BIO110 (MDC) (Pre-Revised)

Student's Copy

2024

(NEP-2020)

(1st Semester Repeater)

BOTANY/ZOOLOGY/BIOTECHNOLOGY

(Multi-disciplinary Course)

(Fundamentals of Biology)

Full Marks: 75

Time : 3 hours

The figures in the margin indicate full marks for the questions

(SECTION : A-OBJECTIVE)

(Marks: 10)

Tick (✓) the correct answer in the brackets provided :

1. The 'father of experimental physiology' is

- (a) William Harvey ()
- (b) Galen ()
- (c) Robert Hooke ()
- (d) Aristotle ()

2. Pasteurization was developed by

- (a) Girolamo Fracastoro ()
- (b) Robert Koch ()
- (c) Louis Pasteur ()
- (d) Robert Hooke ()

 $1 \times 10 = 10$

Contd. The famous statement, "Cells arise from pre-existing cells" was made by and Theodor Schwann Salvarsan is a drug used for the treatment of father of genetics' is attributed to Robert Koch isolated and identified 3 cell theory was proposed by Mycobacterium tuberculosis Antonie van Leeuwenhoek Antonie van Leeuwenhoek term 'cell' was coined by Matthias Schleiden Watson and Crick Bacillus anthraxis Theodor Schwann Charles Darwin Charles Darwin Rudolf Virchow Gregor Mendel Max Delbruck Robert Hooke Vibrio cholera None of them Louis Pasteur Linus Pauling Robert Hooke Robert Koch dysentery syphilis E. coli typhoid cholera The The The ø (q) g (q) Q 3 (q ΰ a) Q (q) (a) (q)3 (q) ø q (q) a) (q) 3 <u>(</u>) (q)0 e, 4 ທ່ ٠ ف 5 œ.

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- 9. Penicillin was discovered by
- (a) Alexander Fleming
 - (b) Robert Hooke
- (c) Howard Florey (
 - (d) Robert Alexander
- 10. Streptomycin was first isolated by
- (a) Waksman ()
- (b) Albert Schatz (
- (c) Gerhard Domagk (
- (d) Alexander Fleming

(SECTION : B-SHORT ANSWERS)

(Marks: 25)

 $W\pi ite$ on five of the following, taking at least one from each Unit :

5×5=25

UNIT-I

- 1. Contribution of Robert Koch
- 2. Works of Girolamo Fracastoro
- 3. Physiological system by Galen

UNIT-II

- 4. Rudolf Virchow
- 5. Monohybrid cross
- 6. Contribution of Robert Hooke

UNIT--III

- 7. Works of Alexander Fleming
- 8. Discovery of prontosil
- 9. Contribution of Watson and Crick

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(SECTION : C-DESCRIPTIVE)

(Marks : 40)

Answer four of the following questions, taking at least one from each Unit :

10×4=40

UNIT-I

1. Write the contribution of Aristotle in Biology.

10

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(SECTION : A-OBJECTIVE)

(Marks : 10)

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Tick (\checkmark) the correct answer in the brackets provided :

- ۲ The 'father of experimental physiology' is
- <u>a</u> William Harvey
- 9 Galen
- 0 Robert Hooke
- (d) Aristotle
- p Pasteurization was developed by
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- Ð Robert Koch
- 0 Louis Pasteur
- a Robert Hooke

- 7 Ś <u>ە</u> 4 ω 0 G The famous statement, 0 ð The Ø. þ Ø. þ The a) 5 G The þ a) 0 g a) a) <u>(</u>) ē a) Robert Koch isolated and identified Antonie van Leeuwenhoek Theodor Schwann Robert Hooke Linus Pauling Rudolf Virchow Charles Darwin Robert Koch Max Delbruck term 'cell' was coined by Gregor Mendel Watson and Crick None of them Antonie van Leeuwenhoek E. coli Louis Pasteur Charles Darwin father of genetics' Matthias Schleiden cell theory was proposed by Robert Hooke Bacillus anthraxis Mycobacterium tuberculosis Vibrio cholera is attributed to and Theodor Schwann
 - "Cells arise from pre-existing cells" was made by

- œ Salvarsan is a drug used for the treatment of
- P typhoid
- 9 dysentery
- 0 syphilis
- a cholera

Contd

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Contribution of Watson and Crick

Discovery of prontosil

7. Works of Alexander Fleming

UNIT-III

4 Rudolf Virchow

à Monohybrid cross

6. Contribution of Robert Hooke

UNIT-늡

UNIT-I

Write on five of the following, taking at least one from each Unit :

(SECTION : B-SHORT ANSWERS (Marks : 25)

1. Contribution of Robert Koch

Ņ Works of Girolamo Fracastoro

3. Physiological system by Galen

 $5 \times 5 = 25$

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a 6

Waksman Albert Schatz

<u></u> (d

Gerhard Domagk Alexander Fleming

Streptomycin was first isolated by

(d) Robert Alexander

<u>a</u>

Alexander Fleming

6 <u></u>

Robert Hooke

Howard Florey

Penicillin was discovered by

(SECTION : C-DESCRIPTIVE)

(Marks : 40)

Answer four of the following questions, taking at least one from each Unit :

10×4=

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***	9. Write on the Dolly sheep cloning project.	 (a) Salvarsan (b) Streptomycin 	7. Describe the discovery of DNA.	Unit—III	 (a) Antonie van Leeuwenhoek (b) Matthias Schleiden 	5. Write on Mendel's experiments and laws.	4. Write on the origin of cell theory.	UNITII	(a) William Harvey (b) Louis Pasteur	3. Write notes on the following :	2. Write on germ theory of disease.	1. Write the contribution of Aristotle in Biology.
	10		10 5×2=10			5×2=10	10		-	5×2=10	10	10

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G25-150