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# **CGPSC**

## **SO**

**Previous Year Paper**  
**(Biochemistry)**  
**14 Feb, 2016**



## Chhattisgarh Public Service Commission

### Notations :

- Options shown in **green** color and with  icon are correct.
- Options shown in **red** color and with  icon are incorrect.

**Question Paper Name:** Biochemistry 14th Feb 2016 Actual

**Subject Name:** Biochemistry

**Duration:** 180

### Biochemistry

Group Maximum Duration : 0  
Group Minimum Duration : 180  
Revisit allowed for view? : No  
Revisit allowed for edit? : No

### General Knowledge on Chhattisgarh

Mandatory or Optional: Mandatory

**Question Number : 1 Question Id : 959376601 Question Type : MCQ**

**Correct : 2 Wrong : 1**

Dandor word related with \_\_\_\_\_.

### Options :

-  Sarguja
-  Bastar
-  Rajnandgaon
-  Khairagarh
-  None of the other option

**Question Number : 1 Question Id : 959376601 Question Type : MCQ**

**Correct : 2 Wrong : 1**

दाण्डोर शब्द संबंधित है-

### Options :

-  सरगुजा
-  बस्तर
-  राजनान्दगांव

4. ✘ खैरागढ़

5. ✘ अन्य विकल्पों में से कोई नहीं

Question Number : 2 Question Id : 959376602 Question Type : MCQ

Correct : 2 Wrong : 1

Where is Deorani-Jethani temple in Chattisgarh situated?

Options :

1. ✘ Ratnapur

2. ✘ Kanker

3. ✘ Dantewada

4. ✓ Talagaon

5. ✘ None of the other option

Question Number : 2 Question Id : 959376602 Question Type : MCQ

Correct : 2 Wrong : 1

देवरानी जेठानी मंदिर छत्तीसगढ़ में कहां विद्मान है?

Options :

1. ✘ रत्नपुर

2. ✘ कांकेर

3. ✘ दंतेवाड़ा

4. ✓ तालागांव

5. ✘ अन्य विकल्पों में से कोई नहीं

Question Number : 3 Question Id : 959376603 Question Type : MCQ

Correct : 2 Wrong : 1

In which place Ratnakar Jha related as a freedom fighter?

Options :

1. ✘ Raipur

2. ✘ Rajnandgaon

3. ✘ Bilaspur

4. ✘ Raigarh

5. ✓ None of the other option

Question Number : 3 Question Id : 959376603 Question Type : MCQ

Correct : 2 Wrong : 1

रत्नाकर झा किस स्थान के स्वतंत्रता संग्राम सेनानी थे?

Options :

1. ✘ रायपुर
2. ✘ राजनान्दगांव
3. ✘ बिलासपुर
4. ✘ रायगढ़
5. ✓ अन्य विकल्पों में से कोई नहीं

Question Number : 4 Question Id : 959376604 Question Type : MCQ

Correct : 2 Wrong : 1

In Surat Congress 1907, who participated as a member of Chattisgarh?

Options :

1. ✓ Pt. Sundarlal Sharma
2. ✘ Pt. Ravishankar Shukla
3. ✘ Pt. Lochan Prasad Pandey
4. ✘ Shri. Narayan Rao Meghawale
5. ✘ None of the other option

Question Number : 4 Question Id : 959376604 Question Type : MCQ

Correct : 2 Wrong : 1

सूरत कांग्रेस 1907 में छत्तीसगढ़ का प्रतिनिधित्व सदस्य के रूप में किसने किया था?

Options :

1. ✓ पं. सुन्दरलाल शर्मा
2. ✘ पं. रविशंकर शुक्ला
3. ✘ पं. लोचन प्रसाद पाण्डे
4. ✘ श्री. नारायणराव मेघावाले
5. ✘ अन्य विकल्पों में से कोई नहीं

Question Number : 5 Question Id : 959376605 Question Type : MCQ

Correct : 2 Wrong : 1

Which of the following pair (tribal revolt in Chhattisgarh and leader) is correctly matched?

Options :

1. ✘ Bhopalpatnam Revolt 1795 - Kora Majhi
2. ✘ Lingagiri Revolt 1856-57 - Dalganjan Singh
3. ✘ Koi Revolt 1859 - Jugga Dorla
4. ✓ Muriya Revolt 1876 - Jhada Sirha
5. ✘ Bastar Revolt 1910 - Dinanath

Question Number : 5 Question Id : 959376605 Question Type : MCQ

Correct : 2 Wrong : 1

निम्नलिखित में से कौन सी जोड़ी (छत्तीसगढ़ में जनजाती विद्रोह एवं नेता) सुमेलित है?

Options :

1. ✗ भोपालपटनम् विद्रोह 1795 - कोरा मांझी
2. ✗ लिंगगिरी विद्रोह 1856-57 - दलगंजन सिंह
3. ✗ कोड़ विद्रोह 1859 - जुग्गा डोरला
4. ✓ मुरिया विद्रोह 1876 - झाड़ा सिरहा
5. ✗ बस्तर विद्रोह 1910 - दीनानाथ

Question Number : 6 Question Id : 959376606 Question Type : MCQ

Correct : 2 Wrong : 1

Which of the following pair (European Traveller in Chhattisgarh and Maratha Ruler) is correctly matched?

Options :

1. ✗ Forester - Bimbaji Bhonsale
2. ✗ Colebrooke - Parsooji Bhonsale
3. ✓ Captain Blunt - Vyanko Ji Bhonsale
4. ✗ Charles grant - Appa Saheb Bhonsale
5. ✗ Crawfurd - Purshoiji Bhonsale

Question Number : 6 Question Id : 959376606 Question Type : MCQ

Correct : 2 Wrong : 1

निम्नलिखित में से कौन सी जोड़ी (छत्तीसगढ़ में युरोपियान यात्री एवं मराठा शासक) सुमेलित है?

Options :

1. ✗ फारेस्टर - बिम्बाजी भोंसले
2. ✗ कोलब्रूक - परसों जी भोंसले
3. ✓ केप्टन ट्लंट - ट्यॉकोजी भोंसले
4. ✗ चालर्स ग्रांट - अप्पासाहब भोंसले
5. ✗ क्राफर्ड - पुरषोजी भोंसले

Question Number : 7 Question Id : 959376607 Question Type : MCQ

Correct : 2 Wrong : 1

Which of the following pair (kalchuri temple, Math and king) is not correctly matched?

Options :

1. ✘ Prithvivedeshwar Temple, Tumman - Prithvi Dev I
2. ✘ Vishnu Temple, Janjgir - Jajalla Dev I
3. ✓ Shiv Temple, Pali - Prithivi Dev II
4. ✘ Laxman Temple, Kharod - Ratna Dev -II
5. ✘ Duhadhi Math, Raipur - Jai Singh Dev

Question Number : 7 Question Id : 959376607 Question Type : MCQ

Correct : 2 Wrong : 1

निम्नलिखित में से कौन सी जोड़ी (कलचुरी मंदिर, मठ एवं राजा) सुमेलित नहीं है?

Options :

1. ✘ पृथ्वीदेवेश्वर मंदिर, तुम्माण - पृथ्वीदेव प्रथम
2. ✘ विष्णु मंदिर, जांजगीर - जाजल्लदेव प्रथम
3. ✓ शिव मंदिर, पाली - पृथ्वीदेव द्वितीय
4. ✘ लक्ष्मण मंदिर, खरौद - रत्नदेव द्वितीय
5. ✘ दुधाधारीमठ, रायपुर - जयसिंह देव

Question Number : 8 Question Id : 959376608 Question Type : MCQ

Correct : 2 Wrong : 1

The highest peak in Chhattisgarh State is \_\_\_\_\_.

Options :

1. ✘ Main pat
2. ✘ Jarang pat
3. ✘ Pendra pat
4. ✓ Samari pat
5. ✘ None of the other option

Question Number : 8 Question Id : 959376608 Question Type : MCQ

Correct : 2 Wrong : 1

छत्तीसगढ़ प्रदेश में सबसे ऊँचा पाट है-

Options :

1. ✘ मैनपाट
2. ✘ जारंगपाट

3. ✗ पेन्ड्रापाट

4. ✓ सामरीपाट

5. ✗ अन्य विकल्पों में से कोई नहीं

Question Number : 9 Question Id : 959376609 Question Type : MCQ

Correct : 2 Wrong : 1

In which of the following hemispheres Chhattisgarh State is situated?

Options :

1. ✓ Northern and Eastern

2. ✗ Southern and Eastern

3. ✗ Northern and Western

4. ✗ Southern and Western

5. ✗ None of the other option

Question Number : 9 Question Id : 959376609 Question Type : MCQ

Correct : 2 Wrong : 1

छत्तीसगढ़ राज्य निम्नलिखित में से किस गोलार्ध में स्थित है?

Options :

1. ✓ उत्तरी और पुर्वी

2. ✗ दक्षिणी और पुर्वी

3. ✗ उत्तरी और पश्चिमी

4. ✗ दक्षिणी और पश्चिमी

5. ✗ अन्य विकल्पों में से कोई नहीं

Question Number : 10 Question Id : 959376610 Question Type : MCQ

Correct : 2 Wrong : 1

Which is the largest in geographical region of Chhattisgarh?

Options :

1. ✗ Sarguja Besin

2. ✗ Jashpur Samari Pat region

3. ✓ Mahanadi Besin

4. ✗ Dandakaranya region

5. ✗ None of the other option

Question Number : 10 Question Id : 959376610 Question Type : MCQ

Correct : 2 Wrong : 1

छत्तीसगढ़ के भौगोलिक क्षेत्र में सबसे बड़ा कौन है?

Options :

1. ❌ सरगुजा बेसिन
2. ❌ जशपुर सामरी पाट प्रदेश
3. ✓ महानदी बेसिन
4. ❌ दन्डाकारण्य
5. ❌ अन्य विकल्पों में से कोई नहीं

Question Number : 11 Question Id : 959376611 Question Type : MCQ

Correct : 2 Wrong : 1

The cave of Kutumbasar is in:

Options :

1. ❌ Janjgir
2. ❌ Raigarh
3. ✓ Bastar
4. ❌ Mahasamund
5. ❌ None of the other option

Question Number : 11 Question Id : 959376611 Question Type : MCQ

Correct : 2 Wrong : 1

कुटुम्बसर की गुफा है-

Options :

1. ❌ जांजगीर
2. ❌ रायगढ़
3. ✓ बस्तर
4. ❌ महासमुद्र
5. ❌ अन्य विकल्पों में से कोई नहीं

Question Number : 12 Question Id : 959376612 Question Type : MCQ

Correct : 2 Wrong : 1

Which of the following district is biggest in area?

Options :

1. ❌ Raipur
2. ✓ Kondagaon
3. ❌ Bemetara
4. ❌ Balod
5. ❌ None of the other option



Question Number : 12 Question Id : 959376612 Question Type : MCQ

Correct : 2 Wrong : 1

निम्नलिखित जिलों में कौन क्षेत्रफल में सबसे बड़ा है?

Options :

1. ✘ रायपुर
2. ✓ कोडागांव
3. ✘ बेमेतरा
4. ✘ बालोद
5. ✘ अन्य विकल्पों में से कोई नहीं

Question Number : 13 Question Id : 959376613 Question Type : MCQ

Correct : 2 Wrong : 1

Which of the following districts has the lowest percentage share of scheduled cast according to census of 2011?

Options :

1. ✘ Kanker
2. ✘ Dantewada
3. ✘ Narayanpur
4. ✓ Bastar
5. ✘ None of the other option

Question Number : 13 Question Id : 959376613 Question Type : MCQ

Correct : 2 Wrong : 1

वर्ष 2011 की जनगणना के अनुसार निम्नलिखित में से किस जिले में अनुसूचित जाति का प्रतिशत हिस्सा सबसे कम है?

Options :

1. ✘ कांकेर
2. ✘ दन्तेवाड़ा
3. ✘ नारायणपुर
4. ✓ बस्तर
5. ✘ अन्य विकल्पों में से कोई नहीं

Question Number : 14 Question Id : 959376614 Question Type : MCQ

Correct : 2 Wrong : 1

Which district has lowest literacy in Chhattisgarh State according to the census 2011?

Options :

1. ✘ Sukma

2. ✘ Narayanpur
3. ✓ Bijapur
4. ✘ Dantewada
5. ✘ None of the other option

Question Number : 14 Question Id : 959376614 Question Type : MCQ

Correct : 2 Wrong : 1

वर्ष 2011 की जनगणना के अनुसार छत्तीसगढ़ राज्य में सबसे कम साक्षरता वाला जिला कौन सा है?

Options :

1. ✘ सुकमा
2. ✘ नारायणपुर
3. ✓ बीजापुर
4. ✘ दन्तेवाड़ा
5. ✘ अन्य विकल्पों में से कोई नहीं

Question Number : 15 Question Id : 959376615 Question Type : MCQ

Correct : 2 Wrong : 1

Which of the following award has not been received the Government of Chhattisgarh for Computerization of public distribution system?

Options :

1. ✘ National E. Governance Award
2. ✘ E. India Award
3. ✘ C. S. I. E. Governance Award
4. ✓ C. F. I. E. Governance Award
5. ✘ None of the other option

Question Number : 15 Question Id : 959376615 Question Type : MCQ

Correct : 2 Wrong : 1

सार्वजनिक वितरण प्रणाली के कम्प्यूटीकरण हेतु छत्तीसगढ़ सरकार को निम्न में से कौन सा आवार्ड प्राप्त नहीं हुआ है?

Options :

1. ✘ नेशनल ई. गवर्नेंस आवार्ड
2. ✘ ई. इंडिया आवार्ड
3. ✘ सी. एस आई. ई. गवर्नेंस आवार्ड
4. ✓ सी. एफ. आई. ई. गवर्नेंस आवार्ड

5. ✘ अन्य विकल्पों में से कोई नहीं

Question Number : 16 Question Id : 959376616 Question Type : MCQ

Correct : 2 Wrong : 1

What is the Central Government's contribution in grants to small and marginal farmer's lender 'Shakambhari' scheme in Chhattisgarh?

Options :

1. ✘ 60 percent
2. ✘ 50 percent
3. ✓ 35 percent
4. ✘ 25 percent
5. ✘ None of the other option

Question Number : 16 Question Id : 959376616 Question Type : MCQ

Correct : 2 Wrong : 1

छत्तीसगढ़ में 'शाकम्भरी' योजना के अन्तर्गत छोटे एवं सीमांत कृषकों के अनुदान में केन्द्र सरकार का योगदान क्या है?

Options :

1. ✘ 60 प्रतिशत
2. ✘ 50 प्रतिशत
3. ✓ 35 प्रतिशत
4. ✘ 25 प्रतिशत
5. ✘ अन्य विकल्पों में से कोई नहीं

Question Number : 17 Question Id : 959376617 Question Type : MCQ

Correct : 2 Wrong : 1

In Which year Chhattisgarh State Forest Development Corporation came into existence?

Options :

1. ✘ May 2003
2. ✘ June 2002
3. ✓ May 2001
4. ✘ June 2001
5. ✘ None of the other option

Question Number : 17 Question Id : 959376617 Question Type : MCQ

Correct : 2 Wrong : 1

छत्तीसगढ़ राज्य वन विकास निगम किस वर्ष अस्तित्व में आया?

Options :

1. ✘ मई 2003
2. ✘ जुन 2002
3. ✓ मई 2001
4. ✘ जुन 2001
5. ✘ अन्य विकल्पों में से कोई नहीं

Question Number : 18 Question Id : 959376618 Question Type : MCQ

Correct : 2 Wrong : 1

Which is not covered under the “National Agricultural Development Scheme” in Chhattisgarh State?

Options :

1. ✘ Orchard Programme
2. ✘ Fruit Diversification
3. ✓ Unconserved Cultivation
4. ✘ Fruit Exhibition Programme
5. ✘ None of the other option

Question Number : 18 Question Id : 959376618 Question Type : MCQ

Correct : 2 Wrong : 1

छत्तीसगढ़ राज्य में ‘राष्ट्रीय कृषि विकास योजना’ के अन्तर्गत किसे शामिल नहीं किया गया है?

Options :

1. ✘ फल - वाटिका कार्यक्रम
2. ✘ फल - विविधीकरण
3. ✓ असंरक्षित खेती
4. ✘ फल प्रदर्शनी कार्यक्रम
5. ✘ अन्य विकल्पों में से कोई नहीं

Question Number : 19 Question Id : 959376619 Question Type : MCQ

Correct : 2 Wrong : 1

In which project division ‘Surpagandha’ medicinal plant is planted in Chhattisgarh State?

Options :

1. ✓ Barnavapara-Kawardha
2. ✘ Antagarh-Konta
3. ✘ Sarguja
4. ✘ Panabaras

5. ✘ None of the other option

Question Number : 19 Question Id : 959376619 Question Type : MCQ

Correct : 2 Wrong : 1

निम्न में से किस परियोजना मण्डल में 'सर्पगंधा' नामक वनोषधि का रोपण छत्तीसगढ़ में किया गया है?

Options :

1. ✓ बारनवापार-कवर्धा
2. ✘ अन्तागढ़-कोटा
3. ✘ सरगुजा
4. ✘ पांनाबरस
5. ✘ अन्य विकल्पों में से कोई नहीं

Question Number : 20 Question Id : 959376620 Question Type : MCQ

Correct : 2 Wrong : 1

Which is the growth rate of Net State Domestic Product of Chhattisgarh at constant prices of 2004-05 in the year 2013-14?

Options :

1. ✘ 5.86 percent
2. ✘ 4.99 percent
3. ✘ 4.31 percent
4. ✓ 2.96 percent
5. ✘ None of the other option

Question Number : 20 Question Id : 959376620 Question Type : MCQ

Correct : 2 Wrong : 1

वर्ष 2013-14 में 2004-05 की स्थिर कीमतों पर छत्तीसगढ़ राज्य के विशुद्ध घरेलू उत्पाद की आर्थिक वृद्धि दर क्या है?

Options :

1. ✘ 5.86 प्रतिशत
2. ✘ 4.99 प्रतिशत
3. ✘ 4.31 प्रतिशत
4. ✓ 2.96 प्रतिशत
5. ✘ अन्य विकल्पों में से कोई नहीं

Question Number : 21 Question Id : 959376621 Question Type : MCQ

Correct : 2 Wrong : 1

What is correct about tendered vote & ballot paper?

- i. It is same as any other ballot paper used at the polling centre.
- ii. It is issued to blind voters.
- iii. It is dropped in the ballot box.
- iv. It is the last ballot paper issued to the polling centre.
- v. It is casting of vote through electronic voting machine.
- vi. It is given to the Presiding Officer in his hand.
- vii. It is the technical terminology of postal ballot paper.
- viii. In general conditions no need to count it.

Options :

- 1. ✘ i, iii, iv, viii
- 2. ✘ ii, iii, iv, vi
- 3. ✓ i, iv, vi, viii
- 4. ✘ iv, v, vii, viii
- 5. ✘ None of the other option

Question Number : 21 Question Id : 959376621 Question Type : MCQ

Correct : 2 Wrong : 1

निविदित मत और मतपत्र के विषय में सही क्या है?

- i. यह मतदान केन्द्र में उपयोग किए जाने वाले मतपत्रों के समान होता है।
- ii. यह अंधे मतदाताओं को दिया जाता है।
- iii. यह मतपेटी में डाला जाता है।
- iv. यह मतदान केन्द्र को प्रदत्त अन्तिम मतपत्र होता है।
- v. यह इलेक्ट्रॉनिक वोटिंग मशीन से मतदान करना है।
- vi. यह पीठासीन अधिकारी के हाथ में दिया जाता है।
- vii. यह डाक मतपत्र की तकनीकी शब्दावली है।
- viii. सामान्य परिस्थितियों में इनकी गणना करना आवश्यक नहीं है।

Options :

- 1. ✘ i, iii, iv, viii
- 2. ✘ ii, iii, iv, vi
- 3. ✓ i, iv, vi, viii
- 4. ✘ iv, v, vii, viii
- 5. ✘ अन्य विकल्पों में से कोई नहीं

Question Number : 22 Question Id : 959376622 Question Type : MCQ

Correct : 2 Wrong : 1

In which act 'tenure holder', 'Government lessee', 'land revenue' and 'rent' is defined?

Options :

1. ❌ Chhattisgarh Land Revenue Code 1956
2. ✅ Chhattisgarh Land Revenue Code 1959
3. ❌ Chhattisgarh Land Revenue Code 2000
4. ❌ Chhattisgarh Land Revenue Code 2004
5. ❌ None of the other option

Question Number : 22 Question Id : 959376622 Question Type : MCQ

Correct : 2 Wrong : 1

किस अधिनियम में 'भुधारी', 'सरकारी पट्टेदार', 'भूराजस्व' और 'लगान' को परिभाषित किया गया है?

Options :

1. ❌ छत्तीसगढ़ भूराजस्व संहिता 1956
2. ✅ छत्तीसगढ़ भूराजस्व संहिता 1959
3. ❌ छत्तीसगढ़ भूराजस्व संहिता 2000
4. ❌ छत्तीसगढ़ भूराजस्व संहिता 2004
5. ❌ अन्य विकल्पों में से कोई नहीं

Question Number : 23 Question Id : 959376623 Question Type : MCQ

Correct : 2 Wrong : 1

What is correct of the following?

- (i) 20% of Sarpanch who are ex-officio member of Janpad Panchayat can be member of standing committee of Janpad Panchayat.
- (ii) 20% of Sarpanch who are ex-officio member of Janpad Panchayat cannot be the member of standing committee of Janpad Panchayat
- (iii) 20% of Sarpanch who are ex-officio member of Janpad Panchayat, their tenure is one year.
- (iv) 20% of Sarpanch who are ex-officio members of Janpad Panchayat, their tenure is five years.
- (v) 20% of Sarpanch who are ex-officio members of Janpad Panchayat can be given remembrance.
- (vi) 20% of Sarpanch who are ex-officio members of Janpad Panchayat cannot be given remembrance.
- (vii) 20% of Sarpanch who are ex-officio members of Janpad Panchayat are selected by the President of Janpad Panchayat.
- (viii) 20% of Sarpanch who are ex-officio members of Janpad Panchayat are selected by lottery.

Options :

1. ❌ i, iii, v, vii
2. ❌ ii, iv, vi, viii

3. ✗ i, iv, v, viii

4. ✓ ii, iii, vi, viii

5. ✗ i, iii, vi, vii

Question Number : 23 Question Id : 959376623 Question Type : MCQ

Correct : 2 Wrong : 1

निम्न में से सही क्या है?

- i. 20% सरपंच जो जनपद पंचायत के पदेन सदस्य होते हैं, जनपद पंचायत की स्थायी समितियों के सदस्य हो सकते हैं।
- ii. 20% सरपंच जो जनपद पंचायत के पदेन सदस्य होते हैं, जनपद पंचायत की स्थायी समितियों के पदेन सदस्य नहीं हो सकते।
- iii. 20% सरपंच जो जनपद पंचायत के पदेन सदस्य होते हैं, का कार्यकाल एक वर्ष होता है।
- iv. 20% सरपंच जो जनपद पंचायत के पदेन सदस्य होते हैं, का कार्यकाल 5 वर्ष होता है।
- v. 20% सरपंच जो जनपद पंचायत के पदेन सदस्य होते हैं, को पुनर्सदस्यता दी जा सकती है।
- vi. 20% सरपंच जो जनपद पंचायत के पदेन सदस्य होते हैं, को पुनर्सदस्यता नहीं दी जा सकती।
- vii. 20% सरपंच जो जनपद पंचायत के पदेन सदस्य होते हैं, चयन जनपद पंचायत के अध्यक्ष के द्वारा की जाती है।
- viii. 20% सरपंच जो जनपद पंचायत के पदेन सदस्य होते हैं, का चयन लॉट द्वारा किया जाता है।

Options :

1. ✗ i, iii, v, vii

2. ✗ ii, iv, vi, viii

3. ✗ i, iv, v, viii

4. ✓ ii, iii, vi, viii

5. ✗ i, iii, vi, vii

Question Number : 24 Question Id : 959376624 Question Type : MCQ

Correct : 2 Wrong : 1

In Janpad Panchayat or Zila Panchayat except the elected member, who can be a member?

Options :

1. ✗ Nominated member

2. ✓ Ex-officio member

3. ❌ Member appointed by Governor
4. ❌ Minority members
5. ❌ None of the other option

Question Number : 24 Question Id : 959376624 Question Type : MCQ

Correct : 2 Wrong : 1

जनपद पंचायत अथवा जिला पंचायत में निर्वाचित सदस्यों के अलावा, कौन सदस्य होता है?

Options :

1. ❌ नामांकित सदस्य
2. ✓ पदेन सदस्य
3. ❌ राज्यपाल द्वारा नियुक्त सदस्य
4. ❌ अल्पसंख्यक सदस्य
5. ❌ अन्य विकल्पों में से कोई नहीं

Question Number : 25 Question Id : 959376625 Question Type : MCQ

Correct : 2 Wrong : 1

Who said, "If our independence is to reflect the people's voice, greater the powers to Panchayats, the better for the people."?

Options :

1. ✓ Pt. Jawahar Lal Nehru
2. ❌ Lal Bahadur Shastri
3. ❌ Mahatma Gandhi
4. ❌ Deendayal Upadhyay
5. ❌ Atal Bihari Bajpeyi

Question Number : 25 Question Id : 959376625 Question Type : MCQ

Correct : 2 Wrong : 1

किसने कहा "यदि हमारी स्वाधीनता को जनता की आवाज की प्रतिध्वनि बनाना है तो पंचायतों को जितनी अधिक शक्ति मिले, जनता के लिए उतना ही अच्छा है"?

Options :

1. ✓ पं जवाहार लाल नेहरू
2. ❌ लाल बहादुर शास्त्री
3. ❌ महात्मा गांधी
4. ❌ दीनदयाल उपाध्याय

5. ✘ अटल बिहारी बाजपेयी

Question Number : 26 Question Id : 959376626 Question Type : MCQ

Correct : 2 Wrong : 1

Which articles of Constitution talks of the formation of Gram Panchayat in the State?

Options :

1. ✘ Article 53
2. ✘ Article 51
3. ✘ Article 19
4. ✓ Article 40
5. ✘ None of the other option

Question Number : 26 Question Id : 959376626 Question Type : MCQ

Correct : 2 Wrong : 1

संविधान के किस अनुच्छेद में राज्य को ग्राम पंचायतों की स्थापना का निर्देश दिया गया है?

Options :

1. ✘ अनुच्छेद 53
2. ✘ अनुच्छेद 51
3. ✘ अनुच्छेद 19
4. ✓ अनुच्छेद 40
5. ✘ अन्य विकल्पों में से कोई नहीं

Question Number : 27 Question Id : 959376627 Question Type : MCQ

Correct : 2 Wrong : 1

Which district is industrially most developed in Chhattisgarh?

Options :

1. ✘ Raigarh
2. ✓ Durg
3. ✘ Raipur
4. ✘ Bilaspur
5. ✘ None of the other option

Question Number : 27 Question Id : 959376627 Question Type : MCQ

Correct : 2 Wrong : 1

छत्तीसगढ़ में औद्योगिक इण्टि से सर्वाधिक विकसित जिला कौन सा है?

Options :

1. ✘ रायगढ़
2. ✓ दुर्ग
3. ✘ रायपुर
4. ✘ बिलासपुर
5. ✘ अन्य विकल्पों में से कोई नहीं

Question Number : 28 Question Id : 959376628 Question Type : MCQ

Correct : 2 Wrong : 1

In which district of Chhattisgarh Catechu Industry is situated?

Options :

1. ✘ Bastar
2. ✓ Sarguja
3. ✘ Dantewada
4. ✘ Jashpur
5. ✘ None of the other option

Question Number : 28 Question Id : 959376628 Question Type : MCQ

Correct : 2 Wrong : 1

छत्तीसगढ़ में कत्था उद्योग किस जिले में स्थित है?

Options :

1. ✘ बस्तर
2. ✓ सरगुजा
3. ✘ दन्तेवाडा
4. ✘ जशपुर
5. ✘ अन्य विकल्पों में से कोई नहीं

Question Number : 29 Question Id : 959376629 Question Type : MCQ

Correct : 2 Wrong : 1

In dolomite production in 2011-12, What is the rank of Chhattisgarh State in the country?

Options :

1. ✘ Second
2. ✓ First
3. ✘ Fourth
4. ✘ Third
5. ✘ None of the other option

Question Number : 29 Question Id : 959376629 Question Type : MCQ

Correct : 2 Wrong : 1

वर्ष 2011-12 में डोलोमाइट के उत्पादन में छत्तीसगढ़ राज्य का देश में कौन सा स्थान है?

Options :

1. ✗ द्वितीय
2. ✓ प्रथम
3. ✗ चतुर्थ
4. ✗ तृतीय
5. ✗ अन्य विकल्पों में से कोई नहीं

Question Number : 30 Question Id : 959376630 Question Type : MCQ

Correct : 2 Wrong : 1

In which district the Sikasari Project is situated?

Options :

1. ✗ Mahasamund
2. ✗ Dhamtari
3. ✗ Kanker
4. ✗ Balod
5. ✓ None of the other option

Question Number : 30 Question Id : 959376630 Question Type : MCQ

Correct : 2 Wrong : 1

सिकासार परियोजना किस जिले में स्थित है?

Options :

1. ✗ महासमुद्र
2. ✗ धमतरी
3. ✗ कांकेर
4. ✗ बालोद
5. ✓ अन्य विकल्पों में से कोई नहीं

Question Number : 31 Question Id : 959376631 Question Type : MCQ

Correct : 2 Wrong : 1

In which district there is no coal deposit?

Options :

1. ✓ Bastar
2. ✗ Korba
3. ✗ Koria



4. ✘ Raigarh  
5. ✘ None of the other option

Question Number : 31 Question Id : 959376631 Question Type : MCQ

Correct : 2 Wrong : 1

किस जिले में कोयले का निक्षेप नहीं है?

Options :

1. ✓ बस्तर  
2. ✘ कोरबा  
3. ✘ कोरिया  
4. ✘ रायगढ़  
5. ✘ अन्य विकल्पों में से कोई नहीं

Question Number : 32 Question Id : 959376632 Question Type : MCQ

Correct : 2 Wrong : 1

Which one of the following is not a non-conventional Source of energy?

Options :

1. ✓ Nuclear energy  
2. ✘ Solar energy  
3. ✘ Wind energy  
4. ✘ Tidal energy  
5. ✘ None of the other option

Question Number : 32 Question Id : 959376632 Question Type : MCQ

Correct : 2 Wrong : 1

निम्नलिखित में कौन-सा गैरपरम्परागत ऊर्जा स्रोत नहीं है?

Options :

1. ✓ परमाणु ऊर्जा  
2. ✘ सौर ऊर्जा  
3. ✘ पवन ऊर्जा  
4. ✘ ज्वारीय ऊर्जा  
5. ✘ अन्य विकल्पों में से कोई नहीं

Question Number : 33 Question Id : 959376633 Question Type : MCQ

Correct : 2 Wrong : 1

Who is the writer of the book "Chhattisgarhi Bhasha Ka Udavikas"?

Options :

1.  Dr. Narendra Dev Varma
2.  Dr. Shankar Shesh
3.  Dr. Vinay Kumar Pathak
4.  Dr. Bhal Chandra Tailang
5.  None of the other option

Question Number : 33 Question Id : 959376633 Question Type : MCQ

Correct : 2 Wrong : 1

‘छत्तीसगढ़ी भाषा का उद्विकास’ पुस्तक के लेखक कौन है?

Options :

1.  डॉ. नरेन्द्र देव वर्मा
2.  डॉ. शंकर शेष
3.  डॉ. विनय कुमार पाठक
4.  डॉ. भालचंद्र तैलंग
5.  अन्य विकल्पों में से कोई नहीं

Question Number : 34 Question Id : 959376634 Question Type : MCQ

Correct : 2 Wrong : 1

Which is the book written by Rewaram Babu of Ratanpur (Chhattisgarh)?

- (i) Ramashwa Megh
- (ii) Vikram Vilas
- (iii) Gita Madhav Mahakavya

Options :

1.  Only i
2.  Only ii
3.  Only iii
4.  i, ii and iii
5.  None of the other option

Question Number : 34 Question Id : 959376634 Question Type : MCQ

Correct : 2 Wrong : 1

रतनपुर (छत्तीसगढ़) के रेवाराम बाबू द्वारा लिखित पुस्तक कोन सी है?

- i. रामाश्व मेघ
- ii. विक्रम विलास
- iii. गीतामाधव महाकाव्य

Options :

1.  केवल i

2. ✘ केवल ii
3. ✘ केवल iii
4. ✓ i, ii और iii
5. ✘ अन्य विकल्पों में से कोई नहीं

Question Number : 35 Question Id : 959376635 Question Type : MCQ

Correct : 2 Wrong : 1

What is 'Dadaria'?

Options :

1. ✓ Love Song
2. ✘ Bhakti Song (Worship Song)
3. ✘ Dance Song
4. ✘ Festival Song
5. ✘ None of the other option

Question Number : 35 Question Id : 959376635 Question Type : MCQ

Correct : 2 Wrong : 1

'ददरिया' क्या है?

Options :

1. ✓ प्रणय गीत
2. ✘ भक्ति गीत
3. ✘ नृत्य गीत
4. ✘ त्यौहार गीत
5. ✘ अन्य विकल्पों में से कोई नहीं

Question Number : 36 Question Id : 959376636 Question Type : MCQ

Correct : 2 Wrong : 1

Where the Bamalai Devi's temple is located in Chhattisgarh?

Options :

1. ✘ Khairagarh
2. ✓ Dongargarh
3. ✘ Raipur
4. ✘ Ratanpur
5. ✘ None of the other option

Question Number : 36 Question Id : 959376636 Question Type : MCQ

Correct : 2 Wrong : 1

छत्तीसगढ़ में बमलाई देवी का मंदिर कहां है?

Options :

1. ✗ खैरागढ़
2. ✓ डोंगरगढ़
3. ✗ रायपुर
4. ✗ रत्नपुर
5. ✗ अन्य विकल्पों में से कोई नहीं

Question Number : 37 Question Id : 959376637 Question Type : MCQ

Correct : 2 Wrong : 1

When is the “Guara Geet” sung?

Options :

1. ✗ Janmastami
2. ✗ Ganesh Chaturthi
3. ✗ Navratri
4. ✓ Deepawali
5. ✗ None of the other option

Question Number : 37 Question Id : 959376637 Question Type : MCQ

Correct : 2 Wrong : 1

‘गौरा-गीत’ कब गाते हैं?

Options :

1. ✗ जन्माष्टमी
2. ✗ गणेश चतुर्थी
3. ✗ नवरात्रि
4. ✓ दीपावली
5. ✗ अन्य विकल्पों में से कोई नहीं

Question Number : 38 Question Id : 959376638 Question Type : MCQ

Correct : 2 Wrong : 1

Who are the main characters of the Chhattisgarhi Lokgayan (Folk Song) “Foolbasan”?

Options :

1. ✗ Hidimba and Bheem
2. ✗ Dropati and Arjun
3. ✓ Sita and Laxman
4. ✗ Lorik and Chanda

5. ❌ None of the other option

Question Number : 38 Question Id : 959376638 Question Type : MCQ

Correct : 2 Wrong : 1

छत्तीसगढ़ी लोकगायन “फूलबासन” के मुख्य पात्र कौन हैं?

Options :

1. ❌ हिडिम्बा और भीम
2. ❌ द्रौपदी और अर्जुन
3. ✓ सीता और लक्ष्मण
4. ❌ लोरिक और चन्दा
5. ❌ अन्य विकल्पों में से कोई नहीं

Question Number : 39 Question Id : 959376639 Question Type : MCQ

Correct : 2 Wrong : 1

Who perform the Panthi Nritya (Dance) in Chhattisgarh?

Options :

1. ❌ Kabir panthi
2. ✓ Satnami
3. ❌ Tribals
4. ❌ Raut
5. ❌ None of the other option

Question Number : 39 Question Id : 959376639 Question Type : MCQ

Correct : 2 Wrong : 1

छत्तीसगढ़ में “पंथीनृत्य” कौन करते हैं?

Options :

1. ❌ कबीर पंथी
2. ✓ सतनामी
3. ❌ आदिवासी
4. ❌ राऊत
5. ❌ अन्य विकल्पों में से कोई नहीं

Question Number : 40 Question Id : 959376640 Question Type : MCQ

Correct : 2 Wrong : 1

Where is origin of “Mahanadi”?

Options :

1. ❌ Rajim

- 2. ✘ Shivri Narayan
- 3. ✓ Sihava (Pharsiya)
- 4. ✘ Mahasamund
- 5. ✘ None of the other option

Question Number : 40 Question Id : 959376640 Question Type : MCQ

Correct : 2 Wrong : 1

महानदी का उद्गम कहाँ है?

Options :

- 1. ✘ राजिम
- 2. ✘ शिवरी नारायण
- 3. ✓ सिहावा (फरसिया)
- 4. ✘ महासमुन्द
- 5. ✘ अन्य विकल्पों में से कोई नहीं

Question Number : 41 Question Id : 959376641 Question Type : MCQ

Correct : 2 Wrong : 1

Why the “Jogimara” is famous?

Options :

- 1. ✘ Sculpture
- 2. ✘ Silk craft
- 3. ✘ Dhokala shilp ( Bell Metal)
- 4. ✘ Wooden craft
- 5. ✓ None of the other option

Question Number : 41 Question Id : 959376641 Question Type : MCQ

Correct : 2 Wrong : 1

“जोगीमारा” क्यों प्रसिद्ध है?

Options :

- 1. ✘ मुर्ती कला
- 2. ✘ कोसा शिल्प
- 3. ✘ ढोकला शिल्प
- 4. ✘ काष्ठ शिल्प
- 5. ✓ अन्य विकल्पों में से कोई नहीं

Question Number : 42 Question Id : 959376642 Question Type : MCQ

Correct : 2 Wrong : 1

What is the meaning of Chhattisgarhi riddle “Ek parra lai, Badar ma Chhariyai”?

Options :

1. ✘ Lai (Parched Peddy)
2. ✘ Dant (Teeth)
3. ✓ Chandaini (stars)
4. ✘ Murra (Parched Rice)
5. ✘ None of the other option

Question Number : 42 Question Id : 959376642 Question Type : MCQ

Correct : 2 Wrong : 1

छत्तीसगढ़ी जनश्लोक “एक परा लाई, बादर मा छरियाई” का क्या अर्थ है?

Options :

1. ✘ लाई (धान की लाई)
2. ✘ दांत
3. ✓ चंदैनी (तारे)
4. ✘ मुर्रा (मुरमुरा)
5. ✘ अन्य विकल्पों में से कोई नहीं

Question Number : 43 Question Id : 959376643 Question Type : MCQ

Correct : 2 Wrong : 1

What is the dialect of “Bhataranat”?

Options :

1. ✘ Halbi
2. ✘ Gondi
3. ✘ Gadbi
4. ✘ Chhattisgarhi
5. ✓ None of the other option

Question Number : 43 Question Id : 959376643 Question Type : MCQ

Correct : 2 Wrong : 1

“भतरानाट” की बोली क्या है?

Options :

1. ✘ हल्बी
2. ✘ गोंडी
3. ✘ गदबी
4. ✘ छत्तीसगढ़ी

5. ✓ अन्य विकल्पों में से कोई नहीं

Question Number : 44 Question Id : 959376644 Question Type : MCQ

Correct : 2 Wrong : 1

What is the meaning of Chhattisgarhi idiom “Ek langhan, Ek farhar”?

Options :

1. ✓ Nichchat Garib (Very poor)
2. ✗ Upas (Fast)
3. ✗ Ek samay upas (One time fast)
4. ✗ Farhar (Diet of fruits only)
5. ✗ None of the other option

Question Number : 44 Question Id : 959376644 Question Type : MCQ

Correct : 2 Wrong : 1

छत्तीसगढ़ी मुहावरा “एक लांघन एक फरहार” का क्या अर्थ है?

Options :

1. ✓ निच्छट गरीब (अत्यंत गरीब)
2. ✗ उपास (उपवास)
3. ✗ एक समय उपास (एक समय उपवास)
4. ✗ फरहार (फलाहार)
5. ✗ अन्य विकल्पों में से कोई नहीं

Question Number : 45 Question Id : 959376645 Question Type : MCQ

Correct : 2 Wrong : 1

Who inaugurated “Purkhouti Muktangan” in naya Raipur?

Options :

1. ✗ Smt. Pratibha Devi Singh Patil
2. ✓ Dr. A.P.J. Abdul Kalam
3. ✗ Shri Pranab Mukherjee
4. ✗ Shri K.R Narayanan
5. ✗ None of the other option

Question Number : 45 Question Id : 959376645 Question Type : MCQ

Correct : 2 Wrong : 1

नया रायपुर में “पुरखौती मुक्तागन” का उद्घाटन किसने किया था?

Options :

1. ✗ श्रीमती प्रतिभा देवी सिंह पाटिल

2. ✓ डॉ. ए. पी. जे. अब्दूल कलाम

3. ✗ श्री. प्रणब मुखर्जी

4. ✗ श्री. के. आर. नारायणन

5. ✗ अन्य विकल्पों में से कोई नहीं

Question Number : 46 Question Id : 959376646 Question Type : MCQ

Correct : 2 Wrong : 1

Indira kala sangeet vishwa-vidyalaya khairagarh was named after the following.

Options :

1. ✗ Smt Indira Gandhi

2. ✗ Indra Nooyi

3. ✓ Rajkumari Indira Devi

4. ✗ Indira Joshi

5. ✗ None of the other option

Question Number : 46 Question Id : 959376646 Question Type : MCQ

Correct : 2 Wrong : 1

निम्नलिखित में से किसके नाम पर “इंदिरा कला संगीत विश्वविद्यालय” खेरागढ़ का नाम रखा गया?

Options :

1. ✗ श्रीमती इंदिरा गांधी

2. ✗ इंद्रा नुयी

3. ✓ राजकुमारी इंदिरा देवी

4. ✗ इंदिरा जोशी

5. ✗ अन्य विकल्पों में से कोई नहीं

Question Number : 47 Question Id : 959376647 Question Type : MCQ

Correct : 2 Wrong : 1

When the Sardar Vallabh Bhai Patel international Hockey stadium situated at Raipur was dedicated?

Options :

1. ✗ October 2015

2. ✓ November 2015

3. ✗ December 2015

4. ✗ January 2016

5. ✗ None of the other option



Question Number : 47 Question Id : 959376647 Question Type : MCQ

Correct : 2 Wrong : 1

रायपुर स्थित सरदार बलभ भाई पटेल अंतराष्ट्रीय हाकी स्टेडियम का लोकार्पण कब हुआ?

Options :

1. ✗ अक्टूबर 2015
2. ✓ नवम्बर 2015
3. ✗ दिसम्बर 2015
4. ✗ जनवरी 2016
5. ✗ अन्य विकल्पों में से कोई नहीं

Question Number : 48 Question Id : 959376648 Question Type : MCQ

Correct : 2 Wrong : 1

Free computer education programme for school girls students by Chhattisgarh Government is -

Options :

1. ✗ Sarv Shiksha Abhiyan
2. ✗ Indira Sahara Yojna
3. ✗ Padho, Padhabo, School jao Campaign
4. ✓ Chhattisgarh Suchna Shakti Yojna
5. ✗ None of the other option

Question Number : 48 Question Id : 959376648 Question Type : MCQ

Correct : 2 Wrong : 1

छत्तीसगढ़ शासन द्वारा स्कूली छात्राओं हेतु निःशुल्क कम्प्यूटर शिक्षा योजना है-

Options :

1. ✗ सर्वशिक्षा अभियान
2. ✗ इंदिरा सहारा योजना
3. ✗ पढ़बो, पढ़ाबो, स्कूल जाबो अभियान
4. ✓ छत्तीसगढ़ सुचना शक्ति योजना
5. ✗ अन्य विकल्पों में से कोई नहीं

Question Number : 49 Question Id : 959376649 Question Type : MCQ

Correct : 2 Wrong : 1

“Kalpvriksha” yojna in Chhattisgarh was started to provide employment to:

Options :

1.  Scheduled Tribe women
2.  Scheduled Tribe men
3.  Scheduled caste women
4.  Scheduled caste men
5.  None of the other option

Question Number : 49 Question Id : 959376649 Question Type : MCQ

Correct : 2 Wrong : 1

छत्तीसगढ़ में “कल्पवृक्ष योजना” किसको रोजगार उपलब्ध कराने के उद्देश्य से प्रारंभ की गई है?

Options :

1.  अनुसूचित जनजाति की महिलाओं को
2.  अनुसूचित जनजाति के पुरुषों को
3.  अनुसूचित जाति के पुरुषों को
4.  अनुसूचित जाति की महिलाओं को
5.  अन्य विकल्पों में से कोई नहीं

Question Number : 50 Question Id : 959376650 Question Type : MCQ

Correct : 2 Wrong : 1

Who is the present chairman of Chhattisgarh Rajbhasha Aayog?

Options :

1.  Shri Shyam Lal Chaturvedi
2.  Shri Daneshwar Sharma
3.  Dr. Vinay Pathak
4.  Shri Rajendra Pambhai
5.  None of the other option

Question Number : 50 Question Id : 959376650 Question Type : MCQ

Correct : 2 Wrong : 1

छत्तीसगढ़ राजभाषा के वर्तमान अध्यक्ष कौन है?

Options :

1.  श्री. श्यामलाल चतुर्वेदी
2.  श्री. जानेश्वर शर्मा
3.  डॉ. विनय पाठक
4.  श्री. राजेन्द्र पामभोई

5. ✗ अन्य विकल्पों में से कोई नहीं

Biochemistry

Mandatory or Optional:

Mandatory

Question Number : 51 Question Id : 959376651 Question Type : MCQ

Correct : 2 Wrong : 1

Which pair of amino acids have the highest absorbance at 280 nm?

Options :

1. ✗ Thr and His
2. ✗ Phe and Pro
3. ✗ Val and Leu
4. ✓ Trp and Tyr
5. ✗ Tyr and Gly

Question Number : 51 Question Id : 959376651 Question Type : MCQ

Correct : 2 Wrong : 1

Which pair of amino acids have the highest absorbance at 280 nm?

Options :

1. ✗ Thr and His
2. ✗ Phe and Pro
3. ✗ Val and Leu
4. ✓ Trp and Tyr
5. ✗ Tyr and Gly

Question Number : 52 Question Id : 959376652 Question Type : MCQ

Correct : 2 Wrong : 1

Pathogenicity of Pneumococcus in the transformation experiment carried out by Griffith was due to:

Options :

1. ✗ DNA and RNA
2. ✗ DNA
3. ✓ polysaccharide
4. ✗ protein
5. ✗ RNA

Question Number : 52 Question Id : 959376652 Question Type : MCQ

Correct : 2 Wrong : 1

Pathogenicity of Pneumococcus in the transformation experiment carried out by Griffith was due to:

Options :

1. ✘ DNA and RNA
2. ✘ DNA
3. ✓ polysaccharide
4. ✘ protein
5. ✘ RNA

Question Number : 53 Question Id : 959376653 Question Type : MCQ

Correct : 2 Wrong : 1

Cellulose is indigestible by humans due to the lack of the enzyme that hydrolyzes:

Options :

1. ✘  $\alpha$  -1,4 glycosidic bonds
2. ✘  $\alpha$  -1,6 glycosidic bonds
3. ✓  $\beta$  -1,4 glycosidic bonds
4. ✘ Long chain polysaccharides
5. ✘  $\beta$  -1,2 glycosidic bonds

Question Number : 53 Question Id : 959376653 Question Type : MCQ

Correct : 2 Wrong : 1

Cellulose is indigestible by humans due to the lack of the enzyme that hydrolyzes:

Options :

1. ✘  $\alpha$  -1,4 glycosidic bonds
2. ✘  $\alpha$  -1,6 glycosidic bonds
3. ✓  $\beta$  -1,4 glycosidic bonds
4. ✘ Long chain polysaccharides
5. ✘  $\beta$  -1,2 glycosidic bonds

Question Number : 54 Question Id : 959376654 Question Type : MCQ

Correct : 2 Wrong : 1

Prostaglandins are synthesized from:

Options :

1. ✘ Linoleic acid
2. ✓ Arachidonic acid
3. ✘ Oleic acid
4. ✘ Linolenic acid

5. ✘ Palmitic acid

Question Number : 54 Question Id : 959376654 Question Type : MCQ

Correct : 2 Wrong : 1

Prostaglandins are synthesized from:

Options :

1. ✘ Linoleic acid
2. ✓ Arachidonic acid
3. ✘ Oleic acid
4. ✘ Linolenic acid
5. ✘ Palmitic acid

Question Number : 55 Question Id : 959376655 Question Type : MCQ

Correct : 2 Wrong : 1

Which of the following cofactor is required for conversion of proline residues into hydroxyproline in procollagen?

Options :

1. ✘ TPP
2. ✘ Biotin
3. ✘ Niacin
4. ✘ pantothenate
5. ✓ ascorbic acid

Question Number : 55 Question Id : 959376655 Question Type : MCQ

Correct : 2 Wrong : 1

Which of the following cofactor is required for conversion of proline residues into hydroxyproline in procollagen?

Options :

1. ✘ TPP
2. ✘ Biotin
3. ✘ Niacin
4. ✘ pantothenate
5. ✓ ascorbic acid

Question Number : 56 Question Id : 959376656 Question Type : MCQ

Correct : 2 Wrong : 1

Rate limiting enzyme in catecholamine biosynthesis:

Options :

1. ✓ tyrosine hydroxylase
2. ✘ dopa decarboxylase

- 3. ❌ dopamine  $\beta$ -hydroxylase
- 4. ❌ 24-hydroxylase
- 5. ❌ 25-hydroxylase

Question Number : 56 Question Id : 959376656 Question Type : MCQ

Correct : 2 Wrong : 1

Rate limiting enzyme in catecholamine biosynthesis:

Options :

- 1. ✓ tyrosine hydroxylase
- 2. ❌ dopa decarboxylase
- 3. ❌ dopamine  $\beta$ -hydroxylase
- 4. ❌ 24-hydroxylase
- 5. ❌ 25-hydroxylase

Question Number : 57 Question Id : 959376657 Question Type : MCQ

Correct : 2 Wrong : 1

The  $K_M$  of an enzyme is:

Options :

- 1. ❌ one half of the  $V_{max}$
- 2. ✓ the substrate concentration that gives half maximal velocity
- 3. ❌ a dissociation constant
- 4. ❌ the substrate concentration that gives maximal velocity
- 5. ❌ one fourth of  $V_{max}$

Question Number : 57 Question Id : 959376657 Question Type : MCQ

Correct : 2 Wrong : 1

The  $K_M$  of an enzyme is:

Options :

- 1. ❌ one half of the  $V_{max}$
- 2. ✓ the substrate concentration that gives half maximal velocity
- 3. ❌ a dissociation constant
- 4. ❌ the substrate concentration that gives maximal velocity
- 5. ❌ one fourth of  $V_{max}$

Question Number : 58 Question Id : 959376658 Question Type : MCQ

Correct : 2 Wrong : 1

Which of the following enzyme transfers a phosphate group from ATP to another molecule?

Options :

1. ✘ phosphatase
2. ✘ Phosphodiesterase
3. ✓ kinase
4. ✘ esterase
5. ✘ Carboxylase

Question Number : 58 Question Id : 959376658 Question Type : MCQ

Correct : 2 Wrong : 1

Which of the following enzyme transfers a phosphate group from ATP to another molecule?

Options :

1. ✘ phosphatase
2. ✘ Phosphodiesterase
3. ✓ kinase
4. ✘ esterase
5. ✘ Carboxylase

Question Number : 59 Question Id : 959376659 Question Type : MCQ

Correct : 2 Wrong : 1

Catalytic triad of chymotrypsin includes:

Options :

1. ✘ leucine, histidine, cysteine
2. ✓ serine, histidine, aspartic acid
3. ✘ serine, valine, glycine
4. ✘ tyrosine, glycine, histidine
5. ✘ lysine, valine, arginine

Question Number : 59 Question Id : 959376659 Question Type : MCQ

Correct : 2 Wrong : 1

Catalytic triad of chymotrypsin includes:

Options :

1. ✘ leucine, histidine, cysteine
2. ✓ serine, histidine, aspartic acid
3. ✘ serine, valine, glycine
4. ✘ tyrosine, glycine, histidine
5. ✘ lysine, valine, arginine

Question Number : 60 Question Id : 959376660 Question Type : MCQ

Correct : 2 Wrong : 1

Which of the following regulatory action involves a reversible covalent modification of an enzyme?

Options :

1. ✘ allosteric modification
2. ✘ competitive inhibition
3. ✘ conversion of zymogen to active enzyme
4. ✘ Non-competitive inhibition
5. ✓ phosphorylation of a serine hydroxyl on the enzyme

Question Number : 60 Question Id : 959376660 Question Type : MCQ

Correct : 2 Wrong : 1

Which of the following regulatory action involves a reversible covalent modification of an enzyme?

Options :

1. ✘ allosteric modification
2. ✘ competitive inhibition
3. ✘ conversion of zymogen to active enzyme
4. ✘ Non-competitive inhibition
5. ✓ phosphorylation of a serine hydroxyl on the enzyme

Question Number : 61 Question Id : 959376661 Question Type : MCQ

Correct : 2 Wrong : 1

Two proteins have the same molecular mass and have identical net charge at pH 7. The best way to separate them would be to use:

Options :

1. ✘ native gel electrophoresis
2. ✓ SDS-polyacrylamide gel electrophoresis
3. ✘ cation exchange chromatography
4. ✘ anion exchange chromatography
5. ✘ thin layer chromatography

Question Number : 61 Question Id : 959376661 Question Type : MCQ

Correct : 2 Wrong : 1

Two proteins have the same molecular mass and have identical net charge at pH 7. The best way to separate them would be to use:

Options :

1. ✘ native gel electrophoresis
2. ✓ SDS-polyacrylamide gel electrophoresis



- 3. ❌ cation exchange chromatography
- 4. ❌ anion exchange chromatography
- 5. ❌ thin layer chromatography

Question Number : 62 Question Id : 959376662 Question Type : MCQ

Correct : 2 Wrong : 1

Technique employed for the purification of a desired protein in a single step:

Options :

- 1. ❌ Ion exchange chromatography
- 2. ❌ SDS-PAGE
- 3. ✓ Affinity chromatography
- 4. ❌ Gel permeation chromatography
- 5. ❌ Column chromatography

Question Number : 62 Question Id : 959376662 Question Type : MCQ

Correct : 2 Wrong : 1

Technique employed for the purification of a desired protein in a single step:

Options :

- 1. ❌ Ion exchange chromatography
- 2. ❌ SDS-PAGE
- 3. ✓ Affinity chromatography
- 4. ❌ Gel permeation chromatography
- 5. ❌ Column chromatography

Question Number : 63 Question Id : 959376663 Question Type : MCQ

Correct : 2 Wrong : 1

Method used for determining the isoelectric point of membrane proteins:

Options :

- 1. ❌ thin layer chromatography
- 2. ❌ ion exchange chromatography
- 3. ❌ affinity chromatography
- 4. ✓ chromatofocusing
- 5. ❌ ultracentrifugation

Question Number : 63 Question Id : 959376663 Question Type : MCQ

Correct : 2 Wrong : 1

Method used for determining the isoelectric point of membrane proteins:

Options :

1. ✘ thin layer chromatography
2. ✘ ion exchange chromatography
3. ✘ affinity chromatography
4. ✓ chromatofocusing
5. ✘ ultracentrifugation

Question Number : 64 Question Id : 959376664 Question Type : MCQ

Correct : 2 Wrong : 1

Radio isotope used for assessing the kidney function:

Options :

1. ✘ Co<sup>60</sup>
2. ✘ Cr<sup>51</sup>
3. ✓ I<sup>131</sup>
4. ✘ Xe<sup>133</sup>
5. ✘ P<sup>32</sup>

Question Number : 64 Question Id : 959376664 Question Type : MCQ

Correct : 2 Wrong : 1

Radio isotope used for assessing the kidney function:

Options :

1. ✘ Co<sup>60</sup>
2. ✘ Cr<sup>51</sup>
3. ✓ I<sup>131</sup>
4. ✘ Xe<sup>133</sup>
5. ✘ P<sup>32</sup>

Question Number : 65 Question Id : 959376665 Question Type : MCQ

Correct : 2 Wrong : 1

1 curie is equal to:

Options :

1. ✘  $5.7 \times 10^8$  Bq
2. ✘  $7.2 \times 10^9$  Bq
3. ✘  $1.5 \times 10^{10}$  Bq
4. ✓  $3.7 \times 10^{10}$  Bq
5. ✘  $10 \times 10^6$  Bq

Question Number : 65 Question Id : 959376665 Question Type : MCQ

Correct : 2 Wrong : 1

1 curie is equal to:

Options :

1. ✗  $5.7 \times 10^8$  Bq
2. ✗  $7.2 \times 10^9$  Bq
3. ✗  $1.5 \times 10^{10}$  Bq
4. ✓  $3.7 \times 10^{10}$  Bq
5. ✗  $10 \times 10^6$  Bq

Question Number : 66 Question Id : 959376666 Question Type : MCQ

Correct : 2 Wrong : 1

Molecular sub-structures responsible for interaction with electromagnetic radiation are called:

Options :

1. ✗ ionophores
2. ✓ chromophores
3. ✗ desmosomes
4. ✗ calmodulin
5. ✗ ceruloplasmin

Question Number : 66 Question Id : 959376666 Question Type : MCQ

Correct : 2 Wrong : 1

Molecular sub-structures responsible for interaction with electromagnetic radiation are called:

Options :

1. ✗ ionophores
2. ✓ chromophores
3. ✗ desmosomes
4. ✗ calmodulin
5. ✗ ceruloplasmin

Question Number : 67 Question Id : 959376667 Question Type : MCQ

Correct : 2 Wrong : 1

Elemental analysis can be analyzed at concentrations of less than 1 ppm :

Options :

1. ✗ UV-Visible spectrophotometer
2. ✓ Atomic absorption spectrophotometer

- 3. ✘ Circular dichroism
- 4. ✘ Spectrofluorimeter
- 5. ✘ IR Spectrophotometer

Question Number : 67 Question Id : 959376667 Question Type : MCQ

Correct : 2 Wrong : 1

Elemental analysis can be analyzed at concentrations of less than 1 ppm :

Options :

- 1. ✘ UV-Visible spectrophotometer
- 2. ✓ Atomic absorption spectrophotometer
- 3. ✘ Circular dichroism
- 4. ✘ Spectrofluorimeter
- 5. ✘ IR Spectrophotometer

Question Number : 68 Question Id : 959376668 Question Type : MCQ

Correct : 2 Wrong : 1

Spectroscopic method mainly employed for the structural determination of organic compounds:

Options :

- 1. ✘ IR spectroscopy
- 2. ✘ UV-Visible spectroscopy
- 3. ✓ NMR spectroscopy
- 4. ✘ Circular dichroism
- 5. ✘ Luminometry

Question Number : 68 Question Id : 959376668 Question Type : MCQ

Correct : 2 Wrong : 1

Spectroscopic method mainly employed for the structural determination of organic compounds:

Options :

- 1. ✘ IR spectroscopy
- 2. ✘ UV-Visible spectroscopy
- 3. ✓ NMR spectroscopy
- 4. ✘ Circular dichroism
- 5. ✘ Luminometry

Question Number : 69 Question Id : 959376669 Question Type : MCQ

Correct : 2 Wrong : 1

Method employed in the determination of the three-dimensional structure of DNA by Crick, Franklin, Watson and Wilkins:

Options :

1. ✘ NMR spectroscopy
2. ✘ IR spectroscopy
3. ✘ Raman spectroscopy
4. ✓ Fibre diffraction
5. ✘ UV-Visible spectroscopy

Question Number : 69 Question Id : 959376669 Question Type : MCQ

Correct : 2 Wrong : 1

Method employed in the determination of the three-dimensional structure of DNA by Crick, Franklin, Watson and Wilkins:

Options :

1. ✘ NMR spectroscopy
2. ✘ IR spectroscopy
3. ✘ Raman spectroscopy
4. ✓ Fibre diffraction
5. ✘ UV-Visible spectroscopy

Question Number : 70 Question Id : 959376670 Question Type : MCQ

Correct : 2 Wrong : 1

In scanning electron microscope, samples are generally fixed in:

Options :

1. ✘ ethanol
2. ✘ butanol
3. ✓ glutaraldehyde
4. ✘ glycerol
5. ✘ Sodium propionate

Question Number : 70 Question Id : 959376670 Question Type : MCQ

Correct : 2 Wrong : 1

In scanning electron microscope, samples are generally fixed in:

Options :

1. ✘ ethanol
2. ✘ butanol
3. ✓ glutaraldehyde
4. ✘ glycerol

5. ❌ Sodium propionate

Question Number : 71 Question Id : 959376671 Question Type : MCQ

Correct : 2 Wrong : 1

Sedimentation coefficient of biological macromolecules are expressed as:

Options :

1. ❌ curie units
2. ❌ bequerel units
3. ❌ daltons
4. ✓ svedberg units
5. ❌ amu

Question Number : 71 Question Id : 959376671 Question Type : MCQ

Correct : 2 Wrong : 1

Sedimentation coefficient of biological macromolecules are expressed as:

Options :

1. ❌ curie units
2. ❌ bequerel units
3. ❌ daltons
4. ✓ svedberg units
5. ❌ amu

Question Number : 72 Question Id : 959376672 Question Type : MCQ

Correct : 2 Wrong : 1

Golgi complex plays a major role in:

Options :

1. ❌ protein synthesis
2. ✓ glycosylation of lipids and proteins
3. ❌ removal of sulphate from carbohydrate moiety of glycolipids
4. ❌ formation of secondary lysosomes
5. ❌ lateral diffusion of lipids

Question Number : 72 Question Id : 959376672 Question Type : MCQ

Correct : 2 Wrong : 1

Golgi complex plays a major role in:

Options :

1. ❌ protein synthesis
2. ✓ glycosylation of lipids and proteins
3. ❌ removal of sulphate from carbohydrate moiety of glycolipids

- 4. ✘ formation of secondary lysosomes
- 5. ✘ lateral diffusion of lipids

Question Number : 73 Question Id : 959376673 Question Type : MCQ

Correct : 2 Wrong : 1

Which one of the following is found only in plants?

Options :

- 1. ✘ tight junctions
- 2. ✘ gap junctions
- 3. ✓ plasmodesmata
- 4. ✘ desmosomes
- 5. ✘ Plasmosomes

Question Number : 73 Question Id : 959376673 Question Type : MCQ

Correct : 2 Wrong : 1

Which one of the following is found only in plants?

Options :

- 1. ✘ tight junctions
- 2. ✘ gap junctions
- 3. ✓ plasmodesmata
- 4. ✘ desmosomes
- 5. ✘ Plasmosomes

Question Number : 74 Question Id : 959376674 Question Type : MCQ

Correct : 2 Wrong : 1

Lysosomes contain vast array of hydrolytic enzymes which can digest any foreign material except:

Options :

- 1. ✘ Glycogen
- 2. ✘ Starch
- 3. ✘ Lipids
- 4. ✘ Peptides
- 5. ✓ Cellulose

Question Number : 74 Question Id : 959376674 Question Type : MCQ

Correct : 2 Wrong : 1

Lysosomes contain vast array of hydrolytic enzymes which can digest any foreign material except:

Options :

1. ✘ Glycogen
2. ✘ Starch
3. ✘ Lipids
4. ✘ Peptides
5. ✓ Cellulose

Question Number : 75 Question Id : 959376675 Question Type : MCQ

Correct : 2 Wrong : 1

In facilitated diffusion, a transport protein assists in the movement of a specific substrate:

Options :

1. ✘ against its concentration gradient
2. ✘ along the concentration gradient
3. ✓ down its concentration gradient
4. ✘ by ATP hydrolysis
5. ✘ by GTP hydrolysis

Question Number : 75 Question Id : 959376675 Question Type : MCQ

Correct : 2 Wrong : 1

In facilitated diffusion, a transport protein assists in the movement of a specific substrate:

Options :

1. ✘ against its concentration gradient
2. ✘ along the concentration gradient
3. ✓ down its concentration gradient
4. ✘ by ATP hydrolysis
5. ✘ by GTP hydrolysis

Question Number : 76 Question Id : 959376676 Question Type : MCQ

Correct : 2 Wrong : 1

Red blood cells contain large quantities of:

Options :

1. ✘ Catalase
2. ✘ Peroxidase
3. ✘ Glucokinase
4. ✓ carbonic anhydrase
5. ✘ Hexokinase

Question Number : 76 Question Id : 959376676 Question Type : MCQ

Correct : 2 Wrong : 1

Red blood cells contain large quantities of:

Options :

1. ✗ Catalase
2. ✗ Peroxidase
3. ✗ Glucokinase
4. ✓ carbonic anhydrase
5. ✗ Hexokinase

Question Number : 77 Question Id : 959376677 Question Type : MCQ

Correct : 2 Wrong : 1

The principal stimulus for red blood cell production in low oxygen states:

Options :

1. ✗ Glucagon
2. ✗ Insulin
3. ✗ Calmodulin
4. ✓ erythropoietin
5. ✗ Epinephrine

Question Number : 77 Question Id : 959376677 Question Type : MCQ

Correct : 2 Wrong : 1

The principal stimulus for red blood cell production in low oxygen states:

Options :

1. ✗ Glucagon
2. ✗ Insulin
3. ✗ Calmodulin
4. ✓ erythropoietin
5. ✗ Epinephrine

Question Number : 78 Question Id : 959376678 Question Type : MCQ

Correct : 2 Wrong : 1

Number of oxygen molecules that can be transported by each hemoglobin molecule:

Options :

1. ✗ 8
2. ✓ 4
3. ✗ 2
4. ✗ 6
5. ✗ 12

Question Number : 78 Question Id : 959376678 Question Type : MCQ

Correct : 2 Wrong : 1

Number of oxygen molecules that can be transported by each hemoglobin molecule:

Options :

1. ✗ 8
2. ✓ 4
3. ✗ 2
4. ✗ 6
5. ✗ 12

Question Number : 79 Question Id : 959376679 Question Type : MCQ

Correct : 2 Wrong : 1

The major serine protease inhibitor of plasma:

Options :

1. ✗ thermolysin
2. ✗ haptoglobin
3. ✓  $\alpha$ 1-Antitrypsin
4. ✗ ceruloplasmin
5. ✗ Papain

Question Number : 79 Question Id : 959376679 Question Type : MCQ

Correct : 2 Wrong : 1

The major serine protease inhibitor of plasma:

Options :

1. ✗ thermolysin
2. ✗ haptoglobin
3. ✓  $\alpha$ 1-Antitrypsin
4. ✗ ceruloplasmin
5. ✗ Papain

Question Number : 80 Question Id : 959376680 Question Type : MCQ

Correct : 2 Wrong : 1

Hemophilia A is due to a genetically determined deficiency of:

Options :

1. ✗ Factor V
2. ✓ Factor VIII
3. ✗ Factor X
4. ✗ Factor XII
5. ✗ Factor VI

Question Number : 80 Question Id : 959376680 Question Type : MCQ

Correct : 2 Wrong : 1

Hemophilia A is due to a genetically determined deficiency of:

Options :

1. ✗ Factor V
2. ✓ Factor VIII
3. ✗ Factor X
4. ✗ Factor XII
5. ✗ Factor VI

Question Number : 81 Question Id : 959376681 Question Type : MCQ

Correct : 2 Wrong : 1

Disease of the fetus and newborn child characterized by agglutination and phagocytosis of the fetus red blood cells:

Options :

1. ✗ Graves disease
2. ✗ Acromegaly
3. ✓ Erythroblastosis foetalis
4. ✗ Pernicious anemia
5. ✗ Hemolytic anemia

Question Number : 81 Question Id : 959376681 Question Type : MCQ

Correct : 2 Wrong : 1

Disease of the fetus and newborn child characterized by agglutination and phagocytosis of the fetus red blood cells:

Options :

1. ✗ Graves disease
2. ✗ Acromegaly
3. ✓ Erythroblastosis foetalis
4. ✗ Pernicious anemia
5. ✗ Hemolytic anemia

Question Number : 82 Question Id : 959376682 Question Type : MCQ

Correct : 2 Wrong : 1

The solubility coefficient of  $\text{CO}_2$  at body temperature when partial pressure is expressed in atmospheres and concentration is expressed in volume of gas dissolved in each volume of water:

Options :

1. ✗ 0.05
2. ✗ 0.10
3. ✗ 0.024
4. ✓ 0.57

5. ✗ 0.008

Question Number : 82 Question Id : 959376682 Question Type : MCQ

Correct : 2 Wrong : 1

The solubility coefficient of  $\text{CO}_2$  at body temperature when partial pressure is expressed in atmospheres and concentration is expressed in volume of gas dissolved in each volume of water:

Options :

1. ✗ 0.05
2. ✗ 0.10
3. ✗ 0.024
4. ✓ 0.57
5. ✗ 0.008

Question Number : 83 Question Id : 959376683 Question Type : MCQ

Correct : 2 Wrong : 1

Hormones that cause reduction in GFR and renal blood flow:

Options :

1. ✗ T3 and T4
2. ✓ epinephrine and norepinephrine
3. ✗ Insulin and Glucagon
4. ✗ Mineralocorticoids
5. ✗ Testosterone and Progesterone

Question Number : 83 Question Id : 959376683 Question Type : MCQ

Correct : 2 Wrong : 1

Hormones that cause reduction in GFR and renal blood flow:

Options :

1. ✗ T3 and T4
2. ✓ epinephrine and norepinephrine
3. ✗ Insulin and Glucagon
4. ✗ Mineralocorticoids
5. ✗ Testosterone and Progesterone

Question Number : 84 Question Id : 959376684 Question Type : MCQ

Correct : 2 Wrong : 1

Which buffer system is the most important extracellular buffer in maintaining acid-base balance in the body?

Options :

1. ✓ bicarbonate buffer system
2. ✗ phosphate buffer system

- 3. ✘ citrate buffer system
- 4. ✘ acetate buffer system
- 5. ✘ glycine-NaOH buffer system

Question Number : 84 Question Id : 959376684 Question Type : MCQ

Correct : 2 Wrong : 1

Which buffer system is the most important extracellular buffer in maintaining acid-base balance in the body?

Options :

- 1. ✓ bicarbonate buffer system
- 2. ✘ phosphate buffer system
- 3. ✘ citrate buffer system
- 4. ✘ acetate buffer system
- 5. ✘ glycine-NaOH buffer system

Question Number : 85 Question Id : 959376685 Question Type : MCQ

Correct : 2 Wrong : 1

Which hormone plays an important role in allowing the kidneys to form a small volume of concentrated urine while excreting normal amounts of salt?

Options :

- 1. ✘ Insulin
- 2. ✘ Glucagon
- 3. ✓ Antidiuretic hormone (ADH)
- 4. ✘ Epinephrine
- 5. ✘ Progesterone

Question Number : 85 Question Id : 959376685 Question Type : MCQ

Correct : 2 Wrong : 1

Which hormone plays an important role in allowing the kidneys to form a small volume of concentrated urine while excreting normal amounts of salt?

Options :

- 1. ✘ Insulin
- 2. ✘ Glucagon
- 3. ✓ Antidiuretic hormone (ADH)
- 4. ✘ Epinephrine
- 5. ✘ Progesterone

Question Number : 86 Question Id : 959376686 Question Type : MCQ

Correct : 2 Wrong : 1

Hormone responsible for potent stimulus for causing the gallbladder contractions:

Options :

1. ✗ Insulin
2. ✗ Gastrin
3. ✗ Rennin
4. ✓ Cholecystokinin
5. ✗ Glucagon

Question Number : 86 Question Id : 959376686 Question Type : MCQ

Correct : 2 Wrong : 1

Hormone responsible for potent stimulus for causing the gallbladder contractions:

Options :

1. ✗ Insulin
2. ✗ Gastrin
3. ✗ Rennin
4. ✓ Cholecystokinin
5. ✗ Glucagon

Question Number : 87 Question Id : 959376687 Question Type : MCQ

Correct : 2 Wrong : 1

Fructose is transported all the way through the intestinal epithelium:

Options :

1. ✗ Facilitated diffusion coupled with sodium transport
2. ✓ Facilitated diffusion but not coupled with sodium transport
3. ✗ active transport
4. ✗ as micelles
5. ✗ secondary active transport

Question Number : 87 Question Id : 959376687 Question Type : MCQ

Correct : 2 Wrong : 1

Fructose is transported all the way through the intestinal epithelium:

Options :

1. ✗ Facilitated diffusion coupled with sodium transport
2. ✓ Facilitated diffusion but not coupled with sodium transport
3. ✗ active transport
4. ✗ as micelles
5. ✗ secondary active transport



Question Number : 88 Question Id : 959376688 Question Type : MCQ

Correct : 2 Wrong : 1

The portion of the myofibril that lies between two successive Z discs is called:

Options :

1. ✗ Sarcoplasm
2. ✗ Sarcolemma
3. ✗ I- band
4. ✓ Sarcomere
5. ✗ A-band

Question Number : 88 Question Id : 959376688 Question Type : MCQ

Correct : 2 Wrong : 1

The portion of the myofibril that lies between two successive Z discs is called:

Options :

1. ✗ Sarcoplasm
2. ✗ Sarcolemma
3. ✗ I- band
4. ✓ Sarcomere
5. ✗ A-band

Question Number : 89 Question Id : 959376689 Question Type : MCQ

Correct : 2 Wrong : 1

In muscle contraction, what starts filament sliding?

Options :

1. ✗ a decrease in  $\text{Na}^+$  concentration in the cytosol
2. ✓ an increase in  $\text{Ca}^{2+}$  concentration in the cytosol
3. ✗ an increase in  $\text{K}^+$  concentration in the cytosol
4. ✗ the bending of myosin head
5. ✗ the release of energy from the breakdown of ATP

Question Number : 89 Question Id : 959376689 Question Type : MCQ

Correct : 2 Wrong : 1

In muscle contraction, what starts filament sliding?

Options :

1. ✗ a decrease in  $\text{Na}^+$  concentration in the cytosol
2. ✓ an increase in  $\text{Ca}^{2+}$  concentration in the cytosol
3. ✗ an increase in  $\text{K}^+$  concentration in the cytosol
4. ✗ the bending of myosin head



5. ❌ the release of energy from the breakdown of ATP

Question Number : 90 Question Id : 959376690 Question Type : MCQ

Correct : 2 Wrong : 1

Inability of the neuromuscular junctions to transmit enough signals from the nerve fibers to the muscle fibers leads to:

Options :

1. ❌ Rigor mortis
2. ❌ Graves disease
3. ✓ Myasthenia gravis
4. ❌ Addison's disease
5. ❌ Gaucher's disease

Question Number : 90 Question Id : 959376690 Question Type : MCQ

Correct : 2 Wrong : 1

Inability of the neuromuscular junctions to transmit enough signals from the nerve fibers to the muscle fibers leads to:

Options :

1. ❌ Rigor mortis
2. ❌ Graves disease
3. ✓ Myasthenia gravis
4. ❌ Addison's disease
5. ❌ Gaucher's disease

Question Number : 91 Question Id : 959376691 Question Type : MCQ

Correct : 2 Wrong : 1

The action potential of a neuron:

Options :

1. ❌ is initiated by efflux of  $\text{Na}^+$
2. ✓ is terminated by efflux of  $\text{K}^+$
3. ❌ is terminated by the efflux of  $\text{Cl}^-$
4. ❌ declines in amplitude as it moves along the axon
5. ❌ results in a transient reversal of the concentration gradient

Question Number : 91 Question Id : 959376691 Question Type : MCQ

Correct : 2 Wrong : 1

The action potential of a neuron:

Options :

1. ❌ is initiated by efflux of  $\text{Na}^+$

- 2.  is terminated by efflux of  $K^+$
- 3.  is terminated by the efflux of  $Cl^-$
- 4.  declines in amplitude as it moves along the axon
- 5.  results in a transient reversal of the concentration gradient

Question Number : 92 Question Id : 959376692 Question Type : MCQ

Correct : 2 Wrong : 1

Extreme protein deficiency during the protein malnutrition leads to:

Options :

- 1.  Anemia
- 2.  Pellagra
- 3.  cushings syndrome
- 4.  beri-beri
- 5.  Kwashiorkor

Question Number : 92 Question Id : 959376692 Question Type : MCQ

Correct : 2 Wrong : 1

Extreme protein deficiency during the protein malnutrition leads to:

Options :

- 1.  Anemia
- 2.  Pellagra
- 3.  cushings syndrome
- 4.  beri-beri
- 5.  Kwashiorkor

Question Number : 93 Question Id : 959376693 Question Type : MCQ

Correct : 2 Wrong : 1

Respiratory Quotient (RQ) for glucose is:

Options :

- 1.  0.7
- 2.  1
- 3.  0.5
- 4.  0.3
- 5.  0.45

Question Number : 93 Question Id : 959376693 Question Type : MCQ

Correct : 2 Wrong : 1

Respiratory Quotient (RQ) for glucose is:

Options :

1. ✗ 0.7
2. ✓ 1
3. ✗ 0.5
4. ✗ 0.3
5. ✗ 0.45

Question Number : 94 Question Id : 959376694 Question Type : MCQ

Correct : 2 Wrong : 1

Deficiency of niacin causes:

Options :

1. ✗ Beri-beri
2. ✓ pellagra
3. ✗ cheilosis
4. ✗ anemia
5. ✗ rickets

Question Number : 94 Question Id : 959376694 Question Type : MCQ

Correct : 2 Wrong : 1

Deficiency of niacin causes:

Options :

1. ✗ Beri-beri
2. ✓ pellagra
3. ✗ cheilosis
4. ✗ anemia
5. ✗ rickets

Question Number : 95 Question Id : 959376695 Question Type : MCQ

Correct : 2 Wrong : 1

Coenzymic form of pantothenic acid:

Options :

1. ✗ NAD
2. ✗ FAD
3. ✗ TPP
4. ✓ Coenzyme A
5. ✗ FMN

Question Number : 95 Question Id : 959376695 Question Type : MCQ

Correct : 2 Wrong : 1

Coenzymic form of pantothenic acid:

Options :

1. ✘ NAD
2. ✘ FAD
3. ✘ TPP
4. ✓ Coenzyme A
5. ✘ FMN

Question Number : 96 Question Id : 959376696 Question Type : MCQ

Correct : 2 Wrong : 1

Hormone which increases renal tubular reabsorption of sodium and secretion of potassium:

Options :

1. ✘ insulin
2. ✘ testosterone
3. ✓ Aldosterone
4. ✘ progesterone
5. ✘ Epinephrine

Question Number : 96 Question Id : 959376696 Question Type : MCQ

Correct : 2 Wrong : 1

Hormone which increases renal tubular reabsorption of sodium and secretion of potassium:

Options :

1. ✘ insulin
2. ✘ testosterone
3. ✓ Aldosterone
4. ✘ progesterone
5. ✘ Epinephrine

Question Number : 97 Question Id : 959376697 Question Type : MCQ

Correct : 2 Wrong : 1

Which amino acid destabilizes the alpha-helical structure of a protein?

Options :

1. ✘ Serine
2. ✘ Arginine
3. ✓ Proline
4. ✘ Tyrosine
5. ✘ Glutamine

Question Number : 97 Question Id : 959376697 Question Type : MCQ

Correct : 2 Wrong : 1

Which amino acid destabilizes the alpha-helical structure of a protein?

Options :

1. ✘ Serine
2. ✘ Arginine
3. ✓ Proline
4. ✘ Tyrosine
5. ✘ Glutamine

Question Number : 98 Question Id : 959376698 Question Type : MCQ

Correct : 2 Wrong : 1

Histones have a high proportion of the following amino acids:

Options :

1. ✓ Lysine and arginine
2. ✘ Tryptophan and tyrosine
3. ✘ Tyrosine and phenylalanine
4. ✘ Glutamic acid and aspartic acid
5. ✘ Glycine and valine

Question Number : 98 Question Id : 959376698 Question Type : MCQ

Correct : 2 Wrong : 1

Histones have a high proportion of the following amino acids:

Options :

1. ✓ Lysine and arginine
2. ✘ Tryptophan and tyrosine
3. ✘ Tyrosine and phenylalanine
4. ✘ Glutamic acid and aspartic acid
5. ✘ Glycine and valine

Question Number : 99 Question Id : 959376699 Question Type : MCQ

Correct : 2 Wrong : 1

Glucose and galactose are:

Options :

1. ✘ Anomers
2. ✓ Epimers
3. ✘ enantiomers
4. ✘ conformers
5. ✘ diastereomers

Question Number : 99 Question Id : 959376699 Question Type : MCQ

Correct : 2 Wrong : 1

Glucose and galactose are:

Options :

1. ✗ Anomers
2. ✓ Epimers
3. ✗ enantiomers
4. ✗ conformers
5. ✗ diastereomers

Question Number : 100 Question Id : 959376700 Question Type : MCQ

Correct : 2 Wrong : 1

A steroid hormone typically alters the activity of its target cells by:

Options :

1. ✗ digesting holes in the cell's plasma membrane
2. ✓ entering the cell and altering gene expression
3. ✗ passing its message to an intracellular messenger
4. ✗ digesting holes in the cell's lysosomes
5. ✗ passing its message to an extracellular messenger

Question Number : 100 Question Id : 959376700 Question Type : MCQ

Correct : 2 Wrong : 1

A steroid hormone typically alters the activity of its target cells by:

Options :

1. ✗ digesting holes in the cell's plasma membrane
2. ✓ entering the cell and altering gene expression
3. ✗ passing its message to an intracellular messenger
4. ✗ digesting holes in the cell's lysosomes
5. ✗ passing its message to an extracellular messenger

Question Number : 101 Question Id : 959376701 Question Type : MCQ

Correct : 2 Wrong : 1

Uncoupling of oxidative phosphorylation implies that:

Options :

1. ✗ The ATPase activity of mitochondria is abolished
2. ✗ The mitochondria ceases to oxidize succinate
3. ✓ ATP formation ceases but respiration continues
4. ✗ ATP formation continue but respiration ceases
5. ✗ Respiration ceases and no net formation of ATP

Question Number : 101 Question Id : 959376701 Question Type : MCQ

Correct : 2 Wrong : 1

Uncoupling of oxidative phosphorylation implies that:

Options :

1. ✗ The ATPase activity of mitochondria is abolished
2. ✗ The mitochondria ceases to oxidize succinate
3. ✓ ATP formation ceases but respiration continues
4. ✗ ATP formation continues but respiration ceases
5. ✗ Respiration ceases and no net formation of ATP

Question Number : 102 Question Id : 959376702 Question Type : MCQ

Correct : 2 Wrong : 1

Many enzymes that catalyze oxidation reactions are:

Options :

1. ✗ Isomerases
2. ✓ Dehydrogenases
3. ✗ Mutases
4. ✗ Oxidases
5. ✗ Kinases

Question Number : 102 Question Id : 959376702 Question Type : MCQ

Correct : 2 Wrong : 1

Many enzymes that catalyze oxidation reactions are:

Options :

1. ✗ Isomerases
2. ✓ Dehydrogenases
3. ✗ Mutases
4. ✗ Oxidases
5. ✗ Kinases

Question Number : 103 Question Id : 959376703 Question Type : MCQ

Correct : 2 Wrong : 1

Electrochemical potential gradient for ATP synthesis across the mitochondrial membrane was generated by:

Options :

1. ✓ Pumps
2. ✗ Channels
3. ✗ Facilitated diffusion
4. ✗ Passive transport



5.  Enzymes

Question Number : 103 Question Id : 959376703 Question Type : MCQ

Correct : 2 Wrong : 1

Electrochemical potential gradient for ATP synthesis across the mitochondrial membrane was generated by:

Options :

1.  Pumps
2.  Channels
3.  Facilitated diffusion
4.  Passive transport
5.  Enzymes

Question Number : 104 Question Id : 959376704 Question Type : MCQ

Correct : 2 Wrong : 1

Methods for determining the sequence of electron carriers in electron transport chain:

Options :

1.  By determining inhibitors study
2.  By determining standard reduction potentials alone
3.  Inhibitor studies on carriers alone
4.  By determining standard reduction potentials and inhibitors study
5.  Activator studies on carriers

Question Number : 104 Question Id : 959376704 Question Type : MCQ

Correct : 2 Wrong : 1

Methods for determining the sequence of electron carriers in electron transport chain:

Options :

1.  By determining inhibitors study
2.  By determining standard reduction potentials alone
3.  Inhibitor studies on carriers alone
4.  By determining standard reduction potentials and inhibitors study
5.  Activator studies on carriers

Question Number : 105 Question Id : 959376705 Question Type : MCQ

Correct : 2 Wrong : 1

Which of the following lipids are abundantly present in the thylakoid membrane?

Options :

1.  Sulfolipids
2.  Phospholipids

- 3. ✘ Lecithin
- 4. ✘ Triglycerides
- 5. ✓ Galactolipids

Question Number : 105 Question Id : 959376705 Question Type : MCQ

Correct : 2 Wrong : 1

Which of the following lipids are abundantly present in the thylakoid membrane?

Options :

- 1. ✘ Sulfolipids
- 2. ✘ Phospholipids
- 3. ✘ Lecithin
- 4. ✘ Triglycerides
- 5. ✓ Galactolipids

Question Number : 106 Question Id : 959376706 Question Type : MCQ

Correct : 2 Wrong : 1

Which of the following compound in non-cyclic photophosphorylation of light reaction contain copper?

Options :

- 1. ✘ Cytochrome
- 2. ✘ Ferridoxin
- 3. ✘ Plastoquinone
- 4. ✓ Plastocyanin
- 5. ✘ Chlorophyll

Question Number : 106 Question Id : 959376706 Question Type : MCQ

Correct : 2 Wrong : 1

Which of the following compound in non-cyclic photophosphorylation of light reaction contain copper?

Options :

- 1. ✘ Cytochrome
- 2. ✘ Ferridoxin
- 3. ✘ Plastoquinone
- 4. ✓ Plastocyanin
- 5. ✘ Chlorophyll

Question Number : 107 Question Id : 959376707 Question Type : MCQ

Correct : 2 Wrong : 1

Net production of ATP in glycolysis alone

Options :

- 1. ✓ 2
- 2. ✗ 4
- 3. ✗ 6
- 4. ✗ 8
- 5. ✗ 10

Question Number : 107 Question Id : 959376707 Question Type : MCQ

Correct : 2 Wrong : 1

Net production of ATP in glycolysis alone

Options :

- 1. ✓ 2
- 2. ✗ 4
- 3. ✗ 6
- 4. ✗ 8
- 5. ✗ 10

Question Number : 108 Question Id : 959376708 Question Type : MCQ

Correct : 2 Wrong : 1

Which of the following enzyme catalyzed reactions formed a product containing a newly formed high energy phosphate bond?

Options :

- 1. ✗ The phosphorylation of glucose
- 2. ✗ 2-phosphoglycerate to phosphoenol pyruvate
- 3. ✗ 3-phosphoglycerate to 2-phosphoglycerate
- 4. ✓ Phosphoenolpyruvate to pyruvate
- 5. ✗ Glucose to glucose-6-phosphate

Question Number : 108 Question Id : 959376708 Question Type : MCQ

Correct : 2 Wrong : 1

Which of the following enzyme catalyzed reactions formed a product containing a newly formed high energy phosphate bond?

Options :

- 1. ✗ The phosphorylation of glucose
- 2. ✗ 2-phosphoglycerate to phosphoenol pyruvate
- 3. ✗ 3-phosphoglycerate to 2-phosphoglycerate
- 4. ✓ Phosphoenolpyruvate to pyruvate
- 5. ✗ Glucose to glucose-6-phosphate

Question Number : 109 Question Id : 959376709 Question Type : MCQ

Correct : 2 Wrong : 1

Major target enzyme for regulating glycolysis in muscle under most conditions is:

Options :

1.  Phosphofructokinase
2.  Glucokinase
3.  Hexokinase
4.  Isomerase
5.  Phospho enolpyruvate kinase

Question Number : 109 Question Id : 959376709 Question Type : MCQ

Correct : 2 Wrong : 1

Major target enzyme for regulating glycolysis in muscle under most conditions is:

Options :

1.  Phosphofructokinase
2.  Glucokinase
3.  Hexokinase
4.  Isomerase
5.  Phospho enolpyruvate kinase

Question Number : 110 Question Id : 959376710 Question Type : MCQ

Correct : 2 Wrong : 1

Which of the following is an essential cofactor for Glycogen Phosphorylase?

Options :

1.  Pyridoxine
2.  Pyridoxal phosphate
3.  Biotin
4.  Cobalamin
5.  Potassium

Question Number : 110 Question Id : 959376710 Question Type : MCQ

Correct : 2 Wrong : 1

Which of the following is an essential cofactor for Glycogen Phosphorylase?

Options :

1.  Pyridoxine
2.  Pyridoxal phosphate
3.  Biotin
4.  Cobalamin
5.  Potassium

Question Number : 111 Question Id : 959376711 Question Type : MCQ

Correct : 2 Wrong : 1

Pompe's disease, a glycogen storage disease is due to the deficiency of:

Options :

1.   $\alpha$  -1,4-Glucosidase
2.  Phosphorylase kinase
3.  Glycogen phosphorylase
4.  Glycogen synthase
5.  Glucose-6-phosphatase

Question Number : 111 Question Id : 959376711 Question Type : MCQ

Correct : 2 Wrong : 1

Pompe's disease, a glycogen storage disease is due to the deficiency of:

Options :

1.   $\alpha$  -1,4-Glucosidase
2.  Phosphorylase kinase
3.  Glycogen phosphorylase
4.  Glycogen synthase
5.  Glucose-6-phosphatase

Question Number : 112 Question Id : 959376712 Question Type : MCQ

Correct : 2 Wrong : 1

In the pentose phosphate pathway:

Options :

1.  Only the C-1 carbon of glucose is oxidized to  $\text{CO}_2$
2.  All the carbons of glucose is oxidized to  $\text{CO}_2$
3.  No decarboxylation occurs
4.  C-4 and C-5 of glucose is oxidized to  $\text{CO}_2$
5.  Only C-5 of glucose is oxidized to  $\text{CO}_2$

Question Number : 112 Question Id : 959376712 Question Type : MCQ

Correct : 2 Wrong : 1

In the pentose phosphate pathway:

Options :

1.  Only the C-1 carbon of glucose is oxidized to  $\text{CO}_2$
2.  All the carbons of glucose is oxidized to  $\text{CO}_2$
3.  No decarboxylation occurs
4.  C-4 and C-5 of glucose is oxidized to  $\text{CO}_2$

5. ❌ Only C-5 of glucose is oxidized to  $\text{CO}_2$

Question Number : 113 Question Id : 959376713 Question Type : MCQ

Correct : 2 Wrong : 1

Which of the following process involves the formation of new sugar?

Options :

1. ❌ Glycolysis
2. ❌ Glycogenlysis
3. ✓ Gluconeogenesis
4. ❌ Glycogenesis
5. ❌ HMP shunt

Question Number : 113 Question Id : 959376713 Question Type : MCQ

Correct : 2 Wrong : 1

Which of the following process involves the formation of new sugar?

Options :

1. ❌ Glycolysis
2. ❌ Glycogenlysis
3. ✓ Gluconeogenesis
4. ❌ Glycogenesis
5. ❌ HMP shunt

Question Number : 114 Question Id : 959376714 Question Type : MCQ

Correct : 2 Wrong : 1

In adult mammals fatty acid synthesis occurs mainly in:

Options :

1. ❌ Liver cells and muscle cells
2. ✓ Liver cells and adipocytes
3. ❌ Muscle cells and adipocytes
4. ❌ liver cells and mammary glands
5. ❌ Mammary glands and adipocytes

Question Number : 114 Question Id : 959376714 Question Type : MCQ

Correct : 2 Wrong : 1

In adult mammals fatty acid synthesis occurs mainly in:

Options :

1. ❌ Liver cells and muscle cells
2. ✓ Liver cells and adipocytes



- 3. ❌ Muscle cells and adipocytes
- 4. ❌ liver cells and mammary glands
- 5. ❌ Mammary glands and adipocytes

Question Number : 115 Question Id : 959376715 Question Type : MCQ

Correct : 2 Wrong : 1

Jamaican vomiting sickness is due to the deficiency of:

Options :

- 1. ✓ Acyl-CoA dehydrogenase
- 2. ❌ Methylenecyclopropylacetyl-CoA
- 3. ❌ Octanoyl-CoA
- 4. ❌ Enoyl-CoA hydratase
- 5. ❌ ketoacyl-CoA thiolase

Question Number : 115 Question Id : 959376715 Question Type : MCQ

Correct : 2 Wrong : 1

Jamaican vomiting sickness is due to the deficiency of:

Options :

- 1. ✓ Acyl-CoA dehydrogenase
- 2. ❌ Methylenecyclopropylacetyl-CoA
- 3. ❌ Octanoyl-CoA
- 4. ❌ Enoyl-CoA hydratase
- 5. ❌ ketoacyl-CoA thiolase

Question Number : 116 Question Id : 959376716 Question Type : MCQ

Correct : 2 Wrong : 1

Oxidation of Odd-Number Fatty Acids results in the formation of:

Options :

- 1. ❌ Acetyl Co.A
- 2. ❌ Palmityl Co.A
- 3. ❌ Phytinic acid
- 4. ❌ Acetoacetyl Co.A
- 5. ✓ Malonyl Co.A

Question Number : 116 Question Id : 959376716 Question Type : MCQ

Correct : 2 Wrong : 1

Oxidation of Odd-Number Fatty Acids results in the formation of:

Options :

1. ❌ Acetyl Co.A
2. ❌ Palmityl Co.A
3. ❌ Phytinic acid
4. ❌ Acetoacetyl Co.A
5. ✓ Malonyl Co.A

Question Number : 117 Question Id : 959376717 Question Type : MCQ

Correct : 2 Wrong : 1

Which step is the committed step in cholesterol formation?

Options :

1. ✓ Synthesis of mevalonate
2. ❌ 3-isopentenyl pyrophosphate formation
3. ❌ Synthesis of Squalene
4. ❌ Formation of dimethylallyl pyrophosphate
5. ❌ Synthesis of farnesyl pyrophosphate

Question Number : 117 Question Id : 959376717 Question Type : MCQ

Correct : 2 Wrong : 1

Which step is the committed step in cholesterol formation?

Options :

1. ✓ Synthesis of mevalonate
2. ❌ 3-isopentenyl pyrophosphate formation
3. ❌ Synthesis of Squalene
4. ❌ Formation of dimethylallyl pyrophosphate
5. ❌ Synthesis of farnesyl pyrophosphate

Question Number : 118 Question Id : 959376718 Question Type : MCQ

Correct : 2 Wrong : 1

Which of the following compound provides the carbon atoms for cholesterol synthesis?

Options :

1. ❌ Pregnenolone
2. ✓ Acetyl Co.A
3. ❌ Phytanic acid
4. ❌ 3-hydroxy-3-methylglutaryl Co.A
5. ❌ Squalene

Question Number : 118 Question Id : 959376718 Question Type : MCQ

Correct : 2 Wrong : 1

Which of the following compound provides the carbon atoms for cholesterol synthesis?

Options :

1.  Pregnenolone
2.  Acetyl Co.A
3.  Phytanic acid
4.  3-hydroxy-3-methylglutaryl Co.A
5.  Squalene

Question Number : 119 Question Id : 959376719 Question Type : MCQ

Correct : 2 Wrong : 1

Nitrogen fixation in cyanobacteria is carried out in specialized cells called:

Options :

1.  Nodules
2.  Root cells
3.  Bacterial cells
4.  Heterocysts
5.  Nod cells

Question Number : 119 Question Id : 959376719 Question Type : MCQ

Correct : 2 Wrong : 1

Nitrogen fixation in cyanobacteria is carried out in specialized cells called:

Options :

1.  Nodules
2.  Root cells
3.  Bacterial cells
4.  Heterocysts
5.  Nod cells

Question Number : 120 Question Id : 959376720 Question Type : MCQ

Correct : 2 Wrong : 1

The glutamate dehydrogenases of some species or tissues are specific for cofactor:

Options :

1.  NADH only
2.  NADPH only
3.  NADH /NADPH
4.  FAD
5.  FADH



Question Number : 120 Question Id : 959376720 Question Type : MCQ

Correct : 2 Wrong : 1

The glutamate dehydrogenases of some species or tissues are specific for cofactor:

Options :

1. ✘ NADH only
2. ✘ NADPH only
3. ✓ NADH /NADPH
4. ✘ FAD
5. ✘ FADH

Question Number : 121 Question Id : 959376721 Question Type : MCQ

Correct : 2 Wrong : 1

Which aminoacid play a special role in transporting amino groups to the liver in a nontoxic form?

Options :

1. ✓ Alanine
2. ✘ Phenyl alanine
3. ✘ Tyrosine
4. ✘ Glutamine
5. ✘ Asparagine

Question Number : 121 Question Id : 959376721 Question Type : MCQ

Correct : 2 Wrong : 1

Which aminoacid play a special role in transporting amino groups to the liver in a nontoxic form?

Options :

1. ✓ Alanine
2. ✘ Phenyl alanine
3. ✘ Tyrosine
4. ✘ Glutamine
5. ✘ Asparagine

Question Number : 122 Question Id : 959376722 Question Type : MCQ

Correct : 2 Wrong : 1

Aspartate is precursor for the synthesis of, which of the following aminoacids?

Options :

1. ✘ Methionine and Histidine
2. ✘ Lysine and methionine
3. ✘ Lysine and threonine

4. ✗ Methionine, and threonine  
5. ✓ Lysine, methionine, and threonine

Question Number : 122 Question Id : 959376722 Question Type : MCQ

Correct : 2 Wrong : 1

Aspartate is precursor for the synthesis of, which of the following aminoacids?

Options :

1. ✗ Methionine and Histidine  
2. ✗ Lysine and methionine  
3. ✗ Lysine and threonine  
4. ✗ Methionine, and threonine  
5. ✓ Lysine, methionine, and threonine

Question Number : 123 Question Id : 959376723 Question Type : MCQ

Correct : 2 Wrong : 1

N7 of purine ring is contributed by:

Options :

1. ✗ Aspartate  
2. ✗ Formate  
3. ✗ Glutamine  
4. ✓ Glycine  
5. ✗ Glutamate

Question Number : 123 Question Id : 959376723 Question Type : MCQ

Correct : 2 Wrong : 1

N7 of purine ring is contributed by:

Options :

1. ✗ Aspartate  
2. ✗ Formate  
3. ✗ Glutamine  
4. ✓ Glycine  
5. ✗ Glutamate

Question Number : 124 Question Id : 959376724 Question Type : MCQ

Correct : 2 Wrong : 1

Carbamoyl phosphate required in pyrimidine biosynthesis made by carbomyl phosphate synthetase-II is located in:

Options :

1. ✗ Mitochondrial matrix

- 2. ✘ Internmembrane space
- 3. ✓ Cytosol
- 4. ✘ Plasma membrane
- 5. ✘ Golgi complex

Question Number : 124 Question Id : 959376724 Question Type : MCQ

Correct : 2 Wrong : 1

Carbamoyl phosphate required in pyrimidine biosynthesis made by carbomyl phosphate synthetase-II is located in:

Options :

- 1. ✘ Mitochondrial matrix
- 2. ✘ Internmembrane space
- 3. ✓ Cytosol
- 4. ✘ Plasma membrane
- 5. ✘ Golgi complex

Question Number : 125 Question Id : 959376725 Question Type : MCQ

Correct : 2 Wrong : 1

Which of the following mineral play an important role in blood clotting?

Options :

- 1. ✓ Calcium
- 2. ✘ Zinc
- 3. ✘ Copper
- 4. ✘ Magnesium
- 5. ✘ Manganese

Question Number : 125 Question Id : 959376725 Question Type : MCQ

Correct : 2 Wrong : 1

Which of the following mineral play an important role in blood clotting?

Options :

- 1. ✓ Calcium
- 2. ✘ Zinc
- 3. ✘ Copper
- 4. ✘ Magnesium
- 5. ✘ Manganese

Question Number : 126 Question Id : 959376726 Question Type : MCQ

Correct : 2 Wrong : 1

Identify the principal cations of extracellular and intracellular fluids:



Options :

1. ✗ Calcium, sodium
2. ✗ Magnesium, potassium
3. ✗ Sodium, magnesium
4. ✓ Sodium, potassium
5. ✗ Zinc, magnesium

Question Number : 126 Question Id : 959376726 Question Type : MCQ

Correct : 2 Wrong : 1

Identify the principal cations of extracellular and intracellular fluids:

Options :

1. ✗ Calcium, sodium
2. ✗ Magnesium, potassium
3. ✗ Sodium, magnesium
4. ✓ Sodium, potassium
5. ✗ Zinc, magnesium

Question Number : 127 Question Id : 959376727 Question Type : MCQ

Correct : 2 Wrong : 1

Cytochrome P450s, which participates in detoxification mechanisms are generally located in:

Options :

1. ✓ Endoplasmic reticulum
2. ✗ Golgi complex
3. ✗ Ribosomes
4. ✗ Cytosol
5. ✗ Nucleus

Question Number : 127 Question Id : 959376727 Question Type : MCQ

Correct : 2 Wrong : 1

Cytochrome P450s, which participates in detoxification mechanisms are generally located in:

Options :

1. ✓ Endoplasmic reticulum
2. ✗ Golgi complex
3. ✗ Ribosomes
4. ✗ Cytosol
5. ✗ Nucleus

Question Number : 128 Question Id : 959376728 Question Type : MCQ

Correct : 2 Wrong : 1

Bilirubin content of the serum was determined by:

Options :

1. ✘ Rotheras test
2. ✘ Zaffes test
3. ✘ Pauly's test
4. ✓ Ehrlich's test
5. ✘ Sakaguchi test

Question Number : 128 Question Id : 959376728 Question Type : MCQ

Correct : 2 Wrong : 1

Bilirubin content of the serum was determined by:

Options :

1. ✘ Rotheras test
2. ✘ Zaffes test
3. ✘ Pauly's test
4. ✓ Ehrlich's test
5. ✘ Sakaguchi test

Question Number : 129 Question Id : 959376729 Question Type : MCQ

Correct : 2 Wrong : 1

A condition of encephalopathy due to hyperbilirubinemia is known as:

Options :

1. ✓ Kernicterus
2. ✘ choluric jaundice
3. ✘ Acholuric jaundice
4. ✘ Icterus
5. ✘ Ketosis

Question Number : 129 Question Id : 959376729 Question Type : MCQ

Correct : 2 Wrong : 1

A condition of encephalopathy due to hyperbilirubinemia is known as:

Options :

1. ✓ Kernicterus
2. ✘ choluric jaundice
3. ✘ Acholuric jaundice
4. ✘ Icterus



5. ✘ Ketosis

Question Number : 130 Question Id : 959376730 Question Type : MCQ

Correct : 2 Wrong : 1

STI-571 (or Gleevec) an anticancerous drug is used for the treatment of:

Options :

1. ✘ Dermatofibrosarcoma protuberans
2. ✘ Colorectal cancer
3. ✓ Chronic myeloid leukemia
4. ✘ Acute promyelocytic leukemia
5. ✘ Hypereosinophilic syndrome

Question Number : 130 Question Id : 959376730 Question Type : MCQ

Correct : 2 Wrong : 1

STI-571 (or Gleevec) an anticancerous drug is used for the treatment of:

Options :

1. ✘ Dermatofibrosarcoma protuberans
2. ✘ Colorectal cancer
3. ✓ Chronic myeloid leukemia
4. ✘ Acute promyelocytic leukemia
5. ✘ Hypereosinophilic syndrome

Question Number : 131 Question Id : 959376731 Question Type : MCQ

Correct : 2 Wrong : 1

Which of the following is the activation mechanism for the development of colon carcinoma?

Options :

1. ✓ Point mutation
2. ✘ Frame shift mutation
3. ✘ Amplification
4. ✘ Translocation
5. ✘ Recombination

Question Number : 131 Question Id : 959376731 Question Type : MCQ

Correct : 2 Wrong : 1

Which of the following is the activation mechanism for the development of colon carcinoma?

Options :

1. ✓ Point mutation
2. ✘ Frame shift mutation



- 3. ❌ Amplification
- 4. ❌ Translocation
- 5. ❌ Recombination

Question Number : 132 Question Id : 959376732 Question Type : MCQ

Correct : 2 Wrong : 1

Which of the following is the general mechanism of action for erythromycin?

Options :

- 1. ❌ Inhibition of a metabolic enzyme
- 2. ❌ Inhibition of cell wall synthesis
- 3. ✓ Disruption of protein synthesis
- 4. ❌ Inhibition of nucleic acid transcription and replication
- 5. ❌ Inhibition of nucleic acid transcription

Question Number : 132 Question Id : 959376732 Question Type : MCQ

Correct : 2 Wrong : 1

Which of the following is the general mechanism of action for erythromycin?

Options :

- 1. ❌ Inhibition of a metabolic enzyme
- 2. ❌ Inhibition of cell wall synthesis
- 3. ✓ Disruption of protein synthesis
- 4. ❌ Inhibition of nucleic acid transcription and replication
- 5. ❌ Inhibition of nucleic acid transcription

Question Number : 133 Question Id : 959376733 Question Type : MCQ

Correct : 2 Wrong : 1

All of the following serum enzymes are elevated in myocardial infarction except:

Options :

- 1. ✓ Alkaline phosphatase
- 2. ❌ Lactate dehydrogenase
- 3. ❌ Aspartate transaminase
- 4. ❌ Creatine kinase
- 5. ❌ SGOT

Question Number : 133 Question Id : 959376733 Question Type : MCQ

Correct : 2 Wrong : 1

All of the following serum enzymes are elevated in myocardial infarction except:

Options :

1.  Alkaline phosphatase
2.  Lactate dehydrogenase
3.  Aspartate transaminase
4.  Creatine kinase
5.  SGOT

Question Number : 134 Question Id : 959376734 Question Type : MCQ

Correct : 2 Wrong : 1

Liver diagnostic enzyme is:

Options :

1.  Alkaline phosphatase
2.  Acid phosphatase
3.  Alanine transaminase
4.  Amylase
5.  Protease

Question Number : 134 Question Id : 959376734 Question Type : MCQ

Correct : 2 Wrong : 1

Liver diagnostic enzyme is:

Options :

1.  Alkaline phosphatase
2.  Acid phosphatase
3.  Alanine transaminase
4.  Amylase
5.  Protease

Question Number : 135 Question Id : 959376735 Question Type : MCQ

Correct : 2 Wrong : 1

Approximately one third of the body water exists in the:

Options :

1.  Kidney and urinary bladder
2.  Blood
3.  Extracellular fluid compartment
4.  Intracellular fluid compartment
5.  Interstitial fluid

Question Number : 135 Question Id : 959376735 Question Type : MCQ

Correct : 2 Wrong : 1

Approximately one third of the body water exists in the:

Options :

1. ✗ Kidney and urinary bladder
2. ✗ Blood
3. ✓ Extracellular fluid compartment
4. ✗ Intracellular fluid compartment
5. ✗ Interstitial fluid

Question Number : 136 Question Id : 959376736 Question Type : MCQ

Correct : 2 Wrong : 1

Hypernatremia is a condition arises due to:

Options :

1. ✗ Excess potassium
2. ✓ Excess sodium
3. ✗ Deficiency of sodium
4. ✗ Deficiency of potassium
5. ✗ Excess calcium

Question Number : 136 Question Id : 959376736 Question Type : MCQ

Correct : 2 Wrong : 1

Hypernatremia is a condition arises due to:

Options :

1. ✗ Excess potassium
2. ✓ Excess sodium
3. ✗ Deficiency of sodium
4. ✗ Deficiency of potassium
5. ✗ Excess calcium

Question Number : 137 Question Id : 959376737 Question Type : MCQ

Correct : 2 Wrong : 1

Active immunity means:

Options :

1. ✓ Resistance developed after disease
2. ✗ Resistance developed before disease
3. ✗ Resistance developed by birth
4. ✗ Increasing quantity of blood
5. ✗ Increased immune response



Question Number : 137 Question Id : 959376737 Question Type : MCQ

Correct : 2 Wrong : 1

Active immunity means:

Options :

1.  Resistance developed after disease
2.  Resistance developed before disease
3.  Resistance developed by birth
4.  Increasing quantity of blood
5.  Increased immune response

Question Number : 138 Question Id : 959376738 Question Type : MCQ

Correct : 2 Wrong : 1

The antibody IgE and mast cells are associated with:

Options :

1.  Contact hypersensitivity
2.  Immuno florescence tests
3.  Immunodeficiencies
4.  Immediate hypersensitivity
5.  Antibody diversity

Question Number : 138 Question Id : 959376738 Question Type : MCQ

Correct : 2 Wrong : 1

The antibody IgE and mast cells are associated with:

Options :

1.  Contact hypersensitivity
2.  Immuno florescence tests
3.  Immunodeficiencies
4.  Immediate hypersensitivity
5.  Antibody diversity

Question Number : 139 Question Id : 959376739 Question Type : MCQ

Correct : 2 Wrong : 1

Which of the following do not participate in the formation of antigen-antibody complexes?

Options :

1.  Hydrophobic bonds
2.  Covalent bonds
3.  Electrostatic interaction
4.  Vanderwaals forces

5. ✘ Non covalent bonds

Question Number : 139 Question Id : 959376739 Question Type : MCQ

Correct : 2 Wrong : 1

Which of the following do not participate in the formation of antigen-antibody complexes?

Options :

1. ✘ Hydrophobic bonds
2. ✓ Covalent bonds
3. ✘ Electrostatic interaction
4. ✘ Vanderwaals forces
5. ✘ Non covalent bonds

Question Number : 140 Question Id : 959376740 Question Type : MCQ

Correct : 2 Wrong : 1

Humoral immunity is mediated by:

Options :

1. ✓ B cells
2. ✘ Macrophages
3. ✘ T cells
4. ✘ Phagocytes
5. ✘ Mast cells

Question Number : 140 Question Id : 959376740 Question Type : MCQ

Correct : 2 Wrong : 1

Humoral immunity is mediated by:

Options :

1. ✓ B cells
2. ✘ Macrophages
3. ✘ T cells
4. ✘ Phagocytes
5. ✘ Mast cells

Question Number : 141 Question Id : 959376741 Question Type : MCQ

Correct : 2 Wrong : 1

Chromatin is composed of:

Options :

1. ✓ Nucleic acids and protein
2. ✘ Only nucleic acids
3. ✘ Only protein

4. ❌ Peptide fragments

5. ❌ Nucleotide fragments

Question Number : 141 Question Id : 959376741 Question Type : MCQ

Correct : 2 Wrong : 1

Chromatin is composed of:

Options :

1. ✓ Nucleic acids and protein

2. ❌ Only nucleic acids

3. ❌ Only protein

4. ❌ Peptide fragments

5. ❌ Nucleotide fragments

Question Number : 142 Question Id : 959376742 Question Type : MCQ

Correct : 2 Wrong : 1

The identification of the transforming principle proved that:

Options :

1. ❌ dead bacteria are as lethal as live ones

2. ❌ Streptococcus pneumoniae evolved from Pneumococcus

3. ✓ genetic information is contained in DNA

4. ❌ there is no protein in chromosomes

5. ❌ genetic information was transmitted by a polysaccharide

Question Number : 142 Question Id : 959376742 Question Type : MCQ

Correct : 2 Wrong : 1

The identification of the transforming principle proved that:

Options :

1. ❌ dead bacteria are as lethal as live ones

2. ❌ Streptococcus pneumoniae evolved from Pneumococcus

3. ✓ genetic information is contained in DNA

4. ❌ there is no protein in chromosomes

5. ❌ genetic information was transmitted by a polysaccharide

Question Number : 143 Question Id : 959376743 Question Type : MCQ

Correct : 2 Wrong : 1

Which statement about the elongation of the lagging strand during DNA replication is correct?

Options :

1. ❌ It is synthesized in a 3' --> 5' direction

2. ✘ It progresses (grows) toward the replication fork.
3. ✓ It requires a short RNA primer to proceed.
4. ✘ It is synthesized by DNA ligase.
5. ✘ It is synthesized continuously.

Question Number : 143 Question Id : 959376743 Question Type : MCQ

Correct : 2 Wrong : 1

Which statement about the elongation of the lagging strand during DNA replication is correct?

Options :

1. ✘ It is synthesized in a 3' --> 5' direction
2. ✘ It progresses (grows) toward the replication fork.
3. ✓ It requires a short RNA primer to proceed.
4. ✘ It is synthesized by DNA ligase.
5. ✘ It is synthesized continuously.

Question Number : 144 Question Id : 959376744 Question Type : MCQ

Correct : 2 Wrong : 1

mRNAs and some specialized RNAs are synthesized by:

Options :

1. ✘ RNA polymerase I
2. ✓ RNA polymerase II
3. ✘ RNA polymerase III
4. ✘ DNA polymerase I
5. ✘ Gyrase

Question Number : 144 Question Id : 959376744 Question Type : MCQ

Correct : 2 Wrong : 1

mRNAs and some specialized RNAs are synthesized by:

Options :

1. ✘ RNA polymerase I
2. ✓ RNA polymerase II
3. ✘ RNA polymerase III
4. ✘ DNA polymerase I
5. ✘ Gyrase

Question Number : 145 Question Id : 959376745 Question Type : MCQ

Correct : 2 Wrong : 1

In eukaryotes, translation is initiated by binding of ribosome to:

Options :

1. ✘ Pribnow box

2. ✘ Hogness box

3. ✓ 5' Cap

4. ✘ Poly A tail

5. ✘ TATA box

Question Number : 145 Question Id : 959376745 Question Type : MCQ

Correct : 2 Wrong : 1

In eukaryotes, translation is initiated by binding of ribosome to:

Options :

1. ✘ Pribnow box

2. ✘ Hogness box

3. ✓ 5' Cap

4. ✘ Poly A tail

5. ✘ TATA box

Question Number : 146 Question Id : 959376746 Question Type : MCQ

Correct : 2 Wrong : 1

In terms of lac operon regulation, what happens when E. coli is grown in medium containing both glucose and lactose?

Options :

1. ✘ Both CAP and the lac repressor are bound to the DNA.

2. ✘ CAP is bound to the DNA but the lac repressor is not.

3. ✘ Lac repressor is bound to the DNA but CAP is not.

4. ✓ Neither CAP nor the lac repressor are bound to the DNA.

5. ✘ Lac repressor is bound to the DNA.

Question Number : 146 Question Id : 959376746 Question Type : MCQ

Correct : 2 Wrong : 1

In terms of lac operon regulation, what happens when E. coli is grown in medium containing both glucose and lactose?

Options :

1. ✘ Both CAP and the lac repressor are bound to the DNA.

2. ✘ CAP is bound to the DNA but the lac repressor is not.

3. ✘ Lac repressor is bound to the DNA but CAP is not.

4. ✓ Neither CAP nor the lac repressor are bound to the DNA.

5. ✗ Lac repressor is bound to the DNA.

Question Number : 147 Question Id : 959376747 Question Type : MCQ

Correct : 2 Wrong : 1

Who discovered restriction enzymes?

Options :

1. ✓ Nathan, arber and smith,1970

2. ✗ Watson, crick and wilikins,1970

3. ✗ Boyer and cohen, 1975

4. ✗ Paul berg,1975

5. ✗ Arber and smith,1970

Question Number : 147 Question Id : 959376747 Question Type : MCQ

Correct : 2 Wrong : 1

Who discovered restriction enzymes?

Options :

1. ✓ Nathan, arber and smith,1970

2. ✗ Watson, crick and wilikins,1970

3. ✗ Boyer and cohen, 1975

4. ✗ Paul berg,1975

5. ✗ Arber and smith,1970

Question Number : 148 Question Id : 959376748 Question Type : MCQ

Correct : 2 Wrong : 1

What hormone is commonly expressed in transgenic livestock to increase their growth and productivity?

Options :

1. ✗ clotting factor VIII

2. ✓ bGH (bovine growth hormone)

3. ✗ Erythropoietin

4. ✗ Insulin

5. ✗ Glucagon

Question Number : 148 Question Id : 959376748 Question Type : MCQ

Correct : 2 Wrong : 1

What hormone is commonly expressed in transgenic livestock to increase their growth and productivity?

Options :

1. ❌ clotting factor VIII
2. ✓ bGH (bovine growth hormone)
3. ❌ Erythropoietin
4. ❌ Insulin
5. ❌ Glucagon

Question Number : 149 Question Id : 959376749 Question Type : MCQ

Correct : 2 Wrong : 1

Which of the following technique is suitable for identifying mRNA molecule in a sample?

Options :

1. ❌ Western blotting
2. ❌ Southern blotting
3. ✓ Northern blotting
4. ❌ Eastern blotting
5. ❌ PCR

Question Number : 149 Question Id : 959376749 Question Type : MCQ

Correct : 2 Wrong : 1

Which of the following technique is suitable for identifying mRNA molecule in a sample?

Options :

1. ❌ Western blotting
2. ❌ Southern blotting
3. ✓ Northern blotting
4. ❌ Eastern blotting
5. ❌ PCR

Question Number : 150 Question Id : 959376750 Question Type : MCQ

Correct : 2 Wrong : 1

The first drug produced using recombinant DNA technology is used to treat:

Options :

1. ❌ Hemophilia
2. ❌ Dwarfism
3. ❌ Heart attack
4. ✓ Diabetes
5. ❌ Cancer

Question Number : 150 Question Id : 959376750 Question Type : MCQ

Correct : 2 Wrong : 1

The first drug produced using recombinant DNA technology is used to treat:

Options :

1. ✗ Hemophilia
2. ✗ Dwarfism
3. ✗ Heart attack
4. ✓ Diabetes
5. ✗ Cancer

