the highest frequency is

- A. 140.5 -147.5
- B. 148.5-155.5
- C. 156.5 - 163.5
- D. 164.5 -171.5

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