

# National Testing Agency

<b>Question Paper Name :</b>	Life Science Eng 27th June 2023 Shift 2
<b>Subject Name :</b>	Life Science Eng
<b>Creation Date :</b>	2023-06-27 16:51:19
<b>Duration :</b>	120
<b>Total Marks :</b>	400
<b>Display Marks:</b>	Yes

## Life Science

<b>Group Number :</b>	1
<b>Group Id :</b>	920906282
<b>Group Maximum Duration :</b>	0
<b>Group Minimum Duration :</b>	120
<b>Show Attended Group? :</b>	No
<b>Edit Attended Group? :</b>	No
<b>Break time :</b>	0
<b>Group Marks :</b>	400
<b>Is this Group for Examiner? :</b>	No
<b>Examiner permission :</b>	Cant View
<b>Show Progress Bar? :</b>	No

## Part A

<b>Section Id :</b>	920906563
<b>Section Number :</b>	1
<b>Section type :</b>	Online
<b>Mandatory or Optional :</b>	Mandatory
<b>Number of Questions :</b>	21
<b>Number of Questions to be attempted :</b>	21
<b>Section Marks :</b>	100
<b>Enable Mark as Answered Mark for Review and Clear Response :</b>	Yes
<b>Maximum Instruction Time :</b>	0
<b>Sub-Section Number :</b>	1
<b>Sub-Section Id :</b>	920906910
<b>Question Shuffling Allowed :</b>	No
<b>Is Section Default? :</b>	null

**Question Id : 92090628442 Question Type : COMPREHENSION Sub Question Shuffling Allowed : Yes Group Comprehension Questions : No Question Pattern Type : NonMatrix Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Question Numbers : (1 to 5)**

Question Label : Comprehension

As he hailed India's bilateral ties with Australia as having entered the T20 mode, PM Modi in a meeting with his counterpart, Anthony Albanese, on Wednesday again raised the issue of attacks on Hindu temples and activities of Khalistan separatists in Australia. Any attempt to harm India – Australia ties was unacceptable, Modi said. Albanese assured him of strong action against the perpetrators.

Modi rounded off his three-nation tour with a bilateral meeting with Albanese, and a business round table that saw the two sides signing a migration agreement for two-way mobility of students and business professionals, and another deal to set up a task force for green hydrogen cooperation. The leaders also discussed many regional and global issues, including the threat posed by China's assertiveness in the Indo-Pacific, Russia-Ukraine war, Quad cooperation and ways to address problems faced by the Global South.

Thanking Albanese for the steps taken to prevent attacks on Hindu temples, Modi said the former assured him once again that he would continue to take strict action against the perpetrators.

### Sub questions

**Question Number : 1 Question Id : 92090628443 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Find out one word for the following phrase from the following options.

'Commit a harmful, illegal or immoral action'

- |                |                |
|----------------|----------------|
| (1) Perpetual  | (2) Persiflage |
| (3) Perpetrate | (4) Pernicious |

### Options :

- 920906112401. 1
- 920906112402. 2
- 920906112403. 3
- 920906112404. 4

**Question Number : 2 Question Id : 92090628444 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Given below are two statements :

Statement I : Albanese assured him of no strong action against the perpetrators.

Statement II : PM Modi in a meeting with his counterpart Anthony Albanese on Wednesday again raised the issue of attacks on Hindu temples and activities of Khalistan separatist in Australia.

In the light of the above statements, choose the correct answer from the options given below :

- (1) Both Statement I and Statement II are true
- (2) Both Statement I and Statement II are false
- (3) Statement I is true but Statement II is false
- (4) Statement I is false but Statement II is true

**Options :**

- 920906112405. 1
- 920906112406. 2
- 920906112407. 3
- 920906112408. 4

**Question Number : 3 Question Id : 92090628445 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Fill in the blanks with appropriate words from the options given below:

Modi rounded\_\_\_\_\_ his three nation tour \_\_\_a bilateral meeting with Albanese, and a business round table that saw the two sides signing a migration agreement \_\_\_\_\_ two way mobility of students and business professionals.

- |                    |                    |
|--------------------|--------------------|
| (1) off, with, for | (2) off, for, from |
| (3) off, with, in  | (4) off, on, in    |

**Options :**

- 920906112409. 1
- 920906112410. 2
- 920906112411. 3
- 920906112412. 4

**Question Number : 4 Question Id : 92090628446 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Antonym of the term 'assertive' is:

- |              |               |
|--------------|---------------|
| (1) Assist   | (2) Assess    |
| (3) Retiring | (4) Associate |

**Options :**

- 920906112413. 1
- 920906112414. 2
- 920906112415. 3
- 920906112416. 4

**Question Number : 5 Question Id : 92090628447 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

What issue was raised by PM Modi with his counterpart, Anthony Albanese according to this paragraph?

- (1) Global Warming
- (2) Attacks on Hindu temples in Australia
- (3) Indio – Pak war
- (4) Natural Disaster

**Options :**

- 920906112417. 1
- 920906112418. 2
- 920906112419. 3
- 920906112420. 4

**Question Id : 92090628442 Question Type : COMPREHENSION Sub Question Shuffling Allowed : Yes Group Comprehension Questions : No Question Pattern Type : NonMatrix Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Question Numbers : (1 to 5)**

Question Label : Comprehension

As he hailed India's bilateral ties with Australia as having entered the T20 mode, PM Modi in a meeting with his counterpart, Anthony Albanese, on Wednesday again raised the issue of attacks on Hindu temples and activities of Khalistan separatists in Australia. Any attempt to harm India – Australia ties was unacceptable, Modi said. Albanese assured him of strong action against the perpetrators.

Modi rounded off his three-nation tour with a bilateral meeting with Albanese, and a business round table that saw the two sides signing a migration agreement for two-way mobility of students and business professionals, and another deal to set up a task force for green hydrogen cooperation. The leaders also discussed many regional and global issues, including the threat posed by China's assertiveness in the Indo-Pacific, Russia-Ukraine war, Quad cooperation and ways to address problems faced by the Global South.

Thanking Albanese for the steps taken to prevent attacks on Hindu temples, Modi said the former assured him once again that he would continue to take strict action against the perpetrators.

### Sub questions

**Question Number : 1 Question Id : 92090628443 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Find out one word for the following phrase from the following options.

'Commit a harmful, illegal or immoral action'

- |                |                |
|----------------|----------------|
| (1) Perpetual  | (2) Persiflage |
| (3) Perpetrate | (4) Pernicious |

### Options :

- 920906112401. 1
- 920906112402. 2
- 920906112403. 3
- 920906112404. 4

**Question Number : 2 Question Id : 92090628444 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Given below are two statements :

Statement I : Albanese assured him of no strong action against the perpetrators.

Statement II : PM Modi in a meeting with his counterpart Anthony Albanese on Wednesday again raised the issue of attacks on Hindu temples and activities of Khalistan separatist in Australia.

In the light of the above statements, choose the correct answer from the options given below :

- (1) Both Statement I and Statement II are true
- (2) Both Statement I and Statement II are false
- (3) Statement I is true but Statement II is false
- (4) Statement I is false but Statement II is true

**Options :**

- 920906112405. 1
- 920906112406. 2
- 920906112407. 3
- 920906112408. 4

**Question Number : 3 Question Id : 92090628445 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Fill in the blanks with appropriate words from the options given below:

Modi rounded\_\_\_\_\_ his three nation tour \_\_\_\_a bilateral meeting with Albanese, and a business round table that saw the two sides signing a migration agreement \_\_\_\_\_ two way mobility of students and business professionals.

- |                    |                    |
|--------------------|--------------------|
| (1) off, with, for | (2) off, for, from |
| (3) off, with, in  | (4) off, on, in    |

**Options :**

- 920906112409. 1
- 920906112410. 2
- 920906112411. 3
- 920906112412. 4

**Question Number : 4 Question Id : 92090628446 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Antonym of the term 'assertive' is:

- (1) Assist (2) Assess  
(3) Retiring (4) Associate

**Options :**

920906112413. 1  
920906112414. 2  
920906112415. 3  
920906112416. 4

**Question Number : 5 Question Id : 92090628447 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

What issue was raised by PM Modi with his counterpart, Anthony Albanese according to this paragraph?

- (1) Global Warming  
(2) Attacks on Hindu temples in Australia  
(3) Indio – Pak war  
(4) Natural Disaster

**Options :**

920906112417. 1  
920906112418. 2  
920906112419. 3  
920906112420. 4

**Sub-Section Number :** 2  
**Sub-Section Id :** 920906911  
**Question Shuffling Allowed :** Yes  
**Is Section Default? :** null

**Question Number : 6 Question Id : 92090628448 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Fill in the blanks with appropriate adjective clause

“The exam \_\_\_\_\_ I didn’t study for, was absolutely tough”.

- (1) who (2) that  
(3) while (4) since

**Options :**

- 920906112421. 1
- 920906112422. 2
- 920906112423. 3
- 920906112424. 4

**Question Number : 6 Question Id : 92090628448 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Fill in the blanks with appropriate adjective clause

“The exam \_\_\_\_\_ I didn’t study for, was absolutely tough”.

- |           |           |
|-----------|-----------|
| (1) who   | (2) that  |
| (3) while | (4) since |

**Options :**

- 920906112421. 1
- 920906112422. 2
- 920906112423. 3
- 920906112424. 4

**Question Number : 7 Question Id : 92090628449 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Choose one word for the following part.

“An elaborate and spectacular entertainment”.

- |                 |                    |
|-----------------|--------------------|
| (1) Extravagant | (2) Extracorporeal |
| (3) Exotoxin    | (4) Extravaganza   |

**Options :**

- 920906112425. 1
- 920906112426. 2
- 920906112427. 3
- 920906112428. 4

**Question Number : 7 Question Id : 92090628449 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**



Choose one word for the following part.

“An elaborate and spectacular entertainment”.

- (1) Extravagant (2) Extracorporeal  
(3) Exotoxin (4) Extravaganza

**Options :**

920906112425. 1  
920906112426. 2  
920906112427. 3  
920906112428. 4

**Question Number : 8 Question Id : 92090628450 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Fill in the blanks with appropriate prepositions.

Electronics also take circuitous routes \_\_\_\_\_ the Russian market. One report estimated that such “parallel imports” \_\_\_\_\_laptops, tablets and smartphones totaled \$1.5 billion last year. At the same time, chinese cars and electronics have flooded \_\_\_\_\_the Russian market.

- (1) from, of, in (2) to, in, of  
(3) to, of, into (4) from, of, in

**Options :**

920906112429. 1  
920906112430. 2  
920906112431. 3  
920906112432. 4

**Question Number : 8 Question Id : 92090628450 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Fill in the blanks with appropriate prepositions.

Electronics also take circuitous routes \_\_\_\_\_ the Russian market. One report estimated that such “parallel imports” \_\_\_\_\_ laptops, tablets and smartphones totaled \$1.5 billion last year. At the same time, chinese cars and electronics have flooded \_\_\_\_\_ the Russian market.

- (1) from, of, in (2) to, in, of  
(3) to, of, into (4) from, of, in

**Options :**

920906112429. 1  
920906112430. 2  
920906112431. 3  
920906112432. 4

**Question Number : 9 Question Id : 92090628451 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

**MATCH LIST I WITH LIST II :**

List I (Word)	List II (Synonym)
(A) Deadly	(I) Death
(B) Decipher	(II) Calumny
(C) Defamation	(III) Interpret
(D) Demise	(IV) Lethal

Choose the correct answer from the options given below:

- (1) (A)-(I), (B)-(II), (C)-(III), (D)-(IV)  
(2) (A)-(II), (B)-(I), (C)-(IV), (D)-(III)  
(3) (A)-(III), (B)-(IV), (C)-(I), (D)-(II)  
(4) (A)-(IV), (B)-(III), (C)-(II), (D)-(I)

**Options :**

920906112433. 1  
920906112434. 2  
920906112435. 3  
920906112436. 4

**Question Number : 9 Question Id : 92090628451 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Match List I with List II :

List I (Word)	List II (Synonym)
(A) Deadly	(I) Death
(B) Decipher	(II) Calumny
(C) Defamation	(III) Interpret
(D) Demise	(IV) Lethal

Choose the correct answer from the options given below:

- (1) (A)-(I), (B)-(II), (C)-(III), (D)-(IV)
- (2) (A)-(II), (B)-(I), (C)-(IV), (D)-(III)
- (3) (A)-(III), (B)-(IV), (C)-(I), (D)-(II)
- (4) (A)-(IV), (B)-(III), (C)-(II), (D)-(I)

**Options :**

- 920906112433. 1
- 920906112434. 2
- 920906112435. 3
- 920906112436. 4

**Question Number : 10 Question Id : 92090628452 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Match List I with List II :

List I (Word)	List II (Antonym)
(A) Triumph	(I) Humble
(B) Timid	(II) Failure
(C) Deficit	(III) Bold
(D) Arrogant	(IV) Surplus

Choose the correct answer from the options given below:

- (1) (A)-(II), (B)-(I), (C)-(IV), (D)-(III)
- (2) (A)-(IV), (B)-(II), (C)-(I), (D)-(III)
- (3) (A)-(II), (B)-(III), (C)-(IV), (D)-(I)
- (4) (A)-(I), (B)-(II), (C)-(III), (D)-(IV)

**Options :**

- 920906112437. 1
- 920906112438. 2
- 920906112439. 3
- 920906112440. 4

**Question Number : 10 Question Id : 92090628452 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Match List I with List II :

List I (Word)	List II (Antonym)
(A) Triumph	(I) Humble
(B) Timid	(II) Failure
(C) Deficit	(III) Bold
(D) Arrogant	(IV) Surplus

Choose the correct answer from the options given below:

- (1) (A)-(II), (B)-(I), (C)-(IV), (D)-(III)
- (2) (A)-(IV), (B)-(II), (C)-(I), (D)-(III)
- (3) (A)-(II), (B)-(III), (C)-(IV), (D)-(I)
- (4) (A)-(I), (B)-(II), (C)-(III), (D)-(IV)

**Options :**

- 920906112437. 1
- 920906112438. 2
- 920906112439. 3
- 920906112440. 4

**Question Number : 11 Question Id : 92090628453 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

If  $\frac{x-1}{x} = 5$ , then the value of  $1 + \frac{1}{x^2}$  is:

- |          |        |
|----------|--------|
| (1) 19   | (2) 17 |
| (3) 14.5 | (4) 15 |

**Options :**

- 920906112441. 1
- 920906112442. 2
- 920906112443. 3
- 920906112444. 4

Question Number : 11 Question Id : 92090628453 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

If  $\frac{x-1}{x} = 5$ , then the value of  $1 + \frac{1}{x^2}$  is:

- (1) 19 (2) 17  
(3) 14.5 (4) 15

Options :

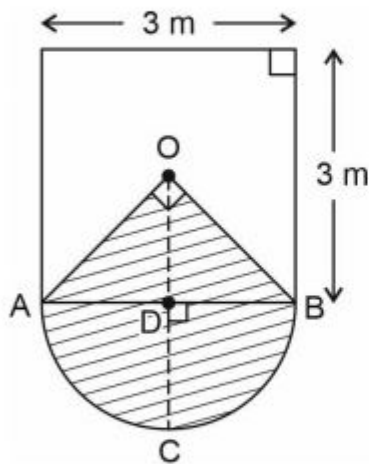
920906112441. 1  
920906112442. 2  
920906112443. 3  
920906112444. 4

Question Number : 12 Question Id : 92090628454 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

If  $AD = CD = BD$ , then the area of the shaded region OACBO is:

( Given,  $\pi = \frac{22}{7}$  )



- (1)  $\frac{161}{28} \text{ m}^2$  (2)  $\frac{81}{14} \text{ m}^2$   
(3)  $\frac{79}{14} \text{ m}^2$  (4)  $6.5 \text{ m}^2$

Options :

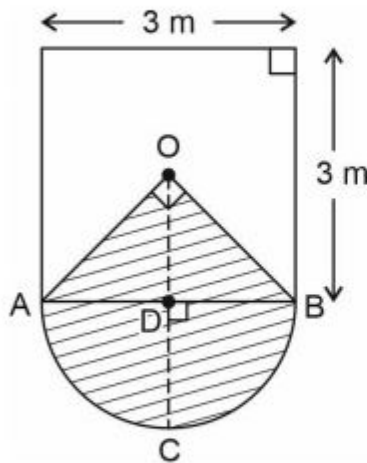
920906112445. 1  
920906112446. 2  
920906112447. 3  
920906112448. 4

**Question Number : 12 Question Id : 92090628454 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

If  $AD = CD = BD$ , then the area of the shaded region OACBO is:

$\left( \text{Given, } \pi = \frac{22}{7} \right)$



(1)  $\frac{161}{28} \text{ m}^2$

(2)  $\frac{81}{14} \text{ m}^2$

(3)  $\frac{79}{14} \text{ m}^2$

(4)  $6.5 \text{ m}^2$

**Options :**

920906112445. 1  
920906112446. 2  
920906112447. 3  
920906112448. 4

**Question Number : 13 Question Id : 92090628455 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Two pipes can fill a tank separately in 20 minutes and 60 minutes respectively. What portion of the tank can be filled by both pipes in 12 minutes?

- (1) 60% (2) 75%  
(3) 80% (4) 85%

**Options :**

920906112449. 1  
920906112450. 2  
920906112451. 3  
920906112452. 4

**Question Number : 13 Question Id : 92090628455 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Two pipes can fill a tank separately in 20 minutes and 60 minutes respectively. What portion of the tank can be filled by both pipes in 12 minutes?

- (1) 60% (2) 75%  
(3) 80% (4) 85%

**Options :**

920906112449. 1  
920906112450. 2  
920906112451. 3  
920906112452. 4

**Question Number : 14 Question Id : 92090628456 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Two trains A and B travelling on the same track at 108 km/h and 72 km/h will cross a pole in 60s and 120s respectively. The ratio of their length is:

- (1) 1 : 2 (2) 2 : 3  
(3) 3 : 2 (4) 3 : 4

**Options :**

920906112453. 1  
920906112454. 2  
920906112455. 3  
920906112456. 4

**Question Number : 14 Question Id : 92090628456 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Two trains A and B travelling on the same track at 108 km/h and 72 km/h will cross a pole in 60s and 120s respectively. The ratio of their length is:

- (1) 1 : 2 (2) 2 : 3  
(3) 3 : 2 (4) 3 : 4

**Options :**

920906112453. 1  
920906112454. 2  
920906112455. 3  
920906112456. 4

**Question Number : 15 Question Id : 92090628457 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

A pizza can be equally distributed among 8 kids and they can eat their individual shares in 45 min. How many pizzas can be eaten by 12 kids in 2 hr. 30 minutes:

- (1) 8 (2) 7  
(3) 6 (4) 5

**Options :**

920906112457. 1  
920906112458. 2  
920906112459. 3  
920906112460. 4

**Question Number : 15 Question Id : 92090628457 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

A pizza can be equally distributed among 8 kids and they can eat their individual shares in 45 min. How many pizzas can be eaten by 12 kids in 2 hr. 30 minutes:

- (1) 8 (2) 7  
(3) 6 (4) 5

**Options :**



920906112457. 1  
920906112458. 2  
920906112459. 3  
920906112460. 4

**Question Number : 16 Question Id : 92090628458 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Find the odd one among the following:

(1)  $\frac{15}{\sqrt{4+25}}$

(2)  $\frac{20}{\sqrt{36+64}}$

(3)  $\frac{100}{\sqrt{49+169}}$

(4)  $\frac{25}{\sqrt{9+49}}$

**Options :**

920906112461. 1  
920906112462. 2  
920906112463. 3  
920906112464. 4

**Question Number : 16 Question Id : 92090628458 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Find the odd one among the following:

(1)  $\frac{15}{\sqrt{4+25}}$

(2)  $\frac{20}{\sqrt{36+64}}$

(3)  $\frac{100}{\sqrt{49+169}}$

(4)  $\frac{25}{\sqrt{9+49}}$

**Options :**

920906112461. 1  
920906112462. 2  
920906112463. 3  
920906112464. 4

**Question Number : 17 Question Id : 92090628459 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

There is a certain relationship between two groups of letters. One set of letters is given on left hand side of the symbol :: . Choose the correct alternative which will establish the similar relation with the group of letters given on other side of the symbol :: -

SUWY : LPTX :: PRTV : \_\_\_\_\_

- |          |          |
|----------|----------|
| (1) IMQU | (2) INRU |
| (3) INQU | (4) IMRU |

**Options :**

- 920906112465. 1
- 920906112466. 2
- 920906112467. 3
- 920906112468. 4

**Question Number : 17 Question Id : 92090628459 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

There is a certain relationship between two groups of letters. One set of letters is given on left hand side of the symbol :: . Choose the correct alternative which will establish the similar relation with the group of letters given on other side of the symbol :: -

SUWY : LPTX :: PRTV : \_\_\_\_\_

- |          |          |
|----------|----------|
| (1) IMQU | (2) INRU |
| (3) INQU | (4) IMRU |

**Options :**

- 920906112465. 1
- 920906112466. 2
- 920906112467. 3
- 920906112468. 4

**Question Number : 18 Question Id : 92090628460 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Find the next number in the given series :

17, 19, 23, 29, 31, 37, \_\_\_\_\_

- |        |        |
|--------|--------|
| (1) 40 | (2) 42 |
| (3) 41 | (4) 43 |

**Options :**

- 920906112469. 1
- 920906112470. 2
- 920906112471. 3
- 920906112472. 4

**Question Number : 18 Question Id : 92090628460 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Find the next number in the given series :

17, 19, 23, 29, 31, 37, \_\_\_\_\_

- |        |        |
|--------|--------|
| (1) 40 | (2) 42 |
| (3) 41 | (4) 43 |

**Options :**

- 920906112469. 1
- 920906112470. 2
- 920906112471. 3
- 920906112472. 4

**Question Number : 19 Question Id : 92090628461 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

In a certain code language, if the word "PARTNER" is coded as OZQSMDQ, then what is the code for the word "SEGMENT" in that language?

- |             |             |
|-------------|-------------|
| (1) TFHNFOU | (2) RDFLDMS |
| (3) RDELDMS | (4) RDFEDNS |

**Options :**

- 920906112473. 1
- 920906112474. 2
- 920906112475. 3
- 920906112476. 4

**Question Number : 19 Question Id : 92090628461 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

In a certain code language, if the word "PARTNER" is coded as OZQSMDQ, then what is the code for the word "SEGMENT" in that language?

- (1) TFHNFOU (2) RDFLDMS  
(3) RDELDMS (4) RDFEDNS

**Options :**

920906112473. 1  
920906112474. 2  
920906112475. 3  
920906112476. 4

**Question Number : 20 Question Id : 92090628462 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Find the time between 4 and 5 O' clock at which the minute hand and the hour hand are perpendicular to each other.

- (1)  $27 \frac{3}{11}$  minutes past 4 (2)  $36 \frac{3}{11}$  minutes past 4  
(3)  $38 \frac{2}{11}$  minutes past 4 (4)  $27 \frac{3}{11}$  minutes past 5

**Options :**

920906112477. 1  
920906112478. 2  
920906112479. 3  
920906112480. 4

**Question Number : 20 Question Id : 92090628462 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Find the time between 4 and 5 O' clock at which the minute hand and the hour hand are perpendicular to each other.

- (1)  $27 \frac{3}{11}$  minutes past 4 (2)  $36 \frac{3}{11}$  minutes past 4  
(3)  $38 \frac{2}{11}$  minutes past 4 (4)  $27 \frac{3}{11}$  minutes past 5

**Options :**

920906112477. 1

920906112478. 2

920906112479. 3

920906112480. 4

**Question Number : 21 Question Id : 92090628463 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

The headquarter of the Board of Control for Cricket in India (BCCI) is located in \_\_\_\_\_.

(1) Mumbai

(2) Bengaluru

(3) Kolkata

(4) Delhi

**Options :**

920906112481. 1

920906112482. 2

920906112483. 3

920906112484. 4

**Question Number : 21 Question Id : 92090628463 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

The headquarter of the Board of Control for Cricket in India (BCCI) is located in \_\_\_\_\_.

(1) Mumbai

(2) Bengaluru

(3) Kolkata

(4) Delhi

**Options :**

920906112481. 1

920906112482. 2

920906112483. 3

920906112484. 4

**Question Number : 22 Question Id : 92090628464 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Match List I with List II :

List I (Major News Paper of the World)	List II (Country)
(A) The Age	(I) India
(B) The Gazette	(II) Australia
(C) The Press	(III) New Zealand
(D) The Tribune	(IV) Canada

Choose the correct answer from the options given below:

- (1) (A)-(I), (B)-(IV), (C)-(III), (D)-(II)
- (2) (A)-(IV), (B)-(II), (C)-(III), (D)-(I)
- (3) (A)-(II), (B)-(IV), (C)-(III), (D)-(I)
- (4) (A)-(II), (B)-(IV), (C)-(I), (D)-(III)

**Options :**

920906112485. 1  
920906112486. 2  
920906112487. 3  
920906112488. 4

**Question Number : 22 Question Id : 92090628464 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Match List I with List II :

List I (Major News Paper of the World)	List II (Country)
(A) The Age	(I) India
(B) The Gazette	(II) Australia
(C) The Press	(III) New Zealand
(D) The Tribune	(IV) Canada

Choose the correct answer from the options given below:

- (1) (A)-(I), (B)-(IV), (C)-(III), (D)-(II)
- (2) (A)-(IV), (B)-(II), (C)-(III), (D)-(I)
- (3) (A)-(II), (B)-(IV), (C)-(III), (D)-(I)
- (4) (A)-(II), (B)-(IV), (C)-(I), (D)-(III)

**Options :**

920906112485. 1  
920906112486. 2  
920906112487. 3  
920906112488. 4

**Question Number : 23 Question Id : 92090628465 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Given below are two statements :

Statement I : 'Vienna' is the capital of 'Australia'

Statement II : 'Euro' is the currency of 'Australia'

In the light of the above statements, choose the correct answer from the options given below :

- (1) Both Statement I and Statement II are correct
- (2) Both Statement I and Statement II are incorrect
- (3) Statement I is correct but Statement II is incorrect
- (4) Statement I is incorrect but Statement II is correct

**Options :**

920906112489. 1  
920906112490. 2  
920906112491. 3  
920906112492. 4

**Question Number : 23 Question Id : 92090628465 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Given below are two statements :

Statement I : 'Vienna' is the capital of 'Australia'

Statement II : 'Euro' is the currency of 'Australia'

In the light of the above statements, choose the correct answer from the options given below :

- (1) Both Statement I and Statement II are correct
- (2) Both Statement I and Statement II are incorrect
- (3) Statement I is correct but Statement II is incorrect
- (4) Statement I is incorrect but Statement II is correct

**Options :**

- 920906112489. 1
- 920906112490. 2
- 920906112491. 3
- 920906112492. 4

**Question Number : 24 Question Id : 92090628466 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

An electric fan and a heater are marked 100 W, 220V and 1000W, 220V respectively.  
The resistance of the heater is\_\_\_\_\_

- |                                 |                                  |
|---------------------------------|----------------------------------|
| (1) Zero                        | (2) Greater than that of the fan |
| (3) Lesser than that of the fan | (4) Equal to that of the fan     |

**Options :**

- 920906112493. 1
- 920906112494. 2
- 920906112495. 3
- 920906112496. 4

**Question Number : 24 Question Id : 92090628466 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**



An electric fan and a heater are marked 100 W, 220V and 1000W, 220V respectively.  
The resistance of the heater is \_\_\_\_\_

- (1) Zero (2) Greater than that of the fan  
(3) Lesser than that of the fan (4) Equal to that of the fan

**Options :**

920906112493. 1  
920906112494. 2  
920906112495. 3  
920906112496. 4

**Question Number : 25 Question Id : 92090628467 Question Type : MCQ Option Shuffling : No Is  
Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum  
Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Match List I with List II :

List I (Author)	List II (Book)
(A) Amartya Sen	(I) I Dare, As I See
(B) Kiran Bedi	(II) Death of a City
(C) Malala Yousafzai	(III) Development as Freedom
(D) Amrita Pritam	(IV) We are displaced

Choose the correct answer from the options given below:

- (1) (A)-(I), (B)-(III), (C)-(II), (D)-(IV)  
(2) (A)-(III), (B)-(I), (C)-(IV), (D)-(II)  
(3) (A)-(III), (B)-(I), (C)-(II), (D)-(IV)  
(4) (A)-(I), (B)-(III), (C)-(IV), (D)-(II)

**Options :**

920906112497. 1  
920906112498. 2  
920906112499. 3  
920906112500. 4

**Question Number : 25 Question Id : 92090628467 Question Type : MCQ Option Shuffling : No Is  
Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum  
Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Match List I with List II :

List I (Author)	List II (Book)
(A) Amartya Sen	(I) I Dare, As I See
(B) Kiran Bedi	(II) Death of a City
(C) Malala Yousafzai	(III) Development as Freedom
(D) Amrita Pritam	(IV) We are displaced

Choose the correct answer from the options given below:

- (1) (A)-(I), (B)-(III), (C)-(II), (D)-(IV)
- (2) (A)-(III), (B)-(I), (C)-(IV), (D)-(II)
- (3) (A)-(III), (B)-(I), (C)-(II), (D)-(IV)
- (4) (A)-(I), (B)-(III), (C)-(IV), (D)-(II)

**Options :**

920906112497. 1  
920906112498. 2  
920906112499. 3  
920906112500. 4

## Part B: Life Science

<b>Section Id :</b>	920906564
<b>Section Number :</b>	2
<b>Section type :</b>	Online
<b>Mandatory or Optional :</b>	Mandatory
<b>Number of Questions :</b>	75
<b>Number of Questions to be attempted :</b>	75
<b>Section Marks :</b>	300
<b>Enable Mark as Answered Mark for Review and Clear Response :</b>	Yes
<b>Maximum Instruction Time :</b>	0
<b>Sub-Section Number :</b>	1
<b>Sub-Section Id :</b>	920906912
<b>Question Shuffling Allowed :</b>	Yes
<b>Is Section Default? :</b>	null

**Question Number : 26 Question Id : 92090628468 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 4 Wrong Marks : 1**

Molecular absorption spectroscopy based on electromagnetic radiation in the wavelength region of –

- (1) 190 – 800 nm (2) 190 – 800 nm  
(3) 1000 – 1500 nm (4) 1000 – 2000 nm

**Options :**

920906112501. 1  
920906112502. 2  
920906112503. 3  
920906112504. 4

**Question Number : 26 Question Id : 92090628468 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

आण्विक अवशोषण स्पेक्ट्रमी इलेक्ट्रोचुम्बकीय विकिरण पर आधारित होता है तथा उसका तरंगदैर्घ्य निम्न क्षेत्र में होता है –

- (1) 190 – 800 nm (2) 190 – 800 nm  
(3) 1000 – 1500 nm (4) 1000 – 2000 nm

**Options :**

920906112501. 1  
920906112502. 2  
920906112503. 3  
920906112504. 4

**Question Number : 27 Question Id : 92090628469 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

The dye used for visualization of DNA or RNA in agarose gel is –

- (1) Ethidium borate (2) Ethidium oxide  
(3) Ethidium bromide (4) Ethidium chloride

**Options :**

920906112505. 1  
920906112506. 2  
920906112507. 3  
920906112508. 4

**Question Number : 27 Question Id : 92090628469 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

अगरोज जेल में DNA या RNA को देखने हेतु प्रयुक्त रंजक है –

- |                      |                      |
|----------------------|----------------------|
| (1) इथिडीयम बोरेट    | (2) इथिडियम ऑक्साइड  |
| (3) इथिडियम ब्रोमाइड | (4) इथिडियम क्लोराइड |

**Options :**

- 920906112505. 1
- 920906112506. 2
- 920906112507. 3
- 920906112508. 4

**Question Number : 28 Question Id : 92090628470 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

The annealing temperature during the PCR reaction should be –

- |               |               |
|---------------|---------------|
| (1) 45 – 98°C | (2) 45 – 65°C |
| (3) 45 – 90°C | (4) 30 – 90°C |

**Options :**

- 920906112509. 1
- 920906112510. 2
- 920906112511. 3
- 920906112512. 4

**Question Number : 28 Question Id : 92090628470 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

PCR क्रिया में तापानुशीतन ताप निम्न होना चाहिये –

- |               |               |
|---------------|---------------|
| (1) 45 – 98°C | (2) 45 – 65°C |
| (3) 45 – 90°C | (4) 30 – 90°C |

**Options :**

- 920906112509. 1
- 920906112510. 2
- 920906112511. 3

920906112512. 4

**Question Number : 29 Question Id : 92090628471 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Size exclusion chromatography is used to separate the proteins on the basis of

- |                             |                 |
|-----------------------------|-----------------|
| (1) size                    | (2) temperature |
| (3) net binding specificity | (4) net charge  |

**Options :**

- 920906112513. 1
- 920906112514. 2
- 920906112515. 3
- 920906112516. 4

**Question Number : 29 Question Id : 92090628471 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

आमाप अपवर्जन वर्णलेखन में प्रोटीन को निम्न के आधार पर अलग किया जाता है

- |                        |              |
|------------------------|--------------|
| (1) आमाप               | (2) तापमान   |
| (3) सकल बंधन विशिष्टता | (4) सकल आवेश |

**Options :**

- 920906112513. 1
- 920906112514. 2
- 920906112515. 3
- 920906112516. 4

**Question Number : 30 Question Id : 92090628472 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

In complement systems which is not the example of anaphylatoxins –

- |                     |                     |
|---------------------|---------------------|
| (1) C <sub>49</sub> | (2) C <sub>39</sub> |
| (3) C <sub>7</sub>  | (4) C <sub>59</sub> |

**Options :**

- 920906112517. 1

920906112518. 2

920906112519. 3

920906112520. 4

**Question Number : 30 Question Id : 92090628472 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

वह पूरक तन्त्र जो एनाफायलोटाक्सिन का उदाहरण नहीं है?

(1) C<sub>49</sub>

(2) C<sub>39</sub>

(3) C<sub>7</sub>

(4) C<sub>59</sub>

**Options :**

920906112517. 1

920906112518. 2

920906112519. 3

920906112520. 4

**Question Number : 31 Question Id : 92090628473 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

What are anti-isotype antibodies?

(1) directed against antigenic determinants of particular antigen combining site of a particular antibody

(2) directed against antigenic determinants that are allele specific

(3) directed against determinant present on variable region of light chain class of antibody

(4) directed against determinants present on constant region of a particular heavy or light chain class of antibody, but not on any of the others

**Options :**

920906112521. 1

920906112522. 2

920906112523. 3

920906112524. 4

**Question Number : 31 Question Id : 92090628473 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

प्रति समरूप प्रतिरक्षी क्या होता है?

- (1) किसी प्रतिरक्षी के विशिष्ट प्रतिजन बन्धन सतह पर स्थित प्रतिजन डिटरमिनेंट के प्रति निर्देशित
- (2) एलील विशिष्ट प्रतिजन डिटरमिनेंट के प्रति निर्देशित
- (3) प्रतिरक्षी के हल्की शृंखला वर्ग के परिवर्त क्षेत्र पर उपस्थित डिटरमिनेंट के प्रति निर्देशित
- (4) प्रतिरक्षी की विशिष्ट भारी या हल्की शृंखला वर्ग के स्थिर क्षेत्र पर स्थित डिटरमिनेंट के प्रति निर्देशित किसी अन्य के प्रति नहीं

**Options :**

920906112521. 1
920906112522. 2
920906112523. 3
920906112524. 4

**Question Number : 32 Question Id : 92090628474 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Which molecule does not take part in inflammatory response?

- |                 |                   |
|-----------------|-------------------|
| (1) Dopamine    | (2) Prostaglandin |
| (3) Thromboxane | (4) Leukotrienes  |

**Options :**

920906112525. 1
920906112526. 2
920906112527. 3
920906112528. 4

**Question Number : 32 Question Id : 92090628474 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

कौन सा अणु शोथज अनुक्रिया में सम्मिलित नहीं होता है?

- |                   |                      |
|-------------------|----------------------|
| (1) डोपामाइन      | (2) प्रोस्टाग्लैंडिन |
| (3) थ्रोम्बोक्सेन | (4) ल्यूकोट्राइन     |

**Options :**

920906112525. 1
920906112526. 2

920906112527. 3

920906112528. 4

**Question Number : 33 Question Id : 92090628475 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Varicella Zoster vaccine is administered for

- |                       |                     |
|-----------------------|---------------------|
| (1) Hepatitis B virus | (2) Small pox virus |
| (3) Chicken pox virus | (4) Polio virus     |

**Options :**

920906112529. 1

920906112530. 2

920906112531. 3

920906112532. 4

**Question Number : 33 Question Id : 92090628475 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

वेरिसेला जोस्टर का टीका निम्न हेतु दिया जाता है -

- |                         |                        |
|-------------------------|------------------------|
| (1) हिपेटाइटिस B विषाणु | (2) स्माल पॉक्स विषाणु |
| (3) चिकन पॉक्स विषाणु   | (4) पोलियो विषाणु      |

**Options :**

920906112529. 1

920906112530. 2

920906112531. 3

920906112532. 4

**Question Number : 34 Question Id : 92090628476 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Which microbe is not capable of degrading petroleum hydrocarbons:

- |                 |                   |
|-----------------|-------------------|
| (1) Candida     | (2) Achromobacter |
| (3) Pseudomonas | (4) Aspergillus   |



**Options :**

- 920906112533. 1
- 920906112534. 2
- 920906112535. 3
- 920906112536. 4

**Question Number : 34 Question Id : 92090628476 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

कौन का सूक्ष्मजीव पेट्रोलियम हाइड्रोकार्बन के अपघटन में सक्षम नहीं है?

- |                 |                   |
|-----------------|-------------------|
| (1) केन्डिडा    | (2) एक्रोमोबेक्टर |
| (3) स्यूडोमोनास | (4) एस्परजिलस     |

**Options :**

- 920906112533. 1
- 920906112534. 2
- 920906112535. 3
- 920906112536. 4

**Question Number : 35 Question Id : 92090628477 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Prokaryotic mRNAs contain a conserved polypurine tract, consensus AGGAGG, located about seven nucleotides upstream from the AUG initiation codon. This conserved hexamer is called

- |                         |                              |
|-------------------------|------------------------------|
| (1) Kozak's sequences   | (2) Shine-Dalgarno sequences |
| (3) Consensus sequences | (4) TATA box sequences       |

**Options :**

- 920906112537. 1
- 920906112538. 2
- 920906112539. 3
- 920906112540. 4

**Question Number : 35 Question Id : 92090628477 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

प्रोकेरियोटिक mRNAs संरक्षित पोलिप्यूरीन ट्रेक्ट सर्वसम्मत AGGAGG होता है, जो AUG आरम्भ कोडोन (कुटक) से ऊपर की ओर लगभग 7 न्यूक्लियोटाइड दूर होता है। यह संरक्षित हैक्सामर कहलाता है।

- |                       |                           |
|-----------------------|---------------------------|
| (1) कोजाक अनुक्रम     | (2) शाइन्-डेलगानो अनुक्रम |
| (3) सर्वसम्मत अनुक्रम | (4) TATA बॉक्स अनुक्रम    |

**Options :**

- 920906112537. 1
- 920906112538. 2
- 920906112539. 3
- 920906112540. 4

**Question Number : 36 Question Id : 92090628478 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Which type of enzyme is known to remove methyl or ethyl groups from Guanine bases that have been mutagenized by Alkylating agents?

- |                      |                        |
|----------------------|------------------------|
| (1) Photolyase       | (2) DNA N-glycosylases |
| (3) Alkyltransferase | (4) AP endonuclease    |

**Options :**

- 920906112541. 1
- 920906112542. 2
- 920906112543. 3
- 920906112544. 4

**Question Number : 36 Question Id : 92090628478 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

गुआनीन बेस से मेथिल या एथिल समूह को हटाने का कार्य कौन से प्रकार का एन्जाइम करता है जिसको एल्कायलीकरण एजेंट द्वारा उत्परिवर्तित किया जाता है?

- |                        |                        |
|------------------------|------------------------|
| (1) फोटोलाएस           | (2) DNA N-ग्लूकोसाइलेस |
| (3) एल्कायल ट्रांसफरेस | (4) AP एंडोन्यूक्लिएस  |

**Options :**

- 920906112541. 1
- 920906112542. 2
- 920906112543. 3

920906112544. 4

**Question Number : 37 Question Id : 92090628479 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Name the technique Mathew Meselson and Franklin Stahl used to evidence that DNA replication is 'semi conservative'

- (1) Cesium Chloride (CsCl) density gradient centrifugation
- (2) 2D Gel Electrophoresis
- (3) Mass spectrometry
- (4) DNA sequencing

**Options :**

- 920906112545. 1
- 920906112546. 2
- 920906112547. 3
- 920906112548. 4

**Question Number : 37 Question Id : 92090628479 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

मैथ्यू मेसलसन तथा फ्रैंकलिन स्टाहल द्वारा प्रयुक्त उस तकनीक का नाम बताइए जिसके द्वारा DNA प्रतिकृति के अर्ध संरक्षी होने का प्रमाण मिला

- (1) सिजियम क्लोराइड (CsCl) घनत्व ग्रेडिएंट अपकेन्द्रण
- (2) 2D जेल विद्युत कण संचलन
- (3) द्रव्यमान स्पेक्ट्रममिति
- (4) डीएनए अनुक्रमण

**Options :**

- 920906112545. 1
- 920906112546. 2
- 920906112547. 3
- 920906112548. 4

**Question Number : 38 Question Id : 92090628480 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Two highly inbred strains of mice, one with black fur and the other with gray fur were crossed, and all of the  $F_1$  offsprings had black fur. Predict the phenotypic outcome of intercrossing the  $F_1$  offsprings.

- (1) All have black fur (2) All have Gray fur  
(3) 2 black fur : 2 Gray fur (4) 3 black fur : 1 Gray fur

**Options :**

920906112549. 1  
920906112550. 2  
920906112551. 3  
920906112552. 4

**Question Number : 38 Question Id : 92090628480 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

चूहे की दो उच्च अंतः प्रजात स्ट्रैन् जिसमें एक काले फर का तथा दूसरा ग्रे फर का था, का संकरण कराने पर  $F_1$  संतति में सभी चूहे काले फर के थे।  $F_1$  संतति के चूहों का आपस में संकरण कराने पर संतति के लक्षणप्ररूप का आकलन करें :

- (1) सभी में काली फर होगी (2) सभी में ग्रे फर होगी  
(3) 2 काली के और 2 ग्रे फर के होंगे (4) 3 काली फर के और 1 ग्रे फर का होगा

**Options :**

920906112549. 1  
920906112550. 2  
920906112551. 3  
920906112552. 4

**Question Number : 39 Question Id : 92090628481 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

How many number of autosomal linkage groups have human somatic cells?

- (1) 23 (2) 22  
(3) 24 (4) 1

**Options :**

920906112553. 1  
920906112554. 2  
920906112555. 3

920906112556. 4

**Question Number : 39 Question Id : 92090628481 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

मानव कायिक कोशिकाओं में ऑटोसोमल लिंकेज समूहों की संख्या क्या है?

- |        |        |
|--------|--------|
| (1) 23 | (2) 22 |
| (3) 24 | (4) 1  |

**Options :**

- 920906112553. 1
- 920906112554. 2
- 920906112555. 3
- 920906112556. 4

**Question Number : 40 Question Id : 92090628482 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

In DNA microarray techniques consist of

- |                            |                            |
|----------------------------|----------------------------|
| (1) large number of ds DNA | (2) large number of ss DNA |
| (3) small number of ss DNA | (4) large number of ds DNA |

**Options :**

- 920906112557. 1
- 920906112558. 2
- 920906112559. 3
- 920906112560. 4

**Question Number : 40 Question Id : 92090628482 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

DNA माइक्रोऐरे तकनीकों में \_\_\_\_\_ होती है -

- |                           |                           |
|---------------------------|---------------------------|
| (1) ds DNA की अधिक संख्या | (2) ss DNA की अधिक संख्या |
| (3) ss DNA की कम संख्या   | (4) ds DNA की अधिक संख्या |

**Options :**

- 920906112557. 1

920906112558. 2

920906112559. 3

920906112560. 4

**Question Number : 41 Question Id : 92090628483 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Small circular DNAs such as plasmids and small viral DNAs when have no breaks in either strand are referred as

- |                |                        |
|----------------|------------------------|
| (1) Nucleosome | (2) Close circular DNA |
| (3) Nicked DNA | (4) Chromatid          |

**Options :**

920906112561. 1

920906112562. 2

920906112563. 3

920906112564. 4

**Question Number : 41 Question Id : 92090628483 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

छोटे वृत्तीय DNA जैसे प्लास्मिड तथा छोटे विषाणवीय DNA जिसमें किसी भी स्टैंड में कोई भंजन नहीं होता है, वह कहलाता है

- |                   |                       |
|-------------------|-----------------------|
| (1) न्यूक्लियोसोम | (2) संवृत वृत्तीय DNA |
| (3) निक्ड DNA     | (4) क्रोमेटिड         |

**Options :**

920906112561. 1

920906112562. 2

920906112563. 3

920906112564. 4

**Question Number : 42 Question Id : 92090628484 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Telomeres end with multiple repeated sequences of the pattern

- |     |                                |     |                                |
|-----|--------------------------------|-----|--------------------------------|
| (1) | (5') (Tn Gy)n<br>(3') (Ax Cy)n | (2) | (5') (Ux Gy)n<br>(3') (An Cy)n |
| (3) | (5') (In Gy)n<br>(3') (An Cy)n | (4) | (5') (In Gy)n<br>(3') (Ux Cy)n |

**Options :**

920906112565. 1  
920906112566. 2  
920906112567. 3  
920906112568. 4

**Question Number : 42 Question Id : 92090628484 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

बहुत से पुनरावृत्त अनुक्रम पैटर्न वाले अंतखण्ड सिरे है

- |     |                                |     |                                |
|-----|--------------------------------|-----|--------------------------------|
| (1) | (5') (Tn Gy)n<br>(3') (Ax Cy)n | (2) | (5') (Ux Gy)n<br>(3') (An Cy)n |
| (3) | (5') (In Gy)n<br>(3') (An Cy)n | (4) | (5') (In Gy)n<br>(3') (Ux Cy)n |

**Options :**

920906112565. 1  
920906112566. 2  
920906112567. 3  
920906112568. 4

**Question Number : 43 Question Id : 92090628485 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

DNA binding proteins associated with bacterial chromosomes are :-

- |     |           |     |           |
|-----|-----------|-----|-----------|
| (1) | HD and H5 | (2) | HU and H1 |
| (3) | HU and H6 | (4) | HZ and H1 |

**Options :**

920906112569. 1

920906112570. 2

920906112571. 3

920906112572. 4

**Question Number : 43 Question Id : 92090628485 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

जीवाणु गुणसूत्र से संबद्ध DNA बंधनकारी प्रोटीन हैं :

(1) HD तथा H5

(2) HU तथा H1

(3) HU तथा H6

(4) HZ तथा H1

**Options :**

920906112569. 1

920906112570. 2

920906112571. 3

920906112572. 4

**Question Number : 44 Question Id : 92090628486 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Eukaryotes have two major chromatin proteins in SMC family. They are

(1) Integrin and laminin

(2) Cohesins and condensin

(3) Hemoglobin and myoglobin

(4) Actin and myosin

**Options :**

920906112573. 1

920906112574. 2

920906112575. 3

920906112576. 4

**Question Number : 44 Question Id : 92090628486 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**



SMC फेमिली में यूकैरियोट्स में 2 मुख्य क्रोमेटिन प्रोटीन होते हैं। ये हैं :

- |                                 |                            |
|---------------------------------|----------------------------|
| (1) इन्टिग्रिन तथा लेमिनिन      | (2) कोहेसिन तथा कन्डेन्सिन |
| (3) हिमोग्लोबिन तथा मायोग्लोबिन | (4) एक्टिन तथा मायोसिन     |

**Options :**

920906112573. 1  
920906112574. 2  
920906112575. 3  
920906112576. 4

**Question Number : 45 Question Id : 92090628487 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

In general, a carbohydrate molecule with  $n$  chiral centre can have

- |                             |                         |
|-----------------------------|-------------------------|
| (1) $2n+2$ stereoisomers    | (2) $n-2$ stereoisomers |
| (3) $2^{n-2}$ stereoisomers | (4) $2^n$ stereoisomers |

**Options :**

920906112577. 1  
920906112578. 2  
920906112579. 3  
920906112580. 4

**Question Number : 45 Question Id : 92090628487 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

सामान्यत  $n$ -कीरल केन्द्र वाले कार्बोहाइड्रेट अणु में हो सकते हैं

- |                               |                           |
|-------------------------------|---------------------------|
| (1) $2n+2$ त्रिविम समावयवी    | (2) $n-2$ त्रिविम समावयवी |
| (3) $2^{n-2}$ त्रिविम समावयवी | (4) $2^n$ त्रिविम समावयवी |

**Options :**

920906112577. 1  
920906112578. 2  
920906112579. 3  
920906112580. 4

**Question Number : 46 Question Id : 92090628488 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

The most stable structure for a random-sequence DNA molecule under physiological conditions is

- |                   |                   |
|-------------------|-------------------|
| (1) C form of DNA | (2) A form of DNA |
| (3) Z form of DNA | (4) B form of DNA |

**Options :**

- 920906112581. 1
- 920906112582. 2
- 920906112583. 3
- 920906112584. 4

**Question Number : 46 Question Id : 92090628488 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

शरीरक्रिया अवस्था में यादृच्छिक अनुक्रम के DNA की सबसे स्थायी संरचना है

- |                     |                     |
|---------------------|---------------------|
| (1) C-प्रकार का DNA | (2) A-प्रकार का DNA |
| (3) Z-प्रकार का DNA | (4) B-प्रकार का DNA |

**Options :**

- 920906112581. 1
- 920906112582. 2
- 920906112583. 3
- 920906112584. 4

**Question Number : 47 Question Id : 92090628489 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Porins are proteins found in gram-negative bacteria such as *E. coli* and allow \_\_\_\_\_ to cross the outer membrane

- |                         |                         |
|-------------------------|-------------------------|
| (1) Amphipathic solutes | (2) Hydrophobic solutes |
| (3) Nonpolar solutes    | (4) Polar solutes       |

**Options :**

- 920906112585. 1
- 920906112586. 2

920906112587. 3

920906112588. 4

**Question Number : 47 Question Id : 92090628489 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

ग्रेम अग्राही जीवाणु जैसे *E. coli* में पाये जाने वाले पोरिन प्रोटीन, \_\_\_\_\_ अणुओं को बाहरी झिल्ली पार करने देते हैं।

- |                                  |                   |
|----------------------------------|-------------------|
| (1) उभयसंवेदी (एम्फीपैथिक) विलेय | (2) जलभीरु विलेय  |
| (3) अध्रुवीय विलेय               | (4) ध्रुवीय विलेय |

**Options :**

920906112585. 1

920906112586. 2

920906112587. 3

920906112588. 4

**Question Number : 48 Question Id : 92090628490 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

In the enzyme ATP synthase  $F_0$  domain is sensitive to

- |                 |                     |
|-----------------|---------------------|
| (1) Oligophycin | (2) Oligosaccharide |
| (3) Oligomycin  | (4) Oligonucleotide |

**Options :**

920906112589. 1

920906112590. 2

920906112591. 3

920906112592. 4

**Question Number : 48 Question Id : 92090628490 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

एन्जाइम ATP सिंथेटेस में  $F_0$  डोमेन निम्न के प्रति संवेदी होता है।

- |                 |                         |
|-----------------|-------------------------|
| (1) ओलिगोफायसिन | (2) ओलिगोसैकेराइड       |
| (3) ओलिगोमायसिन | (4) ओलिगोन्यूक्लियोटाइड |

**Options :**

- 920906112589. 1
- 920906112590. 2
- 920906112591. 3
- 920906112592. 4

**Question Number : 49 Question Id : 92090628491 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Which is not the type of positively charged amino acid?

- (1) Arginine
- (2) Histidine
- (3) Asparagine
- (4) Lysine

**Options :**

- 920906112593. 1
- 920906112594. 2
- 920906112595. 3
- 920906112596. 4

**Question Number : 49 Question Id : 92090628491 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

कौन सा धनात्मक आवेश वाले ऐमीनो अम्ल का उदाहरण नहीं है ?

- (1) आरजिनीन
- (2) हिस्टीडीन
- (3) ऐस्पारेजिन
- (4) लाइसीन

**Options :**

- 920906112593. 1
- 920906112594. 2
- 920906112595. 3
- 920906112596. 4

**Question Number : 50 Question Id : 92090628492 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

In most higher eukaryotes, the fatty acid synthesis occurs in cytosol, but in plants it occurs in

- |                  |                           |
|------------------|---------------------------|
| (1) cytosol      | (2) endoplasmic reticulum |
| (3) mitochondria | (4) chloroplast           |

**Options :**

- 920906112597. 1
- 920906112598. 2
- 920906112599. 3
- 920906112600. 4

**Question Number : 50 Question Id : 92090628492 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

अधिकतर यूकेरियोट्स में वसा अम्ल का संश्लेषण साइटोसोल में होता है किन्तु पादपो में यह निम्न में होता है

- |                     |                              |
|---------------------|------------------------------|
| (1) साइटोसोल        | (2) ऐंडोप्लास्मिक रेटीक्युलम |
| (3) माइटोकॉन्ड्रिया | (4) क्लोरोप्लास्ट            |

**Options :**

- 920906112597. 1
- 920906112598. 2
- 920906112599. 3
- 920906112600. 4

**Question Number : 51 Question Id : 92090628493 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

When the bacterium *Agrobacterium tumefaciens* comes in contact with damaged plant cell, the segment of Ti plasmid called T-DNA is transferred from plasmid and integrated at a random position in one of the plant cell chromosomes. The size of T-DNA is

- |               |               |
|---------------|---------------|
| (1) 80,000 bp | (2) 40,000 bp |
| (3) 23,000 bp | (4) 50,000 bp |

**Options :**

- 920906112601. 1
- 920906112602. 2

920906112603. 3

920906112604. 4

**Question Number : 51 Question Id : 92090628493 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

जब जीवाणु *Agrobacterium tumefaciens* क्षतिग्रस्त पादप कोशिका के संपर्क में आता है, तो Ti प्लास्मिड का T-DNA नामक खंड प्लास्मिड से स्थानांतरित होकर पादप कोशिका गुणसूत्र में यादृच्छिक स्थान पर समेकित हो जाता है। T-DNA की आमाप है।

(1) 80,000 bp

(2) 40,000 bp

(3) 23,000 bp

(4) 50,000 bp

**Options :**

920906112601. 1

920906112602. 2

920906112603. 3

920906112604. 4

**Question Number : 52 Question Id : 92090628494 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

The completed sequence of the human genome was published in

(1) 2020

(2) 2003

(3) 2006

(4) 2010

**Options :**

920906112605. 1

920906112606. 2

920906112607. 3

920906112608. 4

**Question Number : 52 Question Id : 92090628494 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

मानव जीनोम का पूरा अनुक्रम किस वर्ष में प्रकाशित हुआ था?

- (1) 2020 (2) 2003  
(3) 2006 (4) 2010

**Options :**

920906112605. 1  
920906112606. 2  
920906112607. 3  
920906112608. 4

**Question Number : 53 Question Id : 92090628495 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Plasmids are circular DNA. Naturally occurring bacterial plasmids range in size from

- (1) 5,000 to 4,00,000 bp (2) 50,000 to 4,00,000 bp  
(3) 50,000 to 4,00,000 bp (4) 5,000 to 4,00,000 bp

**Options :**

920906112609. 1  
920906112610. 2  
920906112611. 3  
920906112612. 4

**Question Number : 53 Question Id : 92090628495 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

प्लास्मिड वृत्तीय DNA हैं। प्राकृतिक रूप से पाये जाने वाले जीवाणु प्लास्मिड का आमाप \_\_\_\_\_ के परास में होता है

- (1) 5,000 to 4,00,000 bp (2) 50,000 to 4,00,000 bp  
(3) 50,000 to 4,00,000 bp (4) 5,000 to 4,00,000 bp

**Options :**

920906112609. 1  
920906112610. 2  
920906112611. 3  
920906112612. 4

**Question Number : 54 Question Id : 92090628496 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Gene expression can not be analyzed using this technique

- |                        |  |
|------------------------|--|
| (1) DNA fingerprinting | (2) Fluorescence in situ hybridization |
| (3) RT-PCR             | (4) DNA microarray                     |

**Options :**

- 920906112613. 1
- 920906112614. 2
- 920906112615. 3
- 920906112616. 4

**Question Number : 54 Question Id : 92090628496 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

जीन अभिव्यक्ति का विश्लेषण निम्न विधि द्वारा नहीं किया जा सकता है

- |                        |                                 |
|------------------------|---------------------------------|
| (1) DNA फिंगरप्रिंटिंग | (2) फ्लोरोसेंस स्व स्थाने संकरण |
| (3) RT-PCR             | (4) DNA माइक्रोएरे              |

**Options :**

- 920906112613. 1
- 920906112614. 2
- 920906112615. 3
- 920906112616. 4

**Question Number : 55 Question Id : 92090628497 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

The most efficient and widely used methods for transforming animal cells rely on

- |              |                                      |
|--------------|--------------------------------------|
| (1) BAC      | (2) Liposomes or viral vectors       |
| (3) Plasmids | (4) <i>Agrobacterium tumefaciens</i> |

**Options :**

- 920906112617. 1
- 920906112618. 2
- 920906112619. 3



920906112620. 4

**Question Number : 55 Question Id : 92090628497 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

प्राणी कोशिका के रूपांतरण में सबसे सक्षम तथा बहुप्रचलित विधि है।

- |               |                                    |
|---------------|------------------------------------|
| (1) BAC       | (2) लाइपोसोम या विषाणु वेक्टर      |
| (3) प्लास्मिड | (4) एग्नोबैक्टीरियम ट्यूमीफेशिएन्स |

**Options :**

920906112617. 1  
920906112618. 2  
920906112619. 3  
920906112620. 4

**Question Number : 56 Question Id : 92090628498 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Which of the following phase(s) in bryophytes is/are found freely in nature

- (1) Gametophytic phase
- (2) Sporophytic phase
- (3) Saprophytic phase
- (4) Gametophytic and sporophytic phase

**Options :**

920906112621. 1  
920906112622. 2  
920906112623. 3  
920906112624. 4

**Question Number : 56 Question Id : 92090628498 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

ब्रायोफाइट में निम्न प्रावस्था प्रकृति में मुक्त रूप से पायी जाती है

- (1) युग्मकोद्भिद् प्रावस्था
- (2) बीजाणुउद्भिद् प्रावस्था
- (3) मृतपोषी प्रावस्था
- (4) युग्मकोद्भिद् तथा बीजाणुउद्भिद् प्रावस्था दोनों

**Options :**

920906112621. 1  
920906112622. 2  
920906112623. 3  
920906112624. 4

**Question Number : 57 Question Id : 92090628499 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Which of the following plant has rhizophore?

- |                      |                        |
|----------------------|------------------------|
| (1) <i>Marsilea</i>  | (2) <i>Selaginella</i> |
| (3) <i>Equisetum</i> | (4) <i>Rhynia</i>      |

**Options :**

920906112625. 1  
920906112626. 2  
920906112627. 3  
920906112628. 4

**Question Number : 57 Question Id : 92090628499 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

निम्न पादप में राइजोफोर पाया जाता है

- |                      |                       |
|----------------------|-----------------------|
| (1) <i>मासिलिया</i>  | (2) <i>सिलोजिनेला</i> |
| (3) <i>इक्वीसीटम</i> | (4) <i>रायनिया</i>    |

**Options :**

920906112625. 1  
920906112626. 2  
920906112627. 3

920906112628. 4

**Question Number : 58 Question Id : 92090628500 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Vascular bundles in monocot plants are

- (1) Arranged in rings
- (2) Arranged in steler region
- (3) Scattered in steler region
- (4) Closed and scattered in steler region

**Options :**

920906112629. 1  
920906112630. 2  
920906112631. 3  
920906112632. 4

**Question Number : 58 Question Id : 92090628500 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

एकबीजपत्री पादपो में संवहनी पूल होते हैं

- |                               |   |
|-------------------------------|---|
| (1) वलय में व्यवस्थित         | (2) रंभ क्षेत्र में व्यवस्थित             |
| (3) रंभ क्षेत्र में बिखरे हुए | (4) संवृत्त तथा रंभ क्षेत्र में बिखरे हुए |

**Options :**

920906112629. 1  
920906112630. 2  
920906112631. 3  
920906112632. 4

**Question Number : 59 Question Id : 92090628501 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Turpentine which is an oleo – resin is obtained from

- |                  |                  |
|------------------|------------------|
| (1) <i>Pinus</i> | (2) <i>Abies</i> |
| (3) <i>Gingo</i> | (4) <i>Cycas</i> |

**Options :**

- 920906112633. 1
- 920906112634. 2
- 920906112635. 3
- 920906112636. 4

**Question Number : 59 Question Id : 92090628501 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

टर्पेन्टाइन जो एक ओलियोरेसीन है, निम्न से प्राप्त किया जाता है

- |                  |                  |
|------------------|------------------|
| (1) <i>पाइनस</i> | (2) <i>एबिस</i>  |
| (3) <i>गिंको</i> | (4) <i>साइकस</i> |

**Options :**

- 920906112633. 1
- 920906112634. 2
- 920906112635. 3
- 920906112636. 4

**Question Number : 60 Question Id : 92090628502 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Protochordates are included under chordates by the presence of

- |                 |                      |
|-----------------|----------------------|
| (1) Nerve chord | (2) Notochord        |
| (3) Nerves      | (4) Vertebral column |

**Options :**

- 920906112637. 1
- 920906112638. 2
- 920906112639. 3
- 920906112640. 4

**Question Number : 60 Question Id : 92090628502 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

प्रोटोकॉर्डेट को कॉर्डेटा में निम्न की उपस्थिति के कारण रखा जाता है

- |                    |                 |
|--------------------|-----------------|
| (1) तंत्रिका रज्जु | (2) पृष्ठ रज्जु |
| (3) तंत्रिका       | (4) कशेरुक दण्ड |

**Options :**

- 920906112637. 1
- 920906112638. 2
- 920906112639. 3
- 920906112640. 4

**Question Number : 61 Question Id : 92090628503 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Scaly anteaters are included under

- |                |                 |
|----------------|-----------------|
| (1) Eutheria   | (2) Prototheria |
| (3) Metatheria | (4) Insectivora |

**Options :**

- 920906112641. 1
- 920906112642. 2
- 920906112643. 3
- 920906112644. 4

**Question Number : 61 Question Id : 92090628503 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

शलकी चींटाखोर (एन्टईटर) को निम्न में रखा जाता है

- |                |                  |
|----------------|------------------|
| (1) यूथिरिया   | (2) प्रोटोथिरिया |
| (3) मेटाथिरिया | (4) इंसेक्टिवोरा |

**Options :**

- 920906112641. 1
- 920906112642. 2
- 920906112643. 3

920906112644. 4

**Question Number : 62 Question Id : 92090628504 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Hormones are released in

- |                                 |                 |
|---------------------------------|-----------------|
| (1) Lumen of endocrine gland    | (2) Blood       |
| (3) Outside the endocrine gland | (4) Blood cells |

**Options :**

- 920906112645. 1
- 920906112646. 2
- 920906112647. 3
- 920906112648. 4

**Question Number : 62 Question Id : 92090628504 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

हार्मोन्स \_\_\_\_\_ स्त्रावित होते हैं

- |  |                   |
|--|-------------------|
| (1) अंतास्त्रावि ग्रंथि के ल्यूमेन में | (2) रक्त          |
| (3) अंतःस्त्रावी ग्रंथि के बाहर        | (4) रक्त कोशिकाओं |

**Options :**

- 920906112645. 1
- 920906112646. 2
- 920906112647. 3
- 920906112648. 4

**Question Number : 63 Question Id : 92090628505 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Nerve impulse in a neuron travels in

- |                     |                        |
|---------------------|------------------------|
| (1) one direction   | (2) two directions     |
| (3) multidirections | (4) from cyton to axon |

**Options :**

920906112649. 1  
920906112650. 2  
920906112651. 3  
920906112652. 4

**Question Number : 63 Question Id : 92090628505 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

न्यूरोन में तंत्रिका आवेग का प्रवाह \_\_\_\_\_ होता है

- |                    |                          |
|--------------------|--------------------------|
| (1) एक दिशा में    | (2) द्वि दिशाओं में      |
| (3) बहु दिशाओं में | (4) सायटोन से एक्सोन में |

**Options :**

920906112649. 1  
920906112650. 2  
920906112651. 3  
920906112652. 4

**Question Number : 64 Question Id : 92090628506 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Cataract of human eye defect refers to

- (1) Shrinkage of eye lens
- (2) Wrinkling of eye lens
- (3) Denaturation of protein in eye lens
- (4) Denaturation of crystalline protein of eye lens

**Options :**

920906112653. 1  
920906112654. 2  
920906112655. 3  
920906112656. 4

**Question Number : 64 Question Id : 92090628506 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

मानव दृष्टि के विकार केटरेक्ट से अभिप्राय है

- (1) आँख के लेंस का सिकुड़ना
- (2) आँख के लेंस में झुरी पड़ना
- (3) आँख के लेंस में प्रोटीन का विकृतियन
- (4) आँख के लेंस के क्रिस्टलीन प्रोटीन का विकृतियन

**Options :**

920906112653. 1  
920906112654. 2  
920906112655. 3  
920906112656. 4

**Question Number : 65 Question Id : 92090628507 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Water from digested food is absorbed from

- |              |                     |
|--------------|---------------------|
| (1) Illium   | (2) Large intestine |
| (3) Duodenum | (4) Stomach         |

**Options :**

920906112657. 1  
920906112658. 2  
920906112659. 3  
920906112660. 4

**Question Number : 65 Question Id : 92090628507 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

पाचित भोजन से जल का अवशोषण \_\_\_\_\_ से होता है

- |              |                |
|--------------|----------------|
| (1) इलियम    | (2) बड़ी आंत्र |
| (3) ड्यूडिनम | (4) आमाशय      |

**Options :**

920906112657. 1  
920906112658. 2  
920906112659. 3



**Question Number : 66 Question Id : 92090628508 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Given below are two statements : One is labelled as Assertion (A) and the other is labelled as Reason (R).

Assertion (A) : Telomeres are unique structures at the ends of linear chromosomes. Telomeres are replicated by telomerase a specialized polymerase that carries its own RNA template.

Reasons (R) : In lagging strand in prokaryotes, first an RNA primer is synthesized by primase, like leading strand synthesis, DNA polymerase III binds to RNA primer and adds deoxy ribonucleotides.

In the light of the above statements, choose the most appropriate answer from the options given below :

- (1) Both (A) and (R) are correct and (R) is the correct explanation of (A)
- (2) Both (A) and (R) are correct but (R) is NOT the correct explanation of (A)
- (3) (A) is correct but (R) is not correct
- (4) (A) is not correct but (R) is correct

**Options :**

920906112661. 1

920906112662. 2

920906112663. 3

920906112664. 4

**Question Number : 66 Question Id : 92090628508 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

नीचे दो कथन दिए गए हैं: एक अभिकथन (Assertion A) के रूप में लिखित है तो दूसरा उसके कारण (Reason R) के रूप में;

अभिकथन A : अंतखण्ड रेखीय गुणसूत्रों के अंत में स्थित विशिष्ट संरचना होती हैं। अंतखण्ड की प्रतिकृति टीलोमरेस नामक विशिष्ट पोलीमरेस द्वारा होती है जो अपना स्वयं का RNA टेम्पलेट रखता है।

कारण R : प्रोकैरियोट्स में अग्र स्टैंड संश्लेषण के समान पश्च स्टैंड के संश्लेषण में सर्वप्रथम RNA प्राइमर प्राइमरेस द्वारा संश्लेषित होता है, DNA पोलीमरेस III RNA प्राइमर से जुड़कर डिआक्सीराइबोन्पूक्लियोटाइड्स जोड़ता है।

उपरोक्त कथन के आलोक में, नीचे दिए गए विकल्पों में से सही उत्तर का चयन कीजिए

- (1) A और R दोनों सही हैं और R, A की सही व्याख्या है
- (2) A और R दोनों सही हैं, लेकिन R, A की सही व्याख्या नहीं है
- (3) A सही हैं, लेकिन R सही नहीं है
- (4) A सही नहीं हैं, लेकिन R सही है

**Options :**

920906112661. 1

920906112662. 2

920906112663. 3

920906112664. 4

**Question Number : 67 Question Id : 92090628509 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Given below are two statements : One is labelled as Assertion (A) and the other is labelled as Reason (R).

Assertion (A) : In preparatory phase of glycolysis phosphorylation of glucose takes place and converts into glyeraldehyde-3-phosphate. Hexokinase like many other kinases requires  $Mg^{++}$  for activity.

Reasons (R) : In payoff phase of glycolysis, under aerobic condition two molecules of NADH are formed in cytosol along with two molecules of pyruvate and two molecules of ATP.

In the light of the above statements, choose the most appropriate answer from the options given below :

- (1) Both (A) and (R) are correct and (R) is the correct explanation of (A)
- (2) Both (A) and (R) are correct but (R) is NOT the correct explanation of (A)
- (3) (A) is correct but (R) is not correct
- (4) (A) is not correct but (R) is correct

**Options :**

920906112665. 1

920906112666. 2

920906112667. 3

920906112668. 4

**Question Number : 67 Question Id : 92090628509 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

नीचे दो कथन दिए गए हैं: एक अभिकथन (Assertion A) के रूप में लिखित है तो दूसरा उसके कारण (Reason R) के रूप में;

अभिकथन A : ग्लाइकोलिसिस की शुरुआती अवस्था में ग्लूकोस का फोस्फोरिलीकरण होकर यह ग्लिसेरॉल डिहाइड -3- फॉस्फेट में बदलता है। हेक्सोकाइनेस को अन्य बहुत से काइनेसों के समान अपनी क्रियाशीलता हेतु  $Mg^{++}$  की आवश्यकता होती है।

कारण R : ग्लाइकोलिसिस की पे-ऑफ (उत्पाद देय) अवस्था में, वायवीय स्थिति में NADH के 2 अणु साइटोसोल में बनते हैं। साथ ही पाइरुवेट तथा ATP के दो-दो अणु बनते हैं।

उपरोक्त कथन के आलोक में, नीचे दिए गए विकल्पों में से सही उत्तर का चयन कीजिए

- (1) A और R दोनों सही हैं और R, A की सही व्याख्या है
- (2) A और R दोनों सही हैं, लेकिन R, A की सही व्याख्या नहीं है
- (3) A सही हैं, लेकिन R सही नहीं है
- (4) A सही नहीं हैं, लेकिन R सही है

**Options :**

920906112665. 1

920906112666. 2

920906112667. 3

920906112668. 4

**Question Number : 68 Question Id : 92090628510 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Given below are two statements : One is labelled as Assertion (A) and the other is labelled as Reason (R).

Assertion (A) : Specific amino acids may be replaced individually by site directed mutagenesis. This powerful approach to studying protein structure and function changes the amino acid sequence of a protein by altering the DNA sequence of cloned gene.

Reasons (R) : When suitably located restriction site A are not present in the sequence to be altered, an approach called oligonucleotide-directed mutagenesis can create a specific DNA sequence change.

In the light of the above statements, choose the most appropriate answer from the options given below :

- (1) Both (A) and (R) are true and (R) is the correct explanation of (A)
- (2) Both (A) and (R) are true but (R) is NOT the correct explanation of (A)
- (3) (A) is true but (R) is false
- (4) (A) is false but (R) is true

**Options :**

- 920906112669. 1
- 920906112670. 2
- 920906112671. 3
- 920906112672. 4

**Question Number : 68 Question Id : 92090628510 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

नीचे दो कथन दिए गए हैं: एक अभिकथन (Assertion A) के रूप में लिखित है तो दूसरा उसके कारण (Reason R) के रूप में;

अभिकथन A : स्थान निर्देशित म्यूटाजेनेसिस (उत्परिवर्तजन) के द्वारा विशेष ऐमीनो अम्ल को वैयक्तिक रूप से बदला जा सकता है। प्रोटीन संरचना तथा कार्य अध्ययन करने की यह सशक्त तकनीक प्रोटीन के ऐमीनो अम्ल अनुक्रम में क्लोन्ड जीन के DNA के अनुक्रम में परिवर्तन करके परिवर्तन करती है।

कारण R : जब जाने वाले अनुक्रम में उचित रूप से स्थित रेस्ट्रिक्शन स्थल नहीं होती है तब ओलिगोन्यूक्लिओटाइड निर्देशित म्यूटाजेनेसिस नामक अभिगम DNA अनुक्रम में विशिष्ट परिवर्तन कर सकता है।

उपरोक्त कथन के आलोक में, नीचे दिए गए विकल्पों में से सही उत्तर का चयन कीजिए

- (1) A और R दोनों सही हैं और R, A की सही व्याख्या है
- (2) A और R दोनों सही हैं, लेकिन R, A की सही व्याख्या नहीं है
- (3) A सही हैं, लेकिन R सही नहीं है
- (4) A सही नहीं हैं, लेकिन R सही है

**Options :**

920906112669. 1  
920906112670. 2  
920906112671. 3  
920906112672. 4

**Question Number : 69 Question Id : 92090628511 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Given below are two statements : One is labelled as Assertion (A) and the other is labelled as Reason (R).

Assertion (A) : The thylakoid reactions of photosynthesis take place in the specialized internal membranes of chloroplast called thylacoids.

Reasons (R) : The end products of these thylakoid reactions are used for the synthesis of sugars in the carbon fixation reactions.

In the light of the above statements, choose the most appropriate answer from the options given below :

- (1) Both (A) and (R) are true and (R) is the correct explanation of (A)
- (2) Both (A) and (R) are true but (R) is NOT the correct explanation of (A)
- (3) (A) is true but (R) is false
- (4) (A) is false but (R) is true

**Options :**

920906112673. 1

920906112674. 2

920906112675. 3

920906112676. 4

**Question Number : 69 Question Id : 92090628511 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

नीचे दो कथन दिए गए हैं: एक अभिकथन (Assertion A) के रूप में लिखित है तो दूसरा उसके कारण (Reason R) के रूप में;

अभिकथन A : प्रकाश संश्लेषण की थाइलेकोइड क्रिया क्लोरोप्लास्ट की विशिष्ट आंतरिक झिल्ली जिसे थाइलेकोइड कहा जाता है पर संपन्न होती है।

कारण R : इन थाइलेकोइड क्रियाओं के अंत उत्पादों का प्रयोग कार्बन यौगिकीकरण क्रियाओं में शर्कराओं के संश्लेषण में किया जाता है।

उपरोक्त कथन के आलोक में, नीचे दिए गए विकल्पों में से सही उत्तर का चयन कीजिए

- (1) A और R दोनों सही हैं और R, A की सही व्याख्या है
- (2) A और R दोनों सही हैं, लेकिन R, A की सही व्याख्या नहीं है
- (3) A सही हैं, लेकिन R सही नहीं है
- (4) A सही नहीं हैं, लेकिन R सही है

**Options :**

- 920906112673. 1
- 920906112674. 2
- 920906112675. 3
- 920906112676. 4

**Question Number : 70 Question Id : 92090628512 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Given below are two statements : One is labelled as Assertion (A) and the other is labelled as Reason (R).

Assertion (A) : In a healthy body RBCs can live for several months or years.

Reasons (R) : RBC's are responsible for transportation of oxygen and some amount of carbon dioxide also.

In the light of the above statements, choose the most appropriate answer from the options given below :

- (1) Both (A) and (R) are true and (R) is the correct explanation of (A)
- (2) Both (A) and (R) are true but (R) is NOT the correct explanation of (A)
- (3) (A) is true but (R) is false
- (4) (A) is false but (R) is true

**Options :**

- 920906112677. 1
- 920906112678. 2
- 920906112679. 3
- 920906112680. 4

**Question Number : 70 Question Id : 92090628512 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**



नीचे दो कथन दिए गए हैं: एक अभिकथन (Assertion A) के रूप में लिखित है तो दूसरा उसके कारण (Reason R) के रूप में;

अभिकथन A : स्वस्थ शरीर में RBC अनेक महीनों अथवा वर्षों तक जीवित रह सकती हैं।

कारण R : RBC ऑक्सीजन के ट्रांसपोर्ट तथा कुछ मात्रा में CO<sub>2</sub> को ले जाने का भी कार्य करती हैं।

उपरोक्त कथन के आलोक में, नीचे दिए गए विकल्पों में से सही उत्तर का चयन कीजिए

- (1) A और R दोनों सही हैं और R, A की सही व्याख्या है
- (2) A और R दोनों सही हैं, लेकिन R, A की सही व्याख्या नहीं है
- (3) A सही हैं, लेकिन R सही नहीं है
- (4) A सही नहीं हैं, लेकिन R सही है

**Options :**

920906112677. 1  
920906112678. 2  
920906112679. 3  
920906112680. 4

**Question Number : 71 Question Id : 92090628513 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Given below are two statements : One is labelled as Assertion (A) and the other is labelled as Reason (R).

Assertion (A) : A hormone is a molecule that is released in one part of the body but regulates the activity of cells in other parts of the body.

Reasons (R) : The circulating blood delivers hormones to cells throughout the body.

In the light of the above statements, choose the most appropriate answer from the options given below :

- (1) Both (A) and (R) are correct and (R) is the correct explanation of (A)
- (2) Both (A) and (R) are correct but (R) is NOT the correct explanation of (A)
- (3) (A) is correct but (R) is not correct
- (4) (A) is not correct but (R) is correct

**Options :**

920906112681. 1  
920906112682. 2  
920906112683. 3  
920906112684. 4

**Question Number : 71 Question Id : 92090628513 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

नीचे दो कथन दिए गए हैं: एक अभिकथन (Assertion A) के रूप में लिखित है तो दूसरा उसके कारण (Reason R) के रूप में;

अभिकथन A : हार्मोन एक ऐसा अणु है जिसे शरीर के एक भाग से निर्मुक्त किया जाता है किन्तु शरीर के अन्य भागों की कोशिकाओं की क्रिया को नियंत्रित करता है।

कारण R : रक्त प्रवाह के साथ हार्मोन को पूरे शरीर में पहुंचाया जाता है।

उपरोक्त कथन के आलोक में, नीचे दिए गए विकल्पों में से सही उत्तर का चयन कीजिए

- (1) A और R दोनों सही हैं और R, A की सही व्याख्या है
- (2) A और R दोनों सही हैं, लेकिन R, A की सही व्याख्या नहीं है
- (3) A सही हैं, लेकिन R सही नहीं है
- (4) A सही नहीं हैं, लेकिन R सही है

**Options :**

920906112681. 1  
920906112682. 2  
920906112683. 3  
920906112684. 4

**Question Number : 72 Question Id : 92090628514 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Given below are two statements : One is labelled as Assertion (A) and the other is labelled as Reason (R).

Assertion (A) : Phytochrome is most abundant in etiolated seedlings.

Reasons (R) : Most biochemical studies have been carried out on phytochrome purified from non green tissues.

In the light of the above statements, choose the most appropriate answer from the options given below :

- (1) Both (A) and (R) are correct and (R) is the correct explanation of (A)
- (2) Both (A) and (R) are correct but (R) is NOT the correct explanation of (A)
- (3) (A) is correct but (R) is not correct
- (4) (A) is not correct but (R) is correct

**Options :**

920906112685. 1  
920906112686. 2  
920906112687. 3  
920906112688. 4

**Question Number : 72 Question Id : 92090628514 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

नीचे दो कथन दिए गए हैं: एक अभिकथन (Assertion A) के रूप में लिखित है तो दूसरा उसके कारण (Reason R) के रूप में;

अभिकथन A : फाइटोक्रोम इटियोलेटेड सीडलिंग्स (पांडुरित नवोद्भिदों) में सर्वाधिक पाया जाता है।

कारण R : अधिकतर जैवरासायनिक अध्ययनों हेतु प्रयुक्त फाइटोक्रोम अहरित ऊतकों से शोधित किए गए हैं।

उपरोक्त कथन के आलोक में, नीचे दिए गए विकल्पों में से सही उत्तर का चयन कीजिए

- (1) A और R दोनों सही हैं और R, A की सही व्याख्या है
- (2) A और R दोनों सही हैं, लेकिन R, A की सही व्याख्या नहीं है
- (3) A सही हैं, लेकिन R सही नहीं है
- (4) A सही नहीं हैं, लेकिन R सही है

**Options :**

920906112685. 1

920906112686. 2

920906112687. 3

920906112688. 4

**Question Number : 73 Question Id : 92090628515 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Identify the correct sequence of genome of different organisms in increasing order

- A. *Homo sapians*
- B. *Escherichia coli*
- C. *Drosophila melanogaster*
- D. *Saccharomyces cerevisiae*
- E. *Caenorhabditis elegans*

Choose the correct answer from the options given below :

- (1) A, B, C, D, E
- (2) B, C, D, E, A
- (3) B, D, E, C, A
- (4) E, D, C, B, A

**Options :**

920906112689. 1

920906112690. 2

920906112691. 3

920906112692. 4

**Question Number : 73 Question Id : 92090628515 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

विभिन्न जीवों को उनके जीनोम के बढ़ते क्रम में व्यवस्थित करें

- A. *होमो सेपियंस*
- B. *ऐशरीकिया कोलाई*
- C. *ड्रोसोफिला मिलेनोगास्टर*
- D. *सैकेरोमाइजीज सेरेविसि*
- E. *सिनोरेबडाइटिस एलीगेंस*

नीचे दिए गए विकल्पों में से सही उत्तर का चयन कीजिए :

- (1) A, B, C, D, E
- (2) B, C, D, E, A
- (3) B, D, E, C, A
- (4) E, D, C, B, A

**Options :**

- 920906112689. 1
- 920906112690. 2
- 920906112691. 3
- 920906112692. 4

**Question Number : 74 Question Id : 92090628516 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Identify the correct sequence of protein components of mitochondrial electron transfer chain.

- A. Succinate dehydrogenase
- B. Cytochrome oxidase
- C. NADH dehydrogenase
- D. Ubiquinone Cytochrome C oxidoreductase

Choose the correct answer from the options given below :

- (1) A, B, C, D
- (2) D, C, B, A
- (3) C, D, A, B
- (4) C, A, D, B

**Options :**

- 920906112693. 1
- 920906112694. 2
- 920906112695. 3
- 920906112696. 4

**Question Number : 74 Question Id : 92090628516 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

माइटोकॉन्ड्रियल इलेक्ट्रॉन स्थानांतरण श्रृंखला में प्रोटीन घटकों के सही अनुक्रम का चयन करें

- A. सक्सीनेट डिहाइड्रोजिनेस
- B. साइट्रोक्रोम ऑक्सीडेस
- C. NADH डिहाइड्रोजिनेस
- D. यूबीक्वीनोन साइट्रोक्रोम C आक्सीडोरिडक्टेस

नीचे दिए गए विकल्पों में से सही उत्तर का चयन कीजिए :

- (1) A, B, C, D
- (2) D, C, B, A
- (3) C, D, A, B
- (4) C, A, D, B

**Options :**

- 920906112693. 1
- 920906112694. 2
- 920906112695. 3
- 920906112696. 4

**Question Number : 75 Question Id : 92090628517 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

The correct sequence of the Southern blotting procedure, as applied to DNA fingerprinting is

- A. Incubation of nylon membrane with radiolabelled DNA probe.
- B. Separation of digested DNA fragments by agarose gel electrophoresis.
- C. Denaturation of separated DNA and transfer to nylon membrane.
- D. Exposure of X-ray film to membrane for analysis of results.
- E. Digestion of chromosomal DNA with restriction endonucleases.

Choose the correct answer from the options given below :

- (1) E, D, C, B, A
- (2) E, B, C, A, D
- (3) A, B, C, D, E
- (4) A, C, B, E, D

**Options :**

- 920906112697. 1
- 920906112698. 2
- 920906112699. 3
- 920906112700. 4

**Question Number : 75 Question Id : 92090628517 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

DNA फिंगरप्रिंटिंग में सदरन ब्लॉटिंग का सही क्रम है

- A. रेडियोलेबल्ड DNA प्रोब का नायलोन झिल्ली पर ऊष्मायन
- B. पाचित DNA खण्डो का एगारोस जेल विद्युत कण संचलन द्वारा पृथक्करण
- C. पृथककृत DNA का विकृतीयन तथा नायलोन झिल्ली पर स्थानांतरण
- D. झिल्ली का एक्सरे फिल्म के लिए उद्भासन परिणाम विश्लेषण हेतु
- E. गुणसूत्रीय DNA का रेक्ट्रिक्शन एन्डोन्यूक्लिएस द्वारा पाचन

नीचे दिए गए विकल्पों में से सही उत्तर का चयन कीजिए :

- (1) E, D, C, B, A
- (2) E, B, C, A, D
- (3) A, B, C, D, E
- (4) A, C, B, E, D

**Options :**

- 920906112697. 1
- 920906112698. 2
- 920906112699. 3
- 920906112700. 4

**Question Number : 76 Question Id : 92090628518 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**



The correct sequence of intermediates formed in Calvin cycle is

- A. 1,3-biphosphoglycerate
- B. 3-phosphoglycerate
- C. Glyceraldehyde 3-phosphate
- D. Ribulose 1,5-biphospahte
- E. Dihydroxy acetone phosphate

Choose the correct answer from the options given below :

- (1) C, A, E, D, B
- (2) D, B, A, C, E
- (3) E, B, D, C, A
- (4) A, B, C, D, E

**Options :**

- 920906112701. 1
- 920906112702. 2
- 920906112703. 3
- 920906112704. 4

**Question Number : 76 Question Id : 92090628518 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

केल्विन चक्र में बनने वाले मध्यवर्तियों का सही अनुक्रम है :

- A. 1,3-बाइफोस्फोग्लिसरेट
- B. 3-फोस्फोग्लिसरेट
- C. ग्लिसरेल्डिहाइड-3-फॉस्फेट
- D. रिबूलोस 1, 5- बाइफॉस्फेट
- E. डाइहाइड्रॉक्सी एसीटोन फॉस्फेट

नीचे दिए गए विकल्पों में से सही उत्तर का चयन कीजिए :

- (1) C, A, E, D, B
- (2) D, B, A, C, E
- (3) E, B, D, C, A
- (4) A, B, C, D, E

**Options :**

- 920906112701. 1
- 920906112702. 2
- 920906112703. 3
- 920906112704. 4

**Question Number : 77 Question Id : 92090628519 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

The correct sequence of vertebrae arranged in a vertebral column in human is :

- A. Sacral vertebrae
- B. Lumbar vertebrae
- C. Axis vertebrae
- D. Thoracic Vertebrae
- E. Atlas vertebrae

Choose the correct answer from the options given below :

- (1) E, C, D, B, A
- (2) A, B, D, C, E
- (3) D, B, A, E, C
- (4) B, A, E, C, D

**Options :**

- 920906112705. 1
- 920906112706. 2
- 920906112707. 3
- 920906112708. 4

**Question Number : 77 Question Id : 92090628519 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

मानव मेरुदण्ड में कशेरुकाएं निम्न क्रम में व्यवस्थित होती हैं

- A. सेकरल कशेरुका
- B. लम्बर कशेरुका
- C. एक्सिस कशेरुका
- D. थोरेसिक कशेरुका
- E. एटलस कशेरुका

नीचे दिए गए विकल्पों में से सही उत्तर का चयन कीजिए :

- (1) E, C, D, B, A
- (2) A, B, D, C, E
- (3) D, B, A, E, C
- (4) B, A, E, C, D

**Options :**

- 920906112705. 1
- 920906112706. 2
- 920906112707. 3
- 920906112708. 4

**Question Number : 78 Question Id : 92090628520 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

To obtain, a large no. of copies of DNA through PCR includes the following steps.

- A. Double stranded DNA with known ends.
- B. Separate chains by heating to 95°C.
- C. Addition of heat tolerant –Taq polymerase and nucleotides and heat to 72°C.
- D. Addition of Nucleotides to primer using single strand as template.
- E. Cool to allow primer to form hydrogen bonds with ends of target sequence.

Choose the correct answer from the options given below :

- (1) A, B, D, C, E
- (2) A, B, C, D, E
- (3) A, B, E, C, D
- (4) A, B, D, E, C

**Options :**

- 920906112709. 1
- 920906112710. 2
- 920906112711. 3
- 920906112712. 4

**Question Number : 78 Question Id : 92090628520 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

PCR द्वारा अधिक संख्या में DNA प्रति प्राप्त करने हेतु पदों का क्रम निम्न होता है

- A. द्विस्ट्रैंड DNA जिसके सिरे ज्ञात हैं
- B. श्रृंखलाओं को 95°C पर गर्म करके अलग करना
- C. ताप सहिष्णु टेक पोलिमेरेस एवं न्यूक्लियोटाइड को मिलाना तथा 72° पर गर्म करना
- D. प्राइमर में एकल स्ट्रैंड का टेम्पलेट के रूप में उपयोग करके न्यूक्लियोटाइड को जोड़ना
- E. टारगेट अनुक्रम के सिरो पर प्राइमर द्वारा हाइड्रोजन बंध बनाने हेतु ठण्डा करना

नीचे दिए गए विकल्पों में से सही उत्तर का चयन कीजिए :

- (1) A, B, D, C, E
- (2) A, B, C, D, E
- (3) A, B, E, C, D
- (4) A, B, D, E, C

**Options :**

- 920906112709. 1
- 920906112710. 2
- 920906112711. 3
- 920906112712. 4

**Question Number : 79 Question Id : 92090628521 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

The lytic cycle of Phage T4 has

- A. Self-assemble of three different protein to form phage component.
- B. T4 make attachment with specific surface protein through tail fibres.
- C. Production of enzyme to damage bacterial cell wall.
- D. Contraction of tail sheath, DNA enters into the cell leaving capsid outside.
- E. Phage DNA directs production of phage protein and copies of phage genome with the help of host and viral enzyme.

Choose the correct answer from the options given below :

- (1) B, C, D, E, A
- (2) B, D, A, E, C
- (3) B, D, E, A, C
- (4) B, C, A, D, E

**Options :**

- 920906112713. 1
- 920906112714. 2
- 920906112715. 3
- 920906112716. 4

**Question Number : 79 Question Id : 92090628521 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

T<sub>4</sub> वियोजी (फेज) के लयन चक्र में होता है -

- A. तीन विभिन्न प्रोटीन के स्व-समुच्चयन से वियोजी के घटक बनते हैं।
- B. T<sub>4</sub> पुच्छ तन्तु के द्वारा विशिष्ट सतह प्रोटीन के साथ संबद्ध होता है।
- C. जीवाणु कोशिका भित्ति को क्षतिग्रस्त करने के लिए एंजाइम से संबद्ध होता है।
- D. पुच्छ आच्छद के संकुचन के द्वारा डी. एन. ए केप्सिड को बाहर छोड़कर कोशिका में प्रवेश करता है।
- E. वियोजी डी. एन. ए परपोषी और विषाणु एंजाइम की सहायता से वियोजी प्रोटीन एवं वियोजी जीनोम की प्रतियो के उत्पादन को निर्देशित करता है।

नीचे दिए गए विकल्पों में से सही उत्तर का चयन कीजिए :

- (1) B, C, D, E, A
- (2) B, D, A, E, C
- (3) B, D, E, A, C
- (4) B, C, A, D, E

**Options :**

- 920906112713. 1
- 920906112714. 2
- 920906112715. 3
- 920906112716. 4

**Question Number : 80 Question Id : 92090628522 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Given below are two statements :

Statement I : In total, only about 1.5% of Human DNA is coding or exon DNA, carrying information for proteins or RNA products. However, when the much larger introns are included in the count, as much as 30% of the human genome consists of genes.

Statement II : DNA helicase is the enzyme, that increase or decrease the extent of DNA underwinding and affect the linking number.

In the light of the above statements, choose the correct answer from the options given below :

- (1) Both Statement I and Statement II are correct
- (2) Both Statement I and Statement II are incorrect
- (3) Statement I is correct but Statement II is incorrect
- (4) Statement I is incorrect but Statement II is correct

**Options :**

920906112717. 1

920906112718. 2

920906112719. 3

920906112720. 4

**Question Number : 80 Question Id : 92090628522 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**



नीचे दो कथन दिए गए हैं:

कथन I : मानव DNA का कुल लगभग 1.5% कोडिंग अथवा एक्सोन DNA है जो प्रोटीन अथवा RNA उत्पादन के लिए सूचना को ले जाता है। जब अधिक बड़े इन्ट्रॉन काउन्ट में सम्मिलित किए जाते हैं तब मानव जीनोम में 30% तक जीन होते हैं।

कथन II : DNA हैलिकेस ऐसा एंजाइम है जो DNA के खुलने की मात्रा को घटाने व बढ़ाने का काम करता है तथा लिंकिंग संख्या को प्रभावित करता है।

उपरोक्त कथन के आलोक में, नीचे दिए गए विकल्पों में से सही उत्तर का चयन कीजिए

- (1) कथन I और II दोनों सत्य हैं
- (2) कथन I और II दोनों असत्य हैं
- (3) कथन I सत्य है, लेकिन कथन II असत्य है
- (4) कथन I असत्य है, लेकिन कथन II सत्य है

**Options :**

920906112717. 1

920906112718. 2

920906112719. 3

920906112720. 4

**Question Number : 81 Question Id : 92090628523 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Given below are two statements :

Statement I : Many species of biennials and perennials are induced to flower by low temperature exposure (0°C to 5°C) and the process is called vernalization.

Statement II : Vernalization elongates the vegetative period and induces the plant to flower earlier.

In the light of the above statements, choose the correct answer from the options given below :

- (1) Both Statement I and Statement II are true
- (2) Both Statement I and Statement II are false
- (3) Statement I is true but Statement II is false
- (4) Statement I is false but Statement II is true

**Options :**

920906112721. 1  
920906112722. 2  
920906112723. 3  
920906112724. 4

**Question Number : 81 Question Id : 92090628523 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

नीचे दो कथन दिए गए हैं:

कथन I : बहुत सी द्विवर्षीय व बहुवर्षीय प्रजातियों को कम तापमान ( $0^{\circ}\text{C}$ - $5^{\circ}\text{C}$ ) के लिए उद्भासन द्वारा पुष्पन के लिए प्रेरित किया जाता है तथा इस प्रक्रिया को बसंतीकरण कहा जाता है।

कथन II : बसंतीकरण कायिक अवस्था को बढ़ा देता है तथा पौधे को जल्दी पुष्पन हेतु प्रेरित करता है।

उपरोक्त कथन के आलोक में, नीचे दिए गए विकल्पों में से सही उत्तर का चयन कीजिए

- (1) कथन I और II दोनों सत्य हैं
- (2) कथन I और II दोनों असत्य हैं
- (3) कथन I सत्य है, लेकिन कथन II असत्य है
- (4) कथन I असत्य है, लेकिन कथन II सत्य है

**Options :**

920906112721. 1  
920906112722. 2  
920906112723. 3  
920906112724. 4

**Question Number : 82 Question Id : 92090628524 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Given below are two statements:

Statement I : Glycolysis involves a series of reactions carried out by group of soluble enzymes located in both cytosol and plastid.

Statement II : Pentose phosphate pathway is also located both in cytosol and plastid.

In the light of the above statements, choose the correct answer from the options given below :

- (1) Both Statement I and Statement II are correct
- (2) Both Statement I and Statement II are incorrect
- (3) Statement I is correct but Statement II is incorrect
- (4) Statement I is incorrect but Statement II is correct

**Options :**

920906112725. 1  
920906112726. 2  
920906112727. 3  
920906112728. 4

**Question Number : 82 Question Id : 92090628524 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

नीचे दो कथन दिए गए हैं:

कथन I : ग्लाइकोलिसिस में एक क्रियाओं का क्रम होता है जो साइटोसोल तथा प्लास्टिड दोनों में उपस्थित एंजाइम समूह द्वारा संपन्न होता है।

कथन II : पेंटोस फॉस्फेट पाथवे भी साइटोसोल तथा प्लास्टिड दोनों में स्थित होता है।

उपरोक्त कथन के आलोक में, नीचे दिए गए विकल्पों में से सही उत्तर का चयन कीजिए

- (1) कथन I और II दोनों सत्य हैं
- (2) कथन I और II दोनों असत्य हैं
- (3) कथन I सत्य है, लेकिन कथन II असत्य है
- (4) कथन I असत्य है, लेकिन कथन II सत्य है

**Options :**

920906112725. 1

920906112726. 2

920906112727. 3

920906112728. 4

**Question Number : 83 Question Id : 92090628525 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Given below are two statements:

Statement I : Prions are not inactivated by temperature upto 90°C.

Statement II : Prion infection is sensitive to radiation treatment.

In the light of the above statements, choose the correct answer from the options given below :

- (1) Both Statement I and Statement II are true
- (2) Both Statement I and Statement II are false
- (3) Statement I is true but Statement II is false
- (4) Statement I is false but Statement II is true

**Options :**

920906112729. 1

920906112730. 2

920906112731. 3

920906112732. 4

**Question Number : 83 Question Id : 92090628525 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

नीचे दो कथन दिए गए हैं:

कथन I : प्रायः 90°C तक के तापमान तक निष्क्रिय नहीं होता है।

कथन II : प्रायः संक्रमण विकिरण उपचार के लिए संवेदनशील होता है।

उपरोक्त कथन के आलोक में, नीचे दिए गए विकल्पों में से सही उत्तर का चयन कीजिए

- (1) कथन I और II दोनों सत्य हैं
- (2) कथन I और II दोनों असत्य हैं
- (3) कथन I सत्य है, लेकिन कथन II असत्य है
- (4) कथन I असत्य है, लेकिन कथन II सत्य है

**Options :**

920906112729. 1  
920906112730. 2  
920906112731. 3  
920906112732. 4

**Question Number : 84 Question Id : 92090628526 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Given below are two statements:

Statement I : Ion exchange chromatography exploits differences in the sign and magnitude of the net electric charge of proteins at a given pH.

Statement II : In ion exchange chromatography, separation can be optimized by gradually changing the pH and/or salt concentrations of the mobile phase to create pH or salt gradient.

In the light of the above statements, choose the correct answer from the options given below :

- (1) Both Statement I and Statement II are correct
- (2) Both Statement I and Statement II are incorrect
- (3) Statement I is correct but Statement II is incorrect
- (4) Statement I is incorrect Statement II is correct

**Options :**

920906112733. 1  
920906112734. 2

920906112735. 3

920906112736. 4

**Question Number : 84 Question Id : 92090628526 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

नीचे दो कथन दिए गए हैं:

कथन I : आयन विनिमय वर्णलेखन एक दिये हुए pH पर प्रोटीन के नेट विद्युत आवेश के चिह्न एवं तीव्रता के अंतर का उपयोग करता है।

कथन II : आयन विनिमय वर्णलेखन में, सचल प्रावस्था के pH और अथवा लवण सांद्रता में क्रमिक परिवर्तन द्वारा pH या लवण प्रवणता निर्मित करके पृथक्करण को इष्टतम किया जा सकता है।

उपरोक्त कथन के आलोक में, नीचे दिए गए विकल्पों में से सही उत्तर का चयन कीजिए

- (1) कथन I और II दोनों सत्य हैं
- (2) कथन I और II दोनों असत्य हैं
- (3) कथन I सत्य है, लेकिन कथन II असत्य है
- (4) कथन I असत्य है, लेकिन कथन II सत्य है

**Options :**

920906112733. 1

920906112734. 2

920906112735. 3

920906112736. 4

**Question Number : 85 Question Id : 92090628527 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Given below are two statements:

Statement I : Chlorophylls 'a' and 'b' are abundant on green plants and 'c', 'd' are found in some protists and cyanobacteria.

Statement II : Carotenoids are found in all photosynthetic organisms and are integral constituent of thylakoid membrane.

In the light of the above statements, choose the correct answer from the options given below :

- (1) Both Statement I and Statement II are correct
- (2) Both Statement I and Statement II are incorrect
- (3) Statement I is correct but Statement II is incorrect
- (4) Statement I is incorrect but Statement II is correct

**Options :**

920906112737. 1  
920906112738. 2  
920906112739. 3  
920906112740. 4

**Question Number : 85 Question Id : 92090628527 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

नीचे दो कथन दिए गए हैं:

कथन I : क्लोरोफिल "a" तथा "b" हरे पौधों में प्रचुर मात्रा में तथा "c", "d" कुछ प्रोटिस्ट व सायनोबैक्टीरिया में पाये जाते हैं।

कथन II : केरोटिनॉयड सभी प्रकाशसंश्लेषी जीवों में पाया जाता है तथा थायलेकोयड झिल्ली का अन्तरंग घटक होता है।

उपरोक्त कथन के आलोक में, नीचे दिए गए विकल्पों में से सही उत्तर का चयन कीजिए

- (1) कथन I और II दोनों सत्य हैं
- (2) कथन I और II दोनों असत्य हैं
- (3) कथन I सत्य है, लेकिन कथन II असत्य है
- (4) कथन I असत्य है, लेकिन कथन II सत्य है

**Options :**

920906112737. 1

920906112738. 2

920906112739. 3

920906112740. 4

**Question Number : 86 Question Id : 92090628528 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Given below are two statements :

Statement I : Auxins have been used commercially for prevention of fruit and leaf drop only.

Statement II : In some plant species seedless fruit are produced with the help of treatment of unpollinated flower with auxins.

In the light of the above statements, choose the correct answer from the options given below :

- (1) Both Statement I and Statement II are true
- (2) Both Statement I and Statement II are false
- (3) Statement I is true but Statement II is false
- (4) Statement I is false but Statement II is true

**Options :**

920906112741. 1

920906112742. 2

920906112743. 3

920906112744. 4

**Question Number : 86 Question Id : 92090628528 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**



नीचे दो कथन दिए गए हैं:

कथन I : ऑक्सिन व्यावसायिक रूप से केवल फल तथा पत्तियों को गिरने से रोकने के लिए प्रयोग में आते हैं।

कथन II : कुछ पादप प्रजातियों में बीजरहित फल उत्पादन हेतु अपरागित पुष्पों का ऑक्सिन द्वारा उपचार किया जाता है।

उपरोक्त कथन के आलोक में, नीचे दिए गए विकल्पों में से सही उत्तर का चयन कीजिए

- (1) कथन I और II दोनों सत्य हैं
- (2) कथन I और II दोनों असत्य हैं
- (3) कथन I सत्य है, लेकिन कथन II असत्य है
- (4) कथन I असत्य है, लेकिन कथन II सत्य है

**Options :**

920906112741. 1  
920906112742. 2  
920906112743. 3  
920906112744. 4

**Question Number : 87 Question Id : 92090628529 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

During protein synthesis, termination occurs.

- A. Termination signal causing the polymerase to detach from the DNA and release the transcript.
- B. In eukaryotes polymerase-II transcribes a sequence AAGUAC.
- C. Termination signal causing the polymerase to undetach from the DNA.
- D. Termination signal causing the polymerase to detach from the RNA and release the transcript.
- E. In eukaryotes polymerase-II transcribes a sequence AUGAAA.

Choose the correct answer from the options given below :

- (1) A, B only
- (2) A, C, D only
- (3) A only
- (4) A, B only

**Options :**

- 920906112745. 1
- 920906112746. 2
- 920906112747. 3
- 920906112748. 4

**Question Number : 87 Question Id : 92090628529 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

प्रोटीन संश्लेषण के दौरान समापन होता है-

- A. समापन संकेत के द्वारा पोलिमेरेस DNA से हटकर ट्रांसक्रिप्ट को मुक्त करता है
- B. यूकैरियोट्स में पोलिमेरेस II अनुक्रम AAGUAC का अनुलेख करता है।
- C. समापन संकेत पोलिमेरेस को DNA से विलग करता है।
- D. समापन संकेत पोलिमेरेस को RNA से विलग करता है तथा अनुलेख मुक्त होता है।
- E. यूकैरियोट्स में पोलिमेरेस II अनुक्रम AUGAAA का अनुलेख करता है

नीचे दिए गए विकल्पों में से सही उत्तर का चयन कीजिए :

- (1) केवल A, B
- (2) केवल A, C, D
- (3) केवल A
- (4) केवल A, B

**Options :**

- 920906112745. 1
- 920906112746. 2
- 920906112747. 3
- 920906112748. 4

**Question Number : 88 Question Id : 92090628530 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Which protein/s are present in neutrophil?

- A. Collagenase
- B. Leukotrienes
- C. Defensins
- D. Cytokines
- E.  $\alpha$ -1 antitrypsin

Choose the correct answer from the options given below :

- (1) A, B, C only
- (2) A, B, D, E only
- (3) A, C, E only
- (4) B, C, D, E only

**Options :**

- 920906112749. 1
- 920906112750. 2
- 920906112751. 3
- 920906112752. 4

**Question Number : 88 Question Id : 92090628530 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

न्यूट्रोफिल में कौन सा/से प्रोटीन पाये जाते हैं ?

- A. कोलेजीनेस
- B. ल्यूकोट्राइन
- C. डिफेन्सिन
- D. सायटोकाइन
- E.  $\alpha$ -1 एंटीट्रिप्सीन

नीचे दिए गए विकल्पों में से सही उत्तर का चयन कीजिए :

- (1) केवल A, B, C
- (2) केवल A, B, D, E
- (3) केवल A, C, E
- (4) केवल B, C, D, E

**Options :**

- 920906112749. 1
- 920906112750. 2
- 920906112751. 3
- 920906112752. 4

**Question Number : 89 Question Id : 92090628531 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Molecular techniques used for the identification of micro-organisms from environmental samples includes

- A. Metagenomics
- B. CARD-FISH
- C. Denaturing gradient gel electrophoresis
- D. ELISA
- E. Phylochips

Choose the correct answer from the options given below :

- (1) A, C, D only
- (2) A, D, E only
- (3) A, C, E only
- (4) A, B, C only

**Options :**

- 920906112753. 1
- 920906112754. 2
- 920906112755. 3
- 920906112756. 4

**Question Number : 89 Question Id : 92090628531 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

पर्यावरण नमूनों से सूक्ष्मजीवों को पहचानने में प्रयुक्त आण्विक तकनीकों कौन सी हैं ?

- A. मेटाजीनोमिक्स
- B. CARD-FISH
- C. विकृतियन प्रवणता जेल विद्युत कण संचलन
- D. ELISA
- E. फायलोचिप्स

नीचे दिए गए विकल्पों में से सही उत्तर का चयन कीजिए :

- (1) केवल A, C, D
- (2) केवल A, D, E
- (3) केवल A, C, E
- (4) केवल A, B, C

**Options :**

- 920906112753. 1
- 920906112754. 2
- 920906112755. 3
- 920906112756. 4

**Question Number : 90 Question Id : 92090628532 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Sieve-tube elements found in Angiosperms are

- A. Sieve tube
- B. P-protein present
- C. P-protein absent
- D. Sieve-plate
- E. Companion cells

Choose the correct answer from the options given below :

- (1) A, B, D, E only
- (2) A, C, D, E only
- (3) A, B, C, D, E only
- (4) A, B, E only

**Options :**

- 920906112757. 1
- 920906112758. 2
- 920906112759. 3
- 920906112760. 4

**Question Number : 90 Question Id : 92090628532 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

एन्जियोस्पर्म में पाये जाने वाले चालनी नलिका घटक हैं

- A. चालनी नलिका
- B. P-प्रोटीन उपस्थित
- C. P-प्रोटीन अनुपस्थित
- D. चालनी प्लेट
- E. सहचर कोशिकाएं

नीचे दिए गए विकल्पों में से सही उत्तर का चयन कीजिए :

- (1) केवल A, B, D, E
- (2) केवल A, C, D, E
- (3) केवल A, B, C, D, E
- (4) केवल A, B, E

**Options :**

- 920906112757. 1
- 920906112758. 2
- 920906112759. 3
- 920906112760. 4

**Question Number : 91 Question Id : 92090628533 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Following are associated with endocrine functioning of pituitary endocrine gland.

- A. Pars convoluta
- B. Pars intermedia
- C. Pars rodita
- D. Pars nervosa
- E. Pars distalis

Choose the correct answer from the options given below :

- (1) B, D, E, A only
- (2) B, D, E only
- (3) A, B, C, D, E only
- (4) B, C, D, E only

**Options :**

- 920906112761. 1
- 920906112762. 2
- 920906112763. 3
- 920906112764. 4

**Question Number : 91 Question Id : 92090628533 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**



निम्नलिखित पीयूष अंतःस्त्रावी ग्रंथि की अंतःस्त्रावी कार्यप्रणाली से संबन्धित हैं

- A. पार्स कनवोल्यूटा
- B. पार्स इन्टरमिडिया
- C. पार्स रेडिएटा
- D. पार्स नर्वोसा
- E. पार्स डिस्टैलिस

नीचे दिए गए विकल्पों में से सही उत्तर का चयन कीजिए :

- (1) केवल B, D, E, A
- (2) केवल B, D, E
- (3) केवल A, B, C, D, E
- (4) केवल B, C, D, E

**Options :**

- 920906112761. 1
- 920906112762. 2
- 920906112763. 3
- 920906112764. 4

**Question Number : 92 Question Id : 92090628534 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Microbes involved in biological fixation of nitrogen are

- A. *Nitrosomonas*
- B. *Azobacter*
- C. *Pseudomonas*
- D. *Anabaena*
- E. *Rhizobium*

Choose the correct answer from the options given below :

- (1) A, B, C, E only
- (2) B, D, E only
- (3) A, B, C, D, E only
- (4) A, B, D only

**Options :**

- 920906112765. 1
- 920906112766. 2
- 920906112767. 3
- 920906112768. 4

**Question Number : 92 Question Id : 92090628534 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

नाइट्रोजन के जैविक यौगिकीकरण में सम्मिलित सूक्ष्मजीव हैं :

- A. नाइट्रोसोमोनास
- B. एजोबैक्टर
- C. स्यूडोमोनास
- D. एनाबिना
- E. राइजोबियम

नीचे दिए गए विकल्पों में से सही उत्तर का चयन कीजिए :

- (1) केवल A, B, C, E
- (2) केवल B, D, E
- (3) केवल A, B, C, D, E
- (4) केवल A, B, D

**Options :**

- 920906112765. 1
- 920906112766. 2
- 920906112767. 3
- 920906112768. 4

**Question Number : 93 Question Id : 92090628535 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Choose the vertebrates from the given list.

- A. Dog fish
- B. Silver fish
- C. Anguilla
- D. Devil fish
- E. Hippocampus

Choose the correct answer from the options given below :

- (1) A, B, D, E only
- (2) A, B, C, D, E only
- (3) A, C, D, E only
- (4) A, B, C, E only

**Options :**

- 920906112769. 1
- 920906112770. 2
- 920906112771. 3
- 920906112772. 4

**Question Number : 93 Question Id : 92090628535 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

निम्नलिखित सूची में से कशेरुकियों का चयन कीजिए :

- A. डॉग फिश
- B. सिल्वर फिश
- C. एंग्विला
- D. डेविल फिश
- E. हिप्पोकैपस

नीचे दिए गए विकल्पों में से सही उत्तर का चयन कीजिए :

- (1) केवल A, B, D, E
- (2) केवल A, B, C, D, E
- (3) केवल A, C, D, E
- (4) केवल A, B, C, E

**Options :**

- 920906112769. 1
- 920906112770. 2
- 920906112771. 3
- 920906112772. 4

**Question Number : 94 Question Id : 92090628536 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 4 Wrong Marks : 1**

Match List I with List II :

List I	List II
(A) Duchenne muscular dystrophy	(I) Short stature resulted by addition of chromosome 21
(B) Dystrophy Down syndrome	(II) Deletion in chromosome 5 resulted in small head.
(C) Chronic myelogenous leukemia	(III) Loss of coordination due to the absence of gene an X-chromosome
(D) Cri du chat	(IV) Exchange of a large portion of chromosome 22 with a small fragment from a tip of chromosome 9

Choose the correct answer from the options given below:

- (1) (A)-(II), (B)-(I), (C)-(III), (D)-(IV)
- (2) (A)-(III), (B)-(I), (C)-(IV), (D)-(II)
- (3) (A)-(II), (B)-(III), (C)-(IV), (D)-(I)
- (4) (A)-(II), (B)-(III), (C)-(I), (D)-(IV)

**Options :**

- 920906112773. 1
- 920906112774. 2
- 920906112775. 3
- 920906112776. 4

**Question Number : 94 Question Id : 92090628536 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

सूची I के साथ सूची II का मिलान कीजिए

सूची-I	सूची-II
(A) ड्यूशन मस्क्युलर (मांस पेशीय) डिस्ट्रोफी	(I) गुणसूत्र 21 पर अतिरिक्त गुणसूत्र के जुड़ने से छोटा कद
(B) डाउन सिंड्रोम	(II) गुणसूत्र 5 में कमी के कारण छोटा सिर
(C) क्रॉनिक माइलोजिनस ल्यूकيميا	(III) X- गुणसूत्र पर जीन की कमी से समन्वय में कमी
(D) क्राई-डु- चैट	(IV) गुणसूत्र 9 के सिरे के छोटे भाग के साथ गुणसूत्र 22 के बड़े भाग का विनिमय

नीचे दिए गए विकल्पों में से सही उत्तर का चयन कीजिए:

- (1) (A)-(II), (B)-(I), (C)-(III), (D)-(IV)
- (2) (A)-(III), (B)-(I), (C)-(IV), (D)-(II)
- (3) (A)-(II), (B)-(III), (C)-(IV), (D)-(I)
- (4) (A)-(II), (B)-(III), (C)-(I), (D)-(IV)

**Options :**

920906112773. 1  
920906112774. 2  
920906112775. 3  
920906112776. 4

**Question Number : 95 Question Id : 92090628537 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Match List I with List II :

List I	List II
(A) Adeno virus	(I) Single stranded RNA virus with 6,000 nucleotide pairs
(B) Polio virus	(II) Double stranded DNA virus with 35,000 nucleotide pairs
(C) Tobacco mosaic virus	(III) Double stranded DNA virus with 4,500 nucleotide pairs
(D) Polyoma virus	(IV) Single stranded RNA virus with 7,500 nucleotide pairs

Choose the correct answer from the options given below:

- (1) (A)-(II), (B)-(IV), (C)-(I), (D)-(III)
- (2) (A)-(II), (B)-(III), (C)-(I), (D)-(IV)
- (3) (A)-(III), (B)-(I), (C)-(II), (D)-(IV)
- (4) (A)-(II), (B)-(I), (C)-(IV), (D)-(III)

**Options :**

920906112777. 1

920906112778. 2

920906112779. 3

920906112780. 4

**Question Number : 95 Question Id : 92090628537 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

सूची I के साथ सूची II का मिलान कीजिए

सूची-I	सूची-II
(A) एडिनो वाइरस	(I) एकल स्ट्रैंड आर. एन. ए. वाइरस 6000 न्युकिलोटाइड युग्म के साथ
(B) पोलियो वाइरस	(II) द्वि स्ट्रैंड डी. एन. ए. वाइरस 35000 न्युकिलोटाटाइड युग्म के साथ
(C) टोबेको माजेक वाइरस	(III) द्वि स्ट्रैंड डी. एन. ए. वाइरस 45000 न्युकिलोराटाइड युग्म के साथ
(D) पोलीओमावाइरस	(IV) एकल स्ट्रैंड आर. एन. ए. वाइरस 7500 न्युकिलोराटाइड के साथ

नीचे दिए गए विकल्पों में से सही उत्तर का चयन कीजिए:

- (1) (A)-(II), (B)-(IV), (C)-(I), (D)-(III)
- (2) (A)-(II), (B)-(III), (C)-(I), (D)-(IV)
- (3) (A)-(III), (B)-(I), (C)-(II), (D)-(IV)
- (4) (A)-(II), (B)-(I), (C)-(IV), (D)-(III)

**Options :**

920906112777. 1

920906112778. 2

920906112779. 3

920906112780. 4

**Question Number : 96 Question Id : 92090628538 Question Type : MCQ Option Shuffling : No Is  
Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum  
Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**



Match List I with List II :

List I	List II
(A) Use of Hypoxanthine and thymidine	(I) Immuno precipitation
(B) Characterization of F-globulin serum proteins	(II) ELISPOT Assays
(C) Formation of chemiluminescent product	(III) Hybridoma
(D) Detection and quantification of number of cells producing cytokines	(IV) ELISA

Choose the correct answer from the options given below:

- (1) (A)-(III), (B)-(IV), (C)-(I), (D)-(II)
- (2) (A)-(III), (B)-(I), (C)-(IV), (D)-(II)
- (3) (A)-(III), (B)-(IV), (C)-(II), (D)-(I)
- (4) (A)-(II), (B)-(I), (C)-(IV), (D)-(III)

**Options :**

920906112781. 1
920906112782. 2
920906112783. 3
920906112784. 4

**Question Number : 96 Question Id : 92090628538 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

सूची I के साथ सूची II का मिलान कीजिए

सूची-I	सूची-II
(A) हाइपोजेन्थीन एवं थाइमिडीन का प्रयोग	(I) प्रतिरक्षी अवक्षेपण
(B) F ग्लोब्यूलिन सीरम प्रोटीन का लक्षण चित्रण	(II) ELISPOT आमापन
(C) कैमी ल्युमिनीसेन्ट उत्पाद का निर्माण	(III) हाइब्रिडोमा
(D) साइटोकाइन्स उत्पादित करने वाली कोशिकाओं की संख्या की पहचान एवं मात्रात्मक आकलन	(IV) ELISA

नीचे दिए गए विकल्पों में से सही उत्तर का चयन कीजिए:

- (1) (A)-(III), (B)-(IV), (C)-(I), (D)-(II)
- (2) (A)-(III), (B)-(I), (C)-(IV), (D)-(II)
- (3) (A)-(III), (B)-(IV), (C)-(II), (D)-(I)
- (4) (A)-(II), (B)-(I), (C)-(IV), (D)-(III)

**Options :**

920906112781. 1
920906112782. 2
920906112783. 3
920906112784. 4

**Question Number : 97 Question Id : 92090628539 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Match List I with List II :

List I	List II
(A) <i>Marchantia</i>	(I) Capsule is polygonal
(B) <i>Anthoceros</i>	(II) Capsule is Pear-shaped, curved and asymmetrical
(C) <i>Polytrichum</i>	(III) Capsule is bristle or Thornlike
(D) <i>Funaria</i>	(IV) Capsule is oval shaped

Choose the correct answer from the options given below:

- (1) (A)-(II), (B)-(I), (C)-(III), (D)-(IV)
- (2) (A)-(I), (B)-(II), (C)-(IV), (D)-(III)
- (3) (A)-(IV), (B)-(III), (C)-(I), (D)-(II)
- (4) (A)-(III), (B)-(I), (C)-(II), (D)-(IV)

**Options :**

920906112785. 1  
920906112786. 2  
920906112787. 3  
920906112788. 4

**Question Number : 97 Question Id : 92090628539 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

सूची I के साथ सूची II का मिलान कीजिए

सूची-I	सूची-II
(A) मार्केन्शिया	(I) कैप्सूल (संपुटिका) बहुभुजी होता है।
(B) एन्थोसिरोस	(II) कैप्सूल (संपुटिका) नासपाती-आकृति, का विकृत एवं असममित होता है
(C) पोलीट्राइकम्	(III) कैप्सूल (संपुटिका) शूड एवं सींग के समान होता है।
(D) फ्यूनेरिया	(IV) कैप्सूल (संपुटिका), अंडाकार होता है।

नीचे दिए गए विकल्पों में से सही उत्तर का चयन कीजिए:

- (1) (A)-(III), (B)-(I), (C)-(III), (D)-(IV)  
(2) (A)-(I), (B)-(II), (C)-(IV), (D)-(III)  
(3) (A)-(IV), (B)-(III), (C)-(I), (D)-(II)  
(4) (A)-(III), (B)-(I), (C)-(II), (D)-(IV)

**Options :**

920906112785. 1  
920906112786. 2  
920906112787. 3  
920906112788. 4

**Question Number : 98 Question Id : 92090628540 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Match List I with List II :

List I (Phylum)	List II (Excretory organ)
(A) Platyhelminthes	(I) Malpighian tubules
(B) Annelida	(II) Nephridia
(C) Arthropoda	(III) Flame cells
(D) Mollusca	(IV) Feather like Gills

Choose the correct answer from the options given below:

- (1) (A)-(I), (B)-(II), (C)-(IV), (D)-(III)
- (2) (A)-(II), (B)-(III), (C)-(IV), (D)-(I)
- (3) (A)-(III), (B)-(II), (C)-(I), (D)-(IV)
- (4) (A)-(II), (B)-(III), (C)-(IV), (D)-(I)

**Options :**

920906112789. 1  
920906112790. 2  
920906112791. 3  
920906112792. 4

**Question Number : 98 Question Id : 92090628540 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

सूची I के साथ सूची II का मिलान कीजिए

सूची-I	सूची-II
(A) प्लैटीहेल्मिन्थीस	(I) मैलपीगी नलिकाएँ
(B) एनीलिडा	(II) नेफ्रिडिया
(C) आर्थ्रोपोडा	(III) ज्वाला कोशिकाएँ
(D) मोलस्का	(IV) पंख जैसे क्लोम

नीचे दिए गए विकल्पों में से सही उत्तर का चयन कीजिए:

- (1) (A)-(I), (B)-(II), (C)-(IV), (D)-(III)
- (2) (A)-(II), (B)-(III), (C)-(IV), (D)-(I)
- (3) (A)-(III), (B)-(II), (C)-(I), (D)-(IV)
- (4) (A)-(II), (B)-(III), (C)-(IV), (D)-(I)

**Options :**

920906112789. 1  
920906112790. 2  
920906112791. 3  
920906112792. 4

**Question Number : 99 Question Id : 92090628541 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Match List I with List II :

List I	List II
(A) Negatively charged amino acid	(I) Histidine
(B) Polar uncharged amino acid	(II) Cysteine
(C) Aromatic amino acid	(III) Aspartate
(D) Positively charged amino acid	(IV) Phenylalanine

Choose the correct answer from the options given below:

- (1) (A)-(I), (B)-(II), (C)-(III), (D)-(IV)
- (2) (A)-(IV), (B)-(III), (C)-(I), (D)-(II)
- (3) (A)-(I), (B)-(II), (C)-(III), (D)-(IV)
- (4) (A)-(IV), (B)-(III), (C)-(II), (D)-(I)

**Options :**

920906112793. 1  
920906112794. 2  
920906112795. 3  
920906112796. 4

**Question Number : 99 Question Id : 92090628541 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

सूची I के साथ सूची II का मिलान कीजिए

सूची-I	सूची-II
(A) नकारात्मक आवेशित ऐमिनो अम्ल	(I) हिस्टीडीन
(B) ध्रुवीय अनावेशित ऐमिनो अम्ल	(II) सिस्टीन
(C) ऐरोमेटिक ऐमिनो अम्ल	(III) एस्पारटेट
(D) धनात्मक आवेशित ऐमिनो अम्ल	(IV) फिनाइल एलानीन

नीचे दिए गए विकल्पों में से सही उत्तर का चयन कीजिए:

- (1) (A)-(III), (B)-(II), (C)-(II), (D)-(II)
- (2) (A)-(II), (B)-(II), (C)-(II), (D)-(II)
- (3) (A)-(III), (B)-(II), (C)-(II), (D)-(II)
- (4) (A)-(III), (B)-(II), (C)-(II), (D)-(II)

**Options :**

920906112793. 1  
920906112794. 2  
920906112795. 3  
920906112796. 4

**Question Number : 100 Question Id : 92090628542 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

Match List I with List II :

List I	List II
(A) Stearic acid	(I) n-octadecanoic acid
(B) Palmitic acid	(II) n-dodecanoic acid
(C) Myristic acid	(III) n-tetradecanoic acid
(D) Lauri acid	(IV) n-hexadecanoic acid

Choose the correct answer from the options given below:

- (1) (A)-(II), (B)-(I), (C)-(III), (D)-(IV)
- (2) (A)-(I), (B)-(II), (C)-(III), (D)-(IV)
- (3) (A)-(II), (B)-(III), (C)-(I), (D)-(IV)
- (4) (A)-(I), (B)-(IV), (C)-(III), (D)-(II)

**Options :**

920906112797. 1  
920906112798. 2  
920906112799. 3  
920906112800. 4

**Question Number : 100 Question Id : 92090628542 Question Type : MCQ Option Shuffling : No Is  
Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum  
Instruction Time : 0**

**Correct Marks : 4 Wrong Marks : 1**

सूची I के साथ सूची II का मिलान कीजिए

सूची-I	सूची-II
(A) स्टीएरीक अम्ल	(I) n-ऑक्टोडेकानोइक अम्ल
(B) पामेटिक अम्ल	(II) n-डोडेकानोइक अम्ल
(C) मिरिस्टीक अम्ल	(III) n-टेट्राडेकानोइक अम्ल
(D) लॉरिक अम्ल	(IV) n-हेक्सा डेकानोइक अम्ल

नीचे दिए गए विकल्पों में से सही उत्तर का चयन कीजिए:

- (1) (A)-(II), (B)-(I), (C)-(III), (D)-(IV)
- (2) (A)-(I), (B)-(II), (C)-(III), (D)-(IV)
- (3) (A)-(II), (B)-(III), (C)-(I), (D)-(IV)
- (4) (A)-(I), (B)-(IV), (C)-(III), (D)-(II)

**Options :**

920906112797. 1  
920906112798. 2  
920906112799. 3  
920906112800. 4