**Medieval India**

1. Where is the famous Vijaya Vittala Temple, having its 56 carved pillars emitting musical notes located?
   (a) Belur  
   (b) Bhadrachalam  
   (c) Hampi  
   Ans. (c)

**Explanation**

The famous Vijaya Vittala Temple, having its 56 carved pillars emitting musical notes, located at Hampi, the capital of Vijayanagar kingdom to the region of Krishnadevaraya. Krishnadevaraya was regarded as the greatest of all the Vijayanagar rulers. He built the famous temples of Krishnaswami, Hazara Rama Swami and Viththalaswami at Hampi.

*Source: Medieval History of India—NCERT*

**Modern India**

2. Consider the following statements:
   1. Jawaharlal Nehru was in his fourth term as the Prime Minister of India at the time of his death.
   2. Jawaharlal Nehru represented Rae Bareilly constituency as a Member of Parliament.
   3. The first non-Congress Prime Minister of India assumed the office in the year 1977.

Which of the statements given above is/are correct?
   (a) 1 only  
   (b) 3 only  
   (c) Both 1 and 2  
   Ans. (d)

**Explanation**

Jawaharlal Nehru became Prime Minister in 1947 for 1st term followed by an election in 1952 for 2nd term then election took place in 1957 and he became Prime Minister for 3rd term and finally after winning 1962 elections, he became Prime Minister for the 4th term and he died in 1964. He never represented Rae-Bareilly and in fact he represented Phulpur constituency near Allahabad in Uttar Pradesh. From march 24, 1977 to July 28, 1979 Morarji Desai served as Prime Minister as head of a Multiparty front, Janata Party, India’s first non-Congress government. So, statement (1) and (3) is correct. Hence, answer is (d).

*Source: Freedom Struggle of India—Bipin Chandra*

3. Which one of the following was the first fort constructed by the British in India?
   (a) Fort William  
   (b) Fort St. George  
   (c) Fort St. David  
   (d) Fort St. Angelo  
   Ans. (b)

**Explanation**

(i) **Fort William**: Fort William was built under the supervision of Sir Charles Eyr in the year 1700.
(ii) **Fort St. George**: It is the first British fort of India, built in 1644 at the coastal city of Chennai.
(iii) **Fort St. David**: Previously, this fort was a Maratha property. The fort was sold by the Marathas to the English Indian Company in 1690.
(iv) **Fort Angelo**: It is also known as Kannur Fort. The St. Angelo Fort of Kerala was built by the first Portuguese Viceroy Don Francisco De Alvida. It was constructed in the year 1505.

*Source: Modern History of India—B. L. Grover  
Modern History of India—NCERT*

4. Consider the following statements:
   1. Robert Clive was the first Governor-General of Bengal.
   2. William Bentinck was the first Governor-General of India.

   Which of the statements given above is/are correct?
   (a) 1 only  
   (b) 2 only  
   (c) Both 1 and 2  
   (d) Neither 1 nor 2  
   Ans. (c)

**Explanation**

According to Regulating Act of 1773, Warren Hastings was the first Governor-General of Bengal. This provision was changed through the Charter Act of 1833, according to which Lord William Bentinck was made the first Governor-General of India. Thus, the first statement is wrong and the second is correct.

*Source: Modern History of India—NCERT  
Modern History of India—B. L. Grover*

5. Who, among the following Europeans, were the last to come to pre-independence India as traders?
   (a) Dutch  
   (b) English  
   (c) French  
   (d) Portuguese  
   Ans. (c)

**Explanation**

Time line of Europeans who came to Pre Independence India as traders are:
(i) **Dutch**—1502 AD (1st factory was established in Masulipattanam in 1605 AD).
(ii) **English**—1600 AD (1st factory was established in 1608 in Surat).
(iii) **French**—1664 AD (1st factory was established in 1668 in Surat).
(iv) **Portuguese**—1498 AD (1st factory was established in Cochin in 1503 AD).

*Source: Modern History of India—B. L. Grover.*
6. The ruler of which one of the following states was removed from power by the British on the pretext of misgovernment?
   (a) Awadh  (b) Jhansi  
   (c) Nagpur  (d) Satara

   Ans. (a)

   **Explanation**
   Lord Dalhousie annexed other states like Satara, Nagpur, Jhansi etc. on the pretext of Doctrine of Lapse. But Nawab Wazid Ali Shah had many children. So, Dalhousie just annexed Awadh on the pretext of Misrule in 1856.

   **Source**: Modern History of India—NCERT—B. L. Grover

7. Who, among the following, started the newspaper Shome Prakash?
   (a) Dayanand Saraswati  
   (b) Ishwar Chandra Vidyasagar  
   (c) Raja Rammohan Roy  
   (d) Surendranath Banerjee

   Ans. (b)

   **Explanation**
   Shome Prakash, the first Bengali political paper was published by Dwarka Nath Vidyabhusan in 1858 at Calcutta. But Shome Prakash newspaper was published by Ishwar Chandra Vidyasagar in 1898. Born in 1820 in Bengal, Vidyasagar's contribution is many sided. He worked for the upliftment of women. His efforts that led to the Act of Widow Remarriage (1856). After it Vidyasagar continued his reform movement, directing it against polygamy and later child marriage and finally secured an age of consent Act in 1860 and fixed the age of consent for the consummation of marriage at 10 years for women. It was raised to 12 by another legislation in 1891; but as census statistics show, child marriage continued to be a widely practiced social custom among all the castes. High and low alike, well into the 20th century. After 1870, Bengal was past its peak, so far as reform movement was concerned; it was western and southern India, which were to see more activity in this direction.

   **Source**: Modern History of India—NCERT

8. At which one of the following places did Mahatma Gandhi first start his Satyagraha in India?
   (a) Ahmedabad  (b) Bardoli  
   (c) Champaran  (d) Kheda

   Ans. (c)

   **Explanation**
   At Champaran, Mahatma Gandhi first started his Satyagraha in India. Rajkumar Shukla invited Gandhi from Lucknow and mobilisation of peasant was done by Rajkumar Shukla, Saint Raut, Khendar Rai, local mahajans and traders, village Mohktra and village school teachers such as Pir Mohammad, Harbans Sahay. Open inquiry was done in July, 1917 and Gandhi appointed 15 volunteers to start village construction work. In this movement, Rajendra Prasad, A. N. Singh, J. B. Kripiani also supported him in Champaran. It leads to abolition of Tinkathia system, where earlier peasant had to grow indigo on 3/20 part of their land.

   **Source**: Freedom Struggle of India—Bipin Chandra

9. Which one of the following aroused a wave of popular indignation that led to the massacre by the British at Jallianwala Bagh?
   (a) The Arms Act  (b) The Public Safety Act  
   (c) The Rowlatt Act  (d) The Vernacular Press Act

   Ans. (c)

   **Explanation**
   Jallianwala Bagh Massacre took place on April 13, 1919. People had gathered in Jallianwala Bagh to protest against the arrest of Dr. Satyapaul and Kitchlew, during Anti-Rowlatt Act agitation. On the Boisakh Day of April 13, 1919 a peaceful unarmed crowd, consisting mostly of villagers who had come for a fair and were not aware of the ban on meetings was fired upon without any warming and Provocation by Dyer's troops, in Jallianwala Bagh, a park enclosed from all sides. The brutality at Jallianwala Bagh stunned the entire nation. The response did not come immediately, but a little later. Mahatma Gandhi withdrew the movement on April 18 calling it a 'Himalaya blunder'. Since then, Gandhi became extremely wary about starting movements without adequate organisational and ideological preparation. Rabindranath Tagore, voicing the agony and anger of the nation, through a famous letter renounced his knight hood on May 30, 1919. Gandhi returned the 'Kaiser-i-Hind' medal given to him for his work during the Boer war.

   **Source**: Freedom Struggle of India—Bipin Chandra

10. Who wrote the book—'The Story of The Integration of The Indian States'?
    (a) B. N. Rao  (b) C. Rajagopalachari  
    (c) Krishna Menon  (d) V. P. Menon

    Ans. (d)

    **Explanation**
    Vapal Panguni Menon, also known as V. P. Menon, was an Indian Civil Servant, who played a vital role in the partition of India and the integration of independent India, during the period 1945-1950. The Son of school headmaster in Kolar, Menon had begun as a clerk in the Indian Civil Service, but working assiduously hard, Menon rose through the ranks to become the highest serving Indian officer in British India. In 1946, he was appointed Political Reforms Commissioner to the British Viceroy. V. P. Menon wrote the book—'The Story of the Integration of the Indian states'.

    **Source**: The History of Post Independence—Bipin Chandra.

11. Assertion (A) : According to the Wavell Plan, the number of Hindu and Muslim members in the Executive Council were to be equal.

    **Reason (R) :** Wavell thought that this arrangement would have avoided the partition of India.

    **Codes :**
    (a) Both A and R are individually true and R is the correct explanation of A
    (b) Both A and R are individually true but R is not the correct explanation of A
    (c) A is true but R is false
    (d) A is false but R is true

    Ans. (c)

    **Explanation**
    Plan proposed by Wavell in Shimla conference held in 1945, is called Wavell Plan. Under this plan, India was to be
granted Dominion status in the near future. The Indians would themselves draft the constitution. The Hindu and the Muslim would be equally represented besides the members of the scheduled castes and depressed classes. The position of the secretary of state and the viceroy would remain the same. The viceroy would retain his power of Veto. But these proposals were not to be applied to the Indian states. The plan was rejected by the Muslim league. So Assertion (A) is correct but Reason (R) is false, hence answer (c) is correct.

Source: Modern History of India—B. L. Grover

12. Which one of the following places was associated with Acharya Vinoba Bhave's Bhooman Movement at the beginning of the movement?
(a) Udaygiri
(b) Rapur
(c) Pochampalli
(d) Venkatagiri

Ans. (c)

Explanation
Vinoba Bhave organised Sarvodaya Samaj to bring about non-violent social transformation through land reforms with the willing cooperation of landowners. Large landowners were persuaded to gift at least one-sixth of their land. On 18th April 1951, the first donation of land took place in a village called Pochampalli in Telangana, Andhra Pradesh. But it was most successful mainly in Orissa.

Source: History of post Independent—Bipin Chandra

13. Who, among the following, wrote the book ‘Bahubivah’?
(a) Raja Rammohan Roy
(b) Ishwar Chandra Vidyasagar
(c) Pandita Ramabai
(d) Rabindranath Tagore

Ans. (b)

Explanation
Ishwar Chandra Vidyasagar wrote the book ‘Bahubivah’. A well-known and an active social reformer of the 19th century was Vidyasagar. He was a Sanskrit scholar, and helped in a struggle for securing women their rights. He opposed caste evils and priestly domination as well. In 1850, he protested against child marriage and in 1856, in Kolkata, he supervised the first lawful widow re-marriage. He ran as many as 35 girls schools, most of them at his own expense.

Source: Modern History of India—B. L. Grover

14. The first Factory Act for restricting the working hours of women and children, and authorizing local government to make necessary rules was adopted during whose time?
(a) Lord Lytton
(b) Lord Bentinck
(c) Lord Ripon
(d) Lord Canning

Ans. (c)

Explanation
During the period of Lord Ripon (1880-84), there was a phase of progress with the Factory Act 1881, which tried to improve the position of factory workers. The first Factory Act was passed in 1881. This Act prohibited the employment of children below 7 years of age and the employment of children under 12 years of age for more than 9 hours. Other chief events of his period were: end of Second Anglo-Afghan War; the Vernacular Press Act repealed in 1882, and policy of free trade introduced. The most important constructive work of Lord Ripon was the enactment of a series of Acts, which made local self-government more effective. The Ibert Bill was introduced during his time. The Hunter Commission report on education came in 1882. Lord Ripon was the most liked of the British Viceroys.

Source: Modern History of India—NCERT

15. The song ‘Amar Sonar Bangla’ written during the Swadeshi Movement of India inspired the liberation struggle of Bangladesh and was adopted as the National Anthem of Bangladesh. Who wrote this song?
(a) Rajni Kant Sen
(b) Dwijendralal Roy
(c) Mukunda Das
(d) Rabindranath Tagore

Ans. (d)

Explanation
“Amar Sonar Bangla (My Golden Bengal)” is a song written and composed by the poet Rabindranath Tagore. Rabindranath Tagore (1886-1941) was one of the greatest lyric poet of the world: writer of short stories, novels, dramas, won the Nobel Prize, returned his ‘Knighthood’ after Jallianwala Bagh massacre; was prominent in anti-partition of Bengal agitation. Tagore was a thorough artist, a poet, painter as well as musician. His early poetical works include Sandhya Sangit, Prabhat Sangit and Kari-o-Komal. It was his Geetanjali that won him worldwide recognition and the Nobel Prize in 1913. Among his prose works is the book Raja Praja, an analysis of the British rule.

Source: The Freedom Struggle of India—Bipin Chandra

Geography of India

16. Which one of the following National Highways passes through Maharashtra, Chhattisgarh and Orissa?
(a) NH 4
(b) NH 5
(c) NH 6
(d) NH 7

Ans. (c)

Explanation
NH 4: NH 4 passes through Thane—Pune—Belgaum—Hubli—Bangalore—Ranipet—Chennai.
NH 5: NH 5 passes through Bailagao—Cuttack—Bhubaneshwar—Vishakhapatnam—Vijaywada—Chennai.

Source: Oxford Student’s Atlas

17. Which one of the following cities is the Global Automotive Research Centre being set up?
(a) Chennai
(b) Hyderabad
(c) Pune
(d) Gurgaon

Ans. (a)
18. Consider the following statements:
1. Balaghat is known for its diamond mines.
2. Mahagawan is known for its manganese deposits.
Which of the statements given above is/are correct?
(a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2

Answer: (d)

Explanation
Balaghat, Jabalpur, Jabua and Chhindwara districts of Madhya Pradesh is important region for manganese production in the country. In Madhya Pradesh, the principal mining area is Katagaria, Langur, Varvati, Netra, Tritoli, Bagharia, Salwa and Chikpara. Diamond found in Mahagawan area in Panna district of Madhya Pradesh. The reserve of diamond in this area is about one million carats. About 400 carats of diamond is being produced by diamond mines of Bagharia river basin in Panna and Satna districts of Madhya Pradesh. So statements (1) and (2) are not correct. Hence, answer is (d).

Source: Geography of India—C. B. Mamoria

19. Which one among the following states of India has the lowest density of population?
(a) Himachal Pradesh
(b) Meghalaya
(c) Arunachal Pradesh
(d) Sikkim

Answer: (c)

Explanation
According to census of India 2001, some States/UT and their density is given below:

<table>
<thead>
<tr>
<th>States/Union Territories</th>
<th>Density (Per sq. km)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(i) Himachal Pradesh</td>
<td>109</td>
</tr>
<tr>
<td>(ii) Meghalaya</td>
<td>103</td>
</tr>
<tr>
<td>(iii) Arunachal Pradesh</td>
<td>13</td>
</tr>
<tr>
<td>(iv) Sikkim</td>
<td>76</td>
</tr>
<tr>
<td>(v) Delhi</td>
<td>9,294</td>
</tr>
<tr>
<td>(vi) Chandigarh</td>
<td>7,903</td>
</tr>
<tr>
<td>(vii) West-Bengal</td>
<td>904</td>
</tr>
<tr>
<td>(viii) Bihar</td>
<td>880</td>
</tr>
<tr>
<td>(ix) Kerala</td>
<td>819</td>
</tr>
<tr>
<td>(x) Uttar Pradesh</td>
<td>689</td>
</tr>
<tr>
<td>(xi) Mizoram</td>
<td>42</td>
</tr>
<tr>
<td>(xii) Manipur</td>
<td>107</td>
</tr>
</tbody>
</table>

Source: India 2007—Publication Division, Govt. of India

20. Which one of the following rivers originates at Amarkantak?
(a) Damodar
(b) Mahanadi
(c) Narmada
(d) Tapti

Answer: (c)

Explanation

<table>
<thead>
<tr>
<th>River</th>
<th>Originates</th>
</tr>
</thead>
<tbody>
<tr>
<td>(i) Damodar</td>
<td>Chotanagpur (Tort)</td>
</tr>
<tr>
<td>(ii) Mahanadi</td>
<td>Siwaha (Raipur)</td>
</tr>
<tr>
<td>(iii) Narmada</td>
<td>Amarkantak</td>
</tr>
<tr>
<td>(iv) Tapti/Tapi</td>
<td>Multai (Betul)</td>
</tr>
<tr>
<td>(v) Ravi</td>
<td>Rohtang Pass (Himachal Pradesh)</td>
</tr>
</tbody>
</table>

Source: Geography of India—NCERT—Oxford Student Atlas

21. Which one among the following major Indian cities is most eastward located?
(a) Hyderabad
(b) Bhopal
(c) Lucknow
(d) Bengaluru (Bangalore)

Answer: (c)

Explanation

<table>
<thead>
<tr>
<th>City</th>
<th>Longitude</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lucknow</td>
<td>80.5°E</td>
</tr>
<tr>
<td>Hyderabad</td>
<td>78.4°E</td>
</tr>
<tr>
<td>Bhopal</td>
<td>77.36°E</td>
</tr>
<tr>
<td>Bengaluru</td>
<td>77.56°E</td>
</tr>
</tbody>
</table>

Hence, Lucknow is most eastward located.

Source: Oxford Student Atlas

22. Out of the four southern states: Andhra Pradesh, Karnataka, Kerala and Tamil Nadu, which shares boundaries with the maximum number of Indian states?
(a) Andhra Pradesh only
(b) Karnataka only
(c) Each of Andhra Pradesh and Karnataka
(d) Each of Tamil Nadu and Kerala

Answer: (c)

Explanation
(i) Andhra Pradesh is surrounded by Tamil Nadu, Karnataka, Maharashtra, Chhattisgarh and Orissa. It is also surrounded by one Union Territory (Pondicherry).
(ii) Karnataka is surrounded by Kerala, Tamil Nadu, Andhra Pradesh, Maharashtra and Goa.
(iii) Kerala is surrounded by Karnataka and Tamil Nadu. It is also surrounded by one Union Territory MAHE (Pondicherry).
(iv) Tamil Nadu is surrounded by Kerala, Karnataka and Andhra Pradesh. It is also surrounded by one Union Territory Karaikal and Pondicherry (Pondicherry).

Source: Oxford Student Atlas

23. In which state is the Guru Shikhar Peak located?
(a) Rajasthan
(b) Gujarat
(c) Madhya Pradesh
(d) Maharashtra

Answer: (a)

Explanation
Guru Shikhar Peak is located at a distance of 15 km from Mount Abu in Rajasthan. It is the highest peak point in Rajasthan at an altitude of 5676 Feet (1722 m).

24. Which one of the following Himalayan Passes was reopened around in the middle of the year 2006 to facilitate trade between India and China?
(a) Chang La
(b) Jara La
(c) Nathu La
(d) Shipki La

Answer: (c)

Explanation
India and China signed an agreement on border trade, which aimed at opening a border trading point through Nathu La.
Nathu La Passes reopened after 44 years on 6 July, 2006, and it is linking Sikkim with Tibet. The agreement followed China’s delayed acceptance of the status of Sikkim as the part of India.

25. In which one of the following districts, have large reserves of diamond-bearing kimberlite been discovered in the recent past?
   (a) Hoshangabad
   (b) Raipur
   (c) Sambalpur
   (d) Warangal

Ans. (b)

Explanation

Large reserves of diamond-bearing kimberlite tracts have been discovered in Payalikhind and Behradin in Raipur district and Tokapel in Bastar.

26. What is the average distance (approximate) between the Sun and the Earth?
   (a) \(70 \times 10^5\) km
   (b) \(100 \times 10^5\) km
   (c) \(110 \times 10^6\) km
   (d) \(150 \times 10^6\) km

Ans. (d)

Explanation

The average distance between the Sun and the Earth is \(150 \times 10^6\) km.

Source: General Science—NCERT

27. Assertion (A): River Kalindi is an east-flowing river in the southern part of India.
   Reason (R): The Deccan Plateau is higher along its western edge and gently slopes towards the Bay of Bengal in the east.
   Codes:
   (a) Both A and R are individually true and R is the correct explanation of A
   (b) Both A and R are individually true but R is not the correct explanation of A
   (c) A is true but R is false
   (d) A is false but R is true

Ans. (d)

Explanation

River Kalindi is a west-flowing river in the southern part of India. The another river flowing towards west are Satranji, Bhadra, Vaitarni, Saravati, Bharatpujha, Periyar and Pamba. Deccan Plateau is tilted towards the east with bold heights in the west.

So, Assertion (A) is false and Reason (R) is correct.

Source: Geography of India: Dr. Khullar, Oxford Student Atlas

28. Which one of the following is also known as Top Slip?
   (a) Simlipal National Park
   (b) Periyar Wildlife Sanctuary
   (c) Manjira Wildlife Sanctuary
   (d) Indira Gandhi Wildlife Sanctuary and National Park

Ans. (d)

Explanation

Indira Gandhi Wildlife Sanctuary and National Park is also known as Top Slip. It is located in Annamalai hills of Tamil Nadu. It is called Top Slip due to the fact that in old days, there was the practice of sliding timber from these hills.

Source: Geography of India—C.B. Mamoria

29. Shahgarh area in Jaisalmer district of Rajasthan was in news in the year 2006 because of which one of the following?
   (a) Finding high quality gas reserves
   (b) Finding uranium deposits
   (c) Finding zinc deposits
   (d) Installation of wind power units

Ans. (a)

Explanation

High quality gas reserves have been found at a depth of 3,161 metres in an exploratory well drilled in Shahgarh block in Jaisalmer district of Rajasthan.

30. Consider the following statements:
   1. In India, Red Panda is naturally found in the western Himalayas only.
   2. In India, slow Loris lives in the dense forests of the North-East.

Which of the statements given above is/are correct?
   (a) 1 only
   (b) 2 only
   (c) Both 1 and 2
   (d) Neither 1 nor 2

Ans. (b)

Explanation

The Red Panda is found in mountainous band from Nepal through north-eastern India, Bhutan, China, Laos and northern Myanmar.

Slow Loris lives in the dense forests of the north-east (Pakai Range). In India, the Slow Loris is found in the states of Assam, Arunachal Pradesh, Nagaland, Manipur, Mizoram, Tripura, and Meghalaya. So, statement (1) is incorrect but statement (2) is correct. Hence, answer is (b).

Source: Geography of India—NCERT

31. Match list I with list II and select the correct answer by using the codes given below the lists:

<table>
<thead>
<tr>
<th>List-I</th>
<th>List-II</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Trawn)</td>
<td>(River Nearer to it)</td>
</tr>
<tr>
<td>A. Betul</td>
<td>1. Indravati</td>
</tr>
<tr>
<td>B. Jagdalpur</td>
<td>2. Narmada</td>
</tr>
<tr>
<td>C. Jabalpur</td>
<td>3. Shipra</td>
</tr>
<tr>
<td>D. Ujjain</td>
<td>4. Tapti</td>
</tr>
</tbody>
</table>

Codes:

   (a) 1 4 2 3
   (b) 4 1 2 3
   (c) 4 1 3 2
   (d) 1 4 3 2

Ans. (b)

Explanation

<table>
<thead>
<tr>
<th>Places</th>
<th>Rivers</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Betul</td>
<td>Tapti</td>
</tr>
<tr>
<td>B. Jagdalpur</td>
<td>Indravati</td>
</tr>
<tr>
<td>C. Jabalpur</td>
<td>Narmada</td>
</tr>
<tr>
<td>D. Ujjain</td>
<td>Shipra</td>
</tr>
</tbody>
</table>

Source: Oxford’s student Atlas

32. Which one of the following is located in the Bastar region?
   (a) Bandhavgarh National Park
   (b) Dandeli Sanctuary
   (c) Rajaji National Park
   (d) Indravati National Park

Ans. (d)

Explanation

Bandhavgarh National Park is located in the Bastar region.
33. Where are Shevaroy Hills located?
   (a) Andhra Pradesh
   (b) Karnataka
   (c) Kerala
   (d) Tamil Nadu
   Ans. (d)

34. Match list-I with list-II and select the correct answer by using the codes given below the lists:

<table>
<thead>
<tr>
<th>List-I</th>
<th>List-II</th>
</tr>
</thead>
<tbody>
<tr>
<td>City</td>
<td>(River)</td>
</tr>
<tr>
<td>A. Bangkok</td>
<td>1. Irrawaddy</td>
</tr>
<tr>
<td>B. Phnom-Penh</td>
<td>2. Mekong</td>
</tr>
<tr>
<td>C. Hanoi</td>
<td>3. Menam (Chao Phraya)</td>
</tr>
<tr>
<td>D. Yangon</td>
<td>4. Red River</td>
</tr>
</tbody>
</table>

Codes:
(a) 3 2 4 1
(b) 4 1 3 2
(c) 3 1 4 2
(d) 4 2 3 1

Ans. (a)

35. Consider the following statements:
   1. Either of the two belts over the oceans at about 30° to 35° N and S Latitudes is known as Horse Latitude.
   2. Horse Latitudes are low pressure belts.
   Which of the statements given above is/are correct?
   (a) 1 only
   (b) 2 only
   (c) Both 1 and 2
   (d) Neither 1 nor 2
   Ans. (a)

36. Which one among the following rivers is the longest?
   (a) Amazon
   (b) Amur
   (c) Congo
   (d) Lena
   Ans. (a)

37. Dalbergia species is associated with which one of the following?
   (a) Cashew nut
   (b) Coffee
   (c) Tea
   (d) Rosewood
   Ans. (d)
38. The largest coral reef in the world is found near the coast of which one of the following countries?
(a) Australia  
(b) Cuba  
(c) Ghana  
(d) Philippines

Ans. (a)

**Explanation**

The Great Barrier Reef is the largest coral reef. It is situated along the east coast of Queensland state of Australia. It is included in the world heritage list of UNESCO in 1981.

*Source: Physical Geography—Savinder Singh*

39. Consider the following statements:
1. The annual range of temperature is greater in the Pacific Ocean than that in the Atlantic Ocean.
2. The annual range of temperature is greater in the Northern Hemisphere than that in the Southern Hemisphere.

Which of the statements given above is/are correct?
(a) 1 only  
(b) 2 only  
(c) Both 1 and 2  
(d) Neither 1 nor 2

Ans. (b)

**Explanation**

Annual range of temperature means bigger the size of ocean, lesser the annual range. That's why, Atlantic Ocean records higher annual range of temperature than the Pacific Ocean because the size of Atlantic is smaller than that of Pacific. The average temperature of all the oceans is 17.2°F (63.9°F). In Northern Hemisphere, temperature is 19.4°F (67°F) and in the Southern Hemisphere, temperature is 16.1°F (61°F).

*Source: Physical Geography—Savinder Singh*

40. Through which one of the following Straits, does a tunnel connect the United Kingdom and France?
(a) Davis Strait  
(b) Denmark Strait  
(c) Strait of Dover  
(d) Strait of Gibraltar

Ans. (c)

**Explanation**

Well-known straits in the world include the strait of Dover, between England and France, which connects the North Sea with the English Channel; the strait of Gibraltar, the only natural passage between the Atlantic Ocean and the Mediterranean Sea; the Bosporus and Dardanelles, which connects the Mediterranean and the Black Sea; the Bering Strait between Alaska and Siberia which connects the Pacific and Arctic Oceans; and the Straits of Malacca, which lie between Peninsular Malaysia and Sumatra and connects the Indian Ocean with South China Sea.

*Source: Oxford Student Atlas*

41. Where is Copacabana Beach located?
(a) Buenos Aires  
(b) Hawaiian Islands  
(c) Rio de Janeiro  
(d) Valletta

Ans. (c)

**Explanation**

Copacabana Beach is one of the world's most famous beaches. Located right in the heart of Rio-de-Janeiro (Brazil), it is also one of the most lively beaches in the world.

*Source: Oxford Student Atlas*

42. Which one of the following countries is planning to construct a rival to the Panama Canal to link the Pacific and Atlantic Oceans?
(a) Colombia  
(b) Costa Rica  
(c) Guatemala  
(d) Nicaragua

Ans. (d)

**Explanation**

The Inter-Oceanic Nicaragua Canal is a proposed waterway that would connect the Caribbean Sea and therefore, the Atlantic Ocean with the Pacific Ocean through Nicaragua in Central America. Such a canal would follow rivers up to Lake Nicaragua and then cut across the Isthmus of Rivas to reach the Pacific. The proposed project would redraw the map of the world trade by opening an east coast of North America, Europe and Brazil to large-scale sea traffic from Pacific Rim countries like China and South Korea.

43. Which one of the following cities does not have the same clock time as that of the other three cities at any given instant?
(a) London (UK)  
(b) Lisbon (Portugal)  
(c) Accra (Ghana)  
(d) Addis Ababa (Ethiopia)

Ans. (d)

**Explanation**

London (UK), Lisbon (Portugal) and Accra (Ghana) are very close to Greenwich Meridian. So, their clock time are same. But Addis Ababa (Ethiopia) is situated on the eastern part of the Africa (Longitude = 38.74 E), so clock time of Addis Ababa is different. The Greenwich Meridian is the standard time of the world. The Greenwich Meridian at 0° longitude passes through Greenland sea and Norwegian sea, and the countries of the United Kingdom, France, Spain, Algeria, Mali, Burkina Faso and Ghana and then through the South Atlantic Ocean. In some countries with a large west-east extent, more than one time zone may be necessary, eg; the USA and Canada both have five time zones; Australia has three; Russia has eleven. Places located on the same meridian, have the same local time, places located on different meridians have unlike local times; times differing by four minutes for every degree of longitude. As the earth rotates from west to east, places in the east see the Sun first. Therefore, (i) for each 1° of longitude towards the east, a time of four minutes has to be added, (ii) for each 1° of longitude towards the west, a time of four minutes has to be subtracted. The standard time in India is the local time of a place at 82.5°E longitude near Allahabad. This meridian also divides India approximately into half.

*Source: Oxford Student Atlas*
44. Assertion (A): There are no tea plantations in any African country.
Reason (R): Tea plants need fertile soil with high humus.

Codes:
(a) Both A and R are individually true and R is the correct explanation of A
(b) Both A and R are individually true but R is not the correct explanation of A
(c) A is true but R is false
(d) A is false but R is true

Ans. (d)

Explanation
Major tea producing African countries are Kenya, Tanzania, Malawi, Zimbabwe and Mozambique. Kenya is the third largest producer of tea in the world and Kenya stands first in terms of exports. India stands first in production and fourth in exports. Other tea producing countries are China, Sri Lanka, Russia, Japan, Turkey, Indonesia, Bangladesh, Argentina and Uganda. Tea plants need deep, well-drained, hill slopes, fertile soils with high humus. So, Assertion (A) is false but Reason (R) is correct.

Source: Economic Geography—Kashinath Singh

45. The Stilwell Road, built in 1940s, which was recently in news, connects which of the following?
(a) Agartala in India and Yangon in Myanmar via Bangladesh
(b) Ledo in India and Kunming in China via Myanmar
(c) Kalimpong in India and Lhasa in Tibet via Bhutan
(d) Imphal in India and Bangkok in Thailand via Myanmar

Ans. (b)

Explanation
The Stilwell Road connects Ledo in India and Kunming in China via Myanmar. The road work starting from April, 1942 with a length of 1079 miles in; about 1736 km was completed by October, 1944 within record time of two and a half years. The road connected all important places between Ledo and Kunming.

POUTY

46. Who was the speaker of the First Lok Sabha?
(a) Hukum Singh
(b) G. V. Mavalankar
(c) K. M. Munshi
(d) U. N. Dhebar

Ans. (b)

Explanation
G. V. Mavalankar (17.11.1947 to 5.05.1952) was the speaker of First Lok Sabha. The name of speaker of the Lok Sabha is given below:

<table>
<thead>
<tr>
<th>Name</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>G. V. Mavalankar</td>
<td>1952-1956</td>
</tr>
<tr>
<td>M. Ananthasayanam</td>
<td>1956-1962</td>
</tr>
<tr>
<td>Ayengar</td>
<td></td>
</tr>
<tr>
<td>Sardar Hukum Singh</td>
<td>1962-1967</td>
</tr>
<tr>
<td>Neelam Sanjeeva Reddy</td>
<td>1967-1969</td>
</tr>
<tr>
<td>Gurudayal Singh Dhillon</td>
<td>1969-1975</td>
</tr>
<tr>
<td>Bali Ram Bhagat</td>
<td>1976-1977</td>
</tr>
<tr>
<td>Neelam Sanjeeva Reddy</td>
<td>1977 (March-July)</td>
</tr>
<tr>
<td>K. S. Hegde</td>
<td>1977-1979</td>
</tr>
<tr>
<td>Bairem Jhatkar</td>
<td>1980-1989</td>
</tr>
<tr>
<td>Shivraj Patil</td>
<td>1991-1996</td>
</tr>
<tr>
<td>P. A. Sangma</td>
<td>1996-1998</td>
</tr>
<tr>
<td>G.M.C. Balayogi</td>
<td>1998-March 2002</td>
</tr>
<tr>
<td>Manohar Joshi</td>
<td>May 2002-2005</td>
</tr>
<tr>
<td>Somnath Chatterjee</td>
<td>2005 to till date</td>
</tr>
</tbody>
</table>


47. Who among the following have been the Union Finance Ministers of India?
1. V. P. Singh
2. R. Venkataraman
3. Y. B. Chavan
4. Pranab Mukherjee

Select the correct answer by using the code given below:
(a) 1, 2 and 3 (b) 1, 3 and 4 (c) 2 and 4 (d) 1, 2, 3 and 4

Ans. (d)

Explanation
Finance Ministers and their term are given below:
2. John Mathai—1948-1949
5. T. T. Krishnamachari—1957-1958
14. V. P. Singh—1985-1987
15. S.B. Chavan—1987-1990
19. V. P. Singh—1998-2002

48. Assertion (A): The Council of Ministers in the Union of India is collectively responsible both to the Lok Sabha and the Rajya Sabha.
Reason (R): The members of both the Lok Sabha and the Rajya Sabha are eligible to be the Ministers of the Union Government.

Codes:
(a) Both A and R are individually true and R is the correct explanation of A
(b) Both A and R are individually true but R is not the correct explanation of A
(c) A is true but R is false
(d) A is false but R is true

Ans. (d)
49. Consider the following statements:
1. The Judges (Inquiry) Bill 2006 contemplates to establish a Judicial Council which will receive complaints against Judges of the Supreme Court including the Chief Justice of India, High Court Chief Justice and Judges.
2. Under the Protection of women from Domestic Violence Act, 2005, a woman can file a petition before a 1st Class Judicial Magistrate.
Which of the statements given above is/are correct?
(a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2
Ans. (b)

The Judges (Inquiry) Bill 2006, contemplates to establish a Judicial Council which will receive complaints against Judges of Supreme Court and High Court, except Chief Justice of India. But for the purpose of the reference procedure, not the complaint procedure, the Chief Justice of India will be included. The amendment also seeks to introduce a code of ethics for the judiciary. The Act empowers the Magistrate to pass protection order in favour of the abused to prevent the abuser from aiding or committing an act of domestic violence or any other specified act.

50. Consider the following statements:
1. The Chairman of the Committee on Public Accounts is appointed by the Speaker of the Lok Sabha.
2. The Committee on Public Accounts comprises Members of Lok Sabha, Members of Rajya Sabha and a few eminent persons of industry and trade.
Which of the statements given above is/are correct?
(a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2
Ans. (a)

The Lok Sabha Speaker appoints the Chairman of all Parliamentary Committee. So, the Chairman of the Committee on Public Accounts is appointed by the Speaker of Lok Sabha. Hence, statement (1) is correct.

Public Accounts Committee is a financial committee; it consists of 22 members—15 from the Lok Sabha and 7 from the Rajya Sabha—all elected by the proportional representation system. By convention, a Lok Sabha member, from a major opposition party, is appointed as its Chairman. Minister cannot be its members. It is assisted by the Comptroller and Auditor General of India. It ensures that public money is spent in accordance with Parliament's decisions and call attention to waste, extravagance, loss of opportunity and other doubtful expenditure. Hence, statement (2) is incorrect.

51. Which of the following Constitution Amendment Act seeks that the size of the Councils of Ministers at the Centre and in a State must not exceed 15 percent of the total number of members in the Lok Sabha and the total number of members of the Legislative Assembly of the State, respectively?
(a) 91st
(b) 93rd
(c) 95th
(d) 97th
Ans. (a)

Under Article 360, the President can declare emergency if he is satisfied that a situation has arisen whereby the financial stability or credit of India or of any part of its territory is threatened. Such an emergency shall ordinarily remain in force for a period of two months, unless before the expiry of that period, it is approved by resolutions of both Houses of Parliament. If approved, it operates for six months and can be extended by six months at a time. It can remain in operation for a maximum period of three years.

EFFECTS: Financial emergency, (i) the union executive can give directions to any state to observe such canons of financial propriety as may be specified in the directions; (ii)
the President can ask the states to reduce the salaries and allowances of all or any class of persons serving in connection with affairs of the state; (iii) the President can ask the states to reserve all Money Bills passed by the State Legislature for his consideration; (iv) the President can issue directions for the reduction of salaries and allowances of persons serving in connection with the affairs of the Union, including the Judge of the Supreme Court and High Court. No proclamation of this type of emergency has been made so far.


53. Consider the following statements:

1. The mode of removal of a Judge of a High Court in India is same as that of removal of a Judge of the Supreme Court.
2. After retirement from the office, a permanent Judge of a High Court cannot plead or act in any court or before any authority in India.

Which of the statements given above is/are correct?

(a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2

Ans. (a)

Explanation

After retirement, a Judge of High Court cannot serve in any court or before any authority in India except in the Supreme Court and High Court other than the High Court in which he had held the office (Article 220). So, in this question, statement (1) is correct but statement (2) is incorrect.


54. Which one of the following is the correct chronological order of the formation of the following states as full states of the Indian Union?

(a) Sikkim - Arunachal Pradesh - Nagaland - Haryana
(b) Nagaland - Haryana - Sikkim - Arunachal Pradesh
(c) Sikkim - Haryana - Nagaland - Arunachal Pradesh
(d) Nagaland - Arunachal Pradesh - Sikkim - Haryana

Ans. (b)

Explanation

State | Formation year
--- | ---
(i) Nagaland | 1962
(ii) Haryana | 1966
(iii) Sikkim | 1975
(iv) Arunachal Pradesh | 1986
(v) Andhra Pradesh | 1953
(vi) Gujarat | 1960
(vii) Kerala | 1956
(viii) Karnataka | 1974
(ix) Himachal Pradesh | 1970
(x) Meghalaya | 1971
(xi) Mizoram | 1987
(xii) Goa | 1987
(xiii) Chattisgarh | 2000
(xiv) Uttarakhand | 2000
(xv) Jharkhand | 2000


ECONOMICS

55. Which one of the following is the correct sequence in the decreasing order of production (in million tonnes) of the given foodgrains in India?

(a) Wheat-Rice-Pulses-Coarse cereals
(b) Rice-Wheat-Pulses-Coarse cereals
(c) Wheat-Rice-Coarse cereals-Pulses
(d) Rice-Wheat-Coarse cereals-Pulses

Ans. (d)

Explanation

Production of Crops and Foodgrains (Million tonnes):

<table>
<thead>
<tr>
<th>Crops</th>
<th>2005-06</th>
<th>2006-07</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rice</td>
<td>91.8</td>
<td>90.0</td>
</tr>
<tr>
<td>Wheat</td>
<td>69.4</td>
<td>72.5</td>
</tr>
<tr>
<td>Coarse</td>
<td>34.1</td>
<td>32.0</td>
</tr>
<tr>
<td>Pulses</td>
<td>13.4</td>
<td>14.5</td>
</tr>
<tr>
<td>Foodgrains</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kharif</td>
<td>109.9</td>
<td>107.2</td>
</tr>
<tr>
<td>Rabi</td>
<td>98.7</td>
<td>102.2</td>
</tr>
</tbody>
</table>

Source: Economic Survey Report—2006-07, Govt. of India

56. The National Housing Bank was set up in India as a wholly-owned subsidiary of which one of the following?

(a) State Bank of India
(b) Reserve Bank of India
(c) ICICI Bank
(d) Life Insurance Corporation of India

Ans. (b)

Explanation

The National Housing Bank, the apex institution of housing finance in India, was set up as a wholly owned subsidiary of Reserve Bank of India. The Bank started its function from July, 1988.

Source: India 2006-Publication Division, Govt. of India

57. Which one of the following is not a member of the Shanghai Cooperation Organisation?

(a) Russia
(b) Kazakhstan
(c) Ukraine
(d) Uzbekistan

Ans. (c)

Explanation

The Shanghai Cooperation Organisation was established in Shanghai in 2001, comprises 1. China, 2. Kazakhstan, 3. Kyrgyzstan, 4. Russia, 5. Tajikistan and 6. Uzbekistan. Mongolia, Iran, Pakistan and India were granted Shanghai Cooperation Organisation, observer status. The Shanghai Cooperation Organisation held its fifth summit meeting in China's financial capital, Shanghai, on 15 June, 2006. The Petroleum Minister, Murli Deora, represented India at the summit.

58. With reference to the steel industry in India in the recent times, consider the following statements:

1. Vizag Steel Plant (RINL) has been declared Minit Ratna.
2. Merger of IISCO with SAIL has been completed.

Ans. (b)
59. Which one of the following is the correct sequence in the increasing order of contribution of different sectors to the Gross Domestic Product of India?
   (a) Service - Industry - Agriculture
   (b) Service - Agriculture - Industry
   (c) Industry - Service - Agriculture
   (d) Industry - Agriculture - Service

**Explanation**
Contribution of different sectors to the GDP:
   - Service—55.1% (2006-07)
   - Industry—26.4% (2006-07)
   - Agriculture—18.5% (2006-07)

**Source**: Economic Survey Report-2006-07, Govt. of India

62. Consider the following statements:
   1. The nation-wide scheme of the National Child Labour Projects (NCLP) is run by the Union Ministry of Social Justice and Empowerment.
   2. Gurupadswamy Committee dealt with the issues of child labour.

Which of the statements given above is/are correct?
   (a) 1 only
   (b) 2 only
   (c) Both 1 and 2
   (d) Neither 1 nor 2

**Explanation**
National Child Labour Project is run by a registered society constituted under the State Government’s Department of Labour.

Government formed the first committee called Gurupadswamy Committee to study the issue of child labour and to suggest measures to tackle it.

**Source**: The Economy of India—Dutta and Sundaram

63. Consider the following statements:
   1. China has the observer’s status at the South Asian Association for Regional Cooperation.
   2. India has the observer’s status at the Shanghai Cooperation Organisation.

Which of the statements given above is/are correct?
   (a) 1 only
   (b) 2 only
   (c) Both 1 and 2
   (d) Neither 1 nor 2

**Explanation**
The National e-Governance Plan will be approved shortly and 25 projects, in mission mode, will be launched in 2006-07. Among them is project MCA-21 to enable companies to file returns electronically and a project for setting up common service centres and assigning unique ID to BPL families.

61. Consider the following statements:
   1. The repo rate is the rate at which other banks borrow from the Reserve Bank of India.
   2. A value of 1 for Gini Coefficient in a country implies that there is perfectly equal income for everyone in its population.

Which of the statements given above is/are correct?
   (a) 1 only
   (b) 2 only
   (c) Both 1 and 2
   (d) Neither 1 nor 2

**Explanation**
South Asian Association of Regional Cooperation (SAARC) was formally established in 1985 in order to strengthen and accelerate regional cooperation, particularly economic development. The eight countries of South Asia are brought together in this organisation. The name of these countries are—Bangladesh, Bhutan, India, Maldives, Nepal, Sri Lanka, Afghanistan, and Pakistan. The Headquarters of SAARC is in Kathmandu, Nepal. China, Iran, Japan, Republic of Korea, USA and European Union have the observer’s status at SAARC.

Sanghai Cooperation Organisation’s Predecessor, the Shanghai give mechanism, originated and grew from the endeavour by China, Russia, Kazakhstan, Kyrgyzstan and...
64. Match list I with list II and select the correct answer by using the code given below the lists :

<table>
<thead>
<tr>
<th>List I</th>
<th>List II</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Aluminium Company)</td>
<td>(Location)</td>
</tr>
<tr>
<td>A. BALCO</td>
<td>1. Hirakud</td>
</tr>
<tr>
<td>B. HINDALCO</td>
<td>2. Korba</td>
</tr>
<tr>
<td>C. Indian Aluminium Company</td>
<td>3. Koraput</td>
</tr>
<tr>
<td>D. NALCO</td>
<td>4. Renukoot</td>
</tr>
</tbody>
</table>

Codes :

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
</tr>
<tr>
<td>(a)</td>
<td>3</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>(b)</td>
<td>2</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>(c)</td>
<td>3</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>(d)</td>
<td>2</td>
<td>1</td>
<td>4</td>
</tr>
</tbody>
</table>

**Ans.** (b)

**Explanation**
The Indian Aluminium Company Limited (INDAL) is an integrated plant having three units at different places. Aluminium is extracted from bauxite at Muri in Jharkhand. The reduction plant of alumina is located at Alupuram in Kerala and fabrication plant at Belur manufactures aluminium sheets, rods, aluminium paste etc. In order to achieve the economies of scale, a second smelter was set up at Hirakud.

The Hindustan Aluminium Corporation Limited (HINDALCO) is located at Renukoot near Mirzapur in Uttar Pradesh and the Bharat Aluminium Company (BALCO) has set up two units at Korba and Ranagiri to utilise bauxite ores of Amarkantak in Madhya Pradesh and of Udaigiri-Dhangarvadi region in Maharashtra respectively.

65. Tarapore Committee was associated with which one of the following?
(a) Special Economic Zones
(b) Fuller capital account convertibility
(c) Foreign exchange reserves
(d) Effect of oil-prices on the Indian economy

**Ans.** (b)

**Explanation**
The Tarapore Committee report on Fuller Capital Account Convertibility has gone beyond just recommending differential capital adequacy for Banking Conglomerates. It has suggested that industrial houses should be allowed to set up banks and that non-banking financial companies convert themselves into banks. In 1997, the first Tarapore Committee on Capital Account Convertibility (CAC) was released. Now, they have released their second report detailing roadmap towards bringing free convertibility of rupees.

66. Who, among the following, served as the Chief Economist of the International Monetary Fund?
(a) Ashok Lahiri
(b) Sumantra Ghoshal
(c) Saumitra Chaudhari
(d) Raghuram Rajan

**Ans.** (d)

**Explanation**
Raghuram G. Rajan is the Economic Counsellor and Director of Research at the International Monetary Fund or more simply, its chief economist. He replaced Ken Rogoff at the IMF in September, 2003. He is the youngest individual to hold the position (beginning at the age of 40). In 2003, he was the inaugural winner of the Fischer Black Prize awarded by the American Finance Association for outstanding original research in finance.

67. Participatory Notes (PNs) are associated with which one of the following?
(a) Consolidated Fund of India
(b) Foreign Institutional Investors
(c) United Nations Development Programme
(d) Kyoto Protocol

**Ans.** (b)

**Explanation**
Participatory Notes (PNs) are instruments issued by SEBI registered foreign institutions to entities that want to invest in Indian markets but do not want to directly register with the market, resulting in concealment of the investor's identity.

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### Physics

68. Consider the following statements:
1. If magenta and yellow coloured circles intersect, the intersected area will have red colour.
2. If cyan and magenta coloured circles intersect, the intersected area will have blue colour.
Which of the statements given above is/are correct?
(a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2

**Ans.** (c)

**Explanation**
In science, red, green and blue are called primary colours, because none of them can be produced from other colours of light. However, they give other colours when suitably mixed. The colours formed by adding two primary colours are called secondary colours; they are yellow, cyan (peacock blue) and magenta. The three primary colours give white light when they are mixed together, as do the three secondaries. A primary colour and the secondary opposite is in the colour triangle such as blue and yellow also give white light; any two colours producing white light are called complementary colours.
69. Which one of the following non-metals is not a poor conductor of electricity?
(a) Sulphur  (b) Selenium  
(c) Bromine  (d) Phosphorus

Ans. (b)

Explanation

The non-metal conductors of electricity are graphite and Selenium (Se). Selenium is a better conductor of electricity in light than in darkness; its conductivity varying directly with the intensity of light.

70. Which one of the following types of glass can cut off ultraviolet rays?
(a) Soda glass  (b) Pyrex glass  
(c) Jena glass  (d) Crookes glass

Ans. (d)

Explanation

Soda Glass: It is prepared by fusing soda ash, sand and limestone. It is also called soft glass. It fuses at comparatively low temperature. The major disadvantage of using this glass is that it is brittle and breaks easily. It cracks when subjected to sudden changes of temperature. Soda glass is used for the manufacturing of window glass mirrors and common glassware etc.

Pyrex Glass: It is made by fusing a mixture of sand, lime, borax (Na₂B₂O₇·10 H₂O) and alkali carbonates. It has good chemical durability and thermal shock resistance. It is also known as boro-silicate glass. It is used for making laboratory apparatus, ampoules, pharmaceutical containers etc.

Crookes Glass: The crookes glass contains cerium and other rare earths and has a high absorption of ultraviolet radiation. It is used in sun-glasses.

71. Consider the following statements:
1. A flute of smaller length produces waves of lower frequency.
2. Sound travels in rocks in the form of longitudinal elastic waves only.
Which of the statements given above is/are correct?
(a) 1 only  (b) 2 only  
(c) Both 1 and 2  (d) Neither 1 nor 2

Ans. (b)

Explanation

A flute of smaller length produces waves of higher frequency. So, statement (1) is incorrect. Sound travels in rocks in the form of longitudinal elastic waves only, so statement (2) is correct.

Source: Physics—NCERT

72. Four wires of same material and of dimensions as mentioned below are stretched by a load of same magnitude separately. Which one of them will be elongated maximum?
(a) Wire of 1 m length and 2 mm diameter  
(b) Wire of 2 m length and 2 mm diameter  
(c) Wire of 3 m length and 1.5 mm diameter  
(d) Wire of 1 m length and 1 mm diameter

Ans. (c)

Explanation

All four wires of same material and of same dimensions, so the Elasticity Co-efficient are equal.

\[
y' = \frac{f}{A} = \frac{fL}{A\Delta l} = \frac{fL}{\pi r^2 \Delta l}
\]

Hence, we can say that the elongation is directly proportionate of the length of wire and indirectly proportionate of the square of its diameter. Hence, the wire of option (c), whose length is 3 meter and diameter is 1.5 mm, will be elongated maximum.

Source: Physics—NCERT

73. Assertion (A): A jet aircraft moving at match number equal to 1 travels faster at an altitude of 15 km than while moving at match number equal to 1 near the sea level.
Reason (R): The velocity of sound depends on the temperature of the surrounding medium.

Codes:
(a) Both A and R are individually true and R is the correct explanation of A
(b) Both A and R are individually true but R is not the correct explanation of A
(c) A is true but R is false
(d) A is false but R is true

Ans. (d)

Explanation

The speed of any supersonic flow is usually in terms of Mach number. The Mach number represents the ratio of the speed of a body to the speed of sound in the surrounding atmosphere. The speed of sound, or sonic speed is Match 1. The expression 'Match 2' applied to a supersonic aircraft which means that its velocity relative to the atmosphere is twice the velocity of sound passing through the atmosphere. The Mach number can also be applied to subsonic speed, that is, speed less than the speed of sound. The match number in the case of subsonic speed, is always less than 1. A plane travelling at subsonic speed is preceded by the sound or pressure waves that are caused by its flight. But since a plane in supersonic flight travels faster than sound, it gives no advance warning of its coming. In other words, it is preceded by a zone of silence. At subsonic speeds, the sound or pressure waves travel faster than the body producing the waves. The waves spread out. To a stationary observer, there are more waves per second ahead of the approaching body causing the waves. Therefore, frequency increases. There are fewer waves per second behind the body leaving the stationary observer, so the frequency decreases. At supersonic speeds, the waves at any given moment would be limited by the zone of silence. They would form a cone called a match wave. Suppose, an aeroplane travelling at subsonic speed dives towards the earth. It may attain sonic speed during the dive pull out. The pressure disturbance can pile up at the match wave or envelope. After the aeroplane has recovered from its dive, this envelope can continue downward until it reaches the ground and can make itself felt as a disturbance, called a sonic boom.
74. Which of the following types of light are strongly absorbed by plants?
(a) Violet and orange
(b) Blue and red
(c) Indigo and yellow
(d) Yellow and violet

Ans. (b)

Explanation
Out of the seven colours of light, only red and blue are absorbed by plants. Photosynthesis is the process by which green plants trap solar energy and convert it into chemical energy of carbohydrates. Photosynthesis is the only source of energy for all organisms. The light reaction occurs in the grana of cells' chloroplasts and in this reaction, $O_2$ is liberated, ATP and NADPH$_2$ is formed. Leaf is the major organ of photosynthesis in plants. All green parts of the plant have chloroplasts. Chloroplasts are enveloped by double membrane enclosing stroma, in which grana are present. The grana contains pigment such as chlorophyll. Photosynthesis involves two distinct phases: Photo-chemical phase (light reactions) and biosynthetic phase (dark reactions). The light reaction occurs in the grana of cell's chloroplast and in the reaction, $O_2$ is liberated ATP and NADPH$_2$ is formed. The dark reaction occurs in the stroma of chloroplast and CO$_2$ absorbed from the atmosphere is reduced to make carbohydrate. Because the colour of Chlorophyll is green, so it strongly absorbs blue and red colours of electro-magnetic spectrum of Sun.

Source: Biology class XI—NCERT

75. Three identical vessels A, B and C are filled with water, mercury and kerosene respectively up to an equal height. The three vessels are provided with identical taps at the bottom of the vessels. If the three taps are opened simultaneously, then which vessel is emptied first?
(a) Vessel B
(b) All the vessels A, B and C will be emptied simultaneously
(c) Vessel A
(d) Vessel C

Ans. (d)

Explanation
Viscosity of materials are—
Kerosene < Water < Mercury.
Hence, Kerosene oil will diffuse first and makes the vessel empty. Water will diffuse second and mercury will diffuse third.

Source: Physics—NCERT

76. Which one of the following does not contain silver?
(a) Horn silver
(b) German silver
(c) Ruby silver
(d) Lunar caustic

Ans. (b)

Explanation
Except German silver, all alloys given in question contain silver. There are some important alloys and their components are given below—
(i) Horn Silver: It is also called Silver chloride (AgCl). Its components are Ag and Cl.
(ii) German Silver: Cu—50%, Zn—35%, Ni—15%
(iii) Ruby Silver:
(iv) Lunar Caustic: It is also called Silver nitrate (AgNO$_3$).

Source: Chemistry—NCERT

77. Which one among the following is called philosopher's wool?
(a) Zinc bromide
(b) Zinc nitrate
(c) Zinc oxide
(d) Zinc chloride

Ans. (c)

Explanation
Zinc oxide is called philosopher's wool. It is found in nature as Zincite or red zinc ore. It is used in painting, making artificial teeth etc.

Source: Chemistry—NCERT

78. Which one of the following parts of the pitcher plant becomes modified into a pitcher?
(a) Stem
(b) Leaf
(c) Stipule
(d) Petiole

Ans. (b)

Explanation
Insectivorous plants like Pitcher plant, Bladderwort and Sundew, have specialised leaves to catch insects. The leaves of carnivorous plants trap, hold, digest insects and other small animals. Carnivorous plants are found chiefly in bogs, sandy areas and tropical rain forests. In such areas, nitrogen and various other essential food elements are likely to be present only in small amount. Such elements are provided by animals trapped in leaves.

Source: Biology—NCERT

79. In the human body, which structure is the appendix attached to?
(a) The large intestine
(b) The small intestine
(c) The gall bladder
(d) The stomach

Ans. (a)

Explanation
The appendix is a small tube like structure attached to the first part of the large intestine, also called the colon. The appendix is located in the lower right portion of the abdomen, where the small intestine attaches to the large intestine.

Source: Biology; Class XII—NCERT

80. Which one of the following is the correct sequence in the order of decreasing length of the three structural parts, given below, of small intestine in the human body?
(a) Jejunum - Duodenum - Ileum
(b) Ileum - Duodenum - Jejunum
(c) Jejunum - Ileum - Duodenum
(d) Ileum - Jejunum - Duodenum

Ans. (d)

Explanation
The first, slightly wider part of the small intestine is called the duodenum. The length of duodenum is 20 cm. The rest, called the ileum, is the longest (150 cm) part of the gut. The
later stages of digestion takes place in the small intestine. The walls of the ileum produce intestinal juice and the digestive processes of the duodenum continue for a time in the ileum. The length of jejunum is 100 to 110 cm in length

Source: Biology—NCERT

81. In human body, which one of the following hormones regulates blood calcium and phosphate?
   (a) Glucagon  (b) Growth hormone
   (c) Parathyroid hormone  (d) Thyroxine

Ans. (c)

Explanation
Parathyroid hormone controls distribution of calcium and phosphates. Parathyroid hormone is important in bone development.

Source: Biology—NCERT

82. How do most insects respire?
   (a) Through skin  (b) Through gills
   (c) By lungs  (d) By tracheal system

Ans. (d)

Explanation
Most insects respire by tracheal system. In this system, gas is directly transported to the tissues by air filled tubes that bypass blood. The pores to the outside, called spiracles, deliver the gases of respiration.

Source: Biology—NCERT

83. In human beings, normally in which one of the following parts, does the sperm fertilize the ovum?
   (a) Cervix  (b) Fallopian tube
   (c) Lower part of uterus  (d) Upper part of uterus

Ans. (b)

Explanation
During sexual union, the sperms are discharged into the vagina. Each discharge of semen contains millions of sperms. However, only one of them fuses with the ovum to fertilize it. The sperms deposited in the vagina swim up to the uterus and further up through the Fallopian tubes, where if a sperm meets an ovum, it fuses with it, resulting into the formation of a zygote. The zygote moves down the oviduct, reaches the uterus and gets embedded in the endometrium on the 24th day of the Menstrual Cycle.

Source: Biology—NCERT

84. Which one of the following parts of the human brain is the regulating centre for swallowing and vomiting?
   (a) Cerebellum  (b) Cerebrum
   (c) Medulla oblongata  (d) Pons

Ans. (c)

Explanation
Human Brain consists of—

(i) Cerebrum: The largest part of the brain consists of two hemispheres separated by corpus callosum, a deep median furrow. It controls voluntary actions and is the seat of intelligence, memory association, imagination and will.

(ii) Cerebellum: The large mass having ridges and furrows, situated above and behind the medulla and attached to cerebrum. It regulates muscular movement of locomotion.

(iii) Medulla oblongata: It is the lowermost part of the brain which continues as the spinal cord in the vertebral column. It controls involuntary action.

Source: Biology—NCERT

85. Production of which one of the following is a function of the liver?
   (a) Lipase  (b) Urea
   (c) Mucus  (d) Hydrochloric acid

Ans. (b)

Explanation
Liver is found only in vertebrates. Newly absorbed food materials pass through the liver before being transported round the body. An exception is the emulsified fat in the lacteals which bypasses the liver. The liver stores carbohydrate as glycogen, lipids, mineral salts, vitamins A, D and B12. The liver helps to keep the blood sugar (glucose) level constant, which in turn, helps to keep the osmotic pressure of the blood constant. The liver manufactures a wide variety of products. These include most of the plasma proteins and bile. Bile is stored in the gall bladder and passed into the duodenum to help in digestion. Bile contains salts which help in emulsification of fats and absorption of food. The liver converts toxins into harmless substances. Many of the toxic by-products of the body's own metabolism are made harmless in the liver.

Example: The conversion of nitrogenous waste products to urea. Over 100 chemical reactions continually go on in the liver. They produce a significant amount of heat, which contributes to the maintenance of a constant body temperature in homothermic animals.

Source: Biology—NCERT

86. Which one of the following is not a digestive enzyme in the human system?
   (a) Trypsin  (b) Gastrin
   (c) Pylalin  (d) Pepsin

Ans. (b)

Explanation

<table>
<thead>
<tr>
<th>Important Digestive Enzymes:</th>
<th>Produced by</th>
<th>Converts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amylase, Pylalin</td>
<td>Salivary glands in mouth</td>
<td>Starch to Sugars (Maltose)</td>
</tr>
<tr>
<td>Peptin</td>
<td>Gastric glands in stomach</td>
<td>Proteins to amino acids (Peptone)</td>
</tr>
<tr>
<td>Trypsin</td>
<td>Pancreas in abdomen</td>
<td>Proteins to peptones</td>
</tr>
<tr>
<td>Amylase</td>
<td>Pancreas</td>
<td>Carbohydrates to maltose</td>
</tr>
<tr>
<td>Lipase</td>
<td>Pancreas</td>
<td>Fats to fatty acids and glycerol</td>
</tr>
<tr>
<td>Eepsin</td>
<td>Intestinal gland in small intestines</td>
<td>Peptides to amino acids</td>
</tr>
<tr>
<td>Maltose</td>
<td>Intestinal gland</td>
<td>Maltose to glucose</td>
</tr>
<tr>
<td>Lactose</td>
<td>Intestinal gland</td>
<td>Lactose to glucose</td>
</tr>
<tr>
<td>Sucrose</td>
<td>Intestinal gland</td>
<td>Sucrose to glucose</td>
</tr>
</tbody>
</table>

Source: Biology—NCERT
91. NASA's Deep Impact space mission was employed to take detailed pictures of which comet nucleus?
   (a) Halley's Comet  
   (b) Hale-Bopp  
   (c) Hyakutake  
   (d) Tempel-1
   **Ans. (d)**
   **Explanation**
   Deep Impact is a NASA space probe, designed to study the composition of the interior of the Comet 'Tempel-1'.

92. Robert Webster is known for his work associated with which one of the following?
   (a) Cardiology  
   (b) Influenza virus  
   (c) HIV/AIDS  
   (d) Alzheimer
   **Ans. (b)**
   **Explanation**
   Robert Webster (Born May 7, 1932) in Balcithua, New Zealand, leading avian influenza expert, is the virologist who, in 1957, was the first to announce a link between human flu and bird flu.

93. Where was the first conference of the 'Pugwash Conferences on Science and World Affairs' held in the year 1957?
   (a) Minnowbrook (USA)  
   (b) Rhode Island (USA)  
   (c) Nova Scotia (Canada)  
   (d) Nagasaki (Japan)
   **Ans. (c)**
   **Explanation**
   The Pugwash Conference of Science and World Affairs is an international organisation that brings together scholars and public figures to work towards reducing the danger of armed conflict and to seek solutions to global security threats. It was founded in 1957 by Joseph Rotblat and Bertrand Russell in Pugwash, Nova Scotia following the release of the Russell-Einstein Manifesto in 1955. Pugwash and Rotblat jointly won the Nobel Peace Prize in 1995 for efforts on nuclear disarmament.

94. What is the Galileo Project which has been in news recently?
   (a) An inter-country programme of missile shield developed by the United States of America  
   (b) A project developed by India with assistance from Canada  
   (c) An environmental protection project being developed by Japan  
   (d) A multi-satellite navigation project being developed by the European Union
   **Ans. (d)**
   **Explanation**
   The Galileo positioning system, simply referred to as Galileo, is a proposed Global Navigation Satellite System, to be built by the European Union and the European Space Agency (ESA) as an alternative to the United States Operated Global Positioning System (GPS) and Russian GLONASS. Galileo operating company, the concession holder and private consortium running Galileo, will have its main headquarters in Toulouse, France.
95. Match list I with list II and select the correct answer by using the codes given below the lists:

<table>
<thead>
<tr>
<th>List-I</th>
<th>List-II</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Person)</td>
<td>(Known As)</td>
</tr>
<tr>
<td>A. John C. Mather</td>
<td>1. Co-founder of Microsoft</td>
</tr>
<tr>
<td>B. Michael Griffin</td>
<td>2. Space Walker</td>
</tr>
<tr>
<td>C. Paul G. Allen</td>
<td>3. Administrator of NASA</td>
</tr>
<tr>
<td>D. Piers Sellers</td>
<td>4. Nobel Prize Winner, 2006 in Physics</td>
</tr>
</tbody>
</table>

Codes:

A  B  C  D
(a)  4  1  3  2
(b)  2  3  1  4
(c)  3  2  4  3
(d)  1  2  3  4

Ans. (c)

*John C. Mather—He was an American astrophysicist and cosmologist. He was awarded the 2006 Nobel Prize in Physics.

*Dr. Michael Douglas Griffin—He has been the administrator of NASA since April 13, 2005. As the chief of America’s space agency, Dr. Griffin oversees such areas as the future of human space flight, the fate of the Hubble telescope and NASA’s role in understanding climate change.

96. Which one of the following pairs is not correctly matched?

(a) Cosmic Background Explorer (COBE) : Satellite programme
(b) Falcon : Under-sea cable system
(c) Discovery  : Space shuttle
(d) Atlantis : Space station

Ans. (b)

Explanations:

Musk is developing a series of launchers, called the Falcon, which, if successful, could significantly undercut the price routinely paid to aerospace giants Lockheed Martin Corp. and Boeing Co., to send payloads into Orbit. Space Shuttle Orbiter Atlantis is one of the fleet of space shuttles belonging to the US. It was the fourth operational shuttle built. Following the destruction of Challenger and Columbia, it is one of the three fully operational shuttles remaining in the fleet. The other two are Discovery and Endeavour.

97. If all the numbers from 501 to 700 are written, what is the total number of times does the digit 6 appear?

(a) 138 (b) 139 (c) 140 (d) 141

Ans. (c)

Explanations:

*No. of 6 between 501 to 599 at tens place = 10
No. of 6 between 501 to 599 at unit place = 10
No. of 6 between 600 to 699 at hundred place = 100
No. of 6 between 600 to 699 at tens place = 10
No. of 6 between 600 to 699 at unit place = 10

Total no. of times 6 appears
= 10 + 10 + 100 + 10 + 10 = 140.

98. In how many maximum different ways can 3 identical balls be placed in the 12 squares (each ball to be placed in the exact centre of the squares and only one ball is to be placed in one square) shown in the figure given above such that they do not lie along the same straight line?

(a) 144 (b) 200 (c) 204 (d) 216

Ans. (c)

Explanations:

As 3 and 4 are opposite to each other. Since 2 is adjacent of 4, hence it must be adjacent of 3.
100. (Each small circle represents a different station)

What is the maximum number of different paths that exist between the station A and the station B?

(a) 28  
(b) 31  
(c) 33  
(d) 35

Ans. (b)

Explaination

It is clear by figure that there are four routes between A to B.

<table>
<thead>
<tr>
<th>Incoming</th>
<th>Outgoing</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>First</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Second</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Third</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Fourth</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>

Total no. of paths = 9 + 12 + 6 + 4 = 31

101. A person has to completely put each of three liquids: 403 litres of petrol, 465 litres of diesel and 496 litres of Mobil Oil in bottles of equal size without mixing any of the above three types of liquids such that each bottle is completely filled. What is the least possible number of bottles required?

(a) 34  
(b) 44  
(c) 46  
(d) None of these

Ans. (b)

Explaination

HCF of 403, 465 and 496 = 31

:. Largest capacity of bottles must be 31L

Now, the no. of bottles required to put 403L of petrol

= \frac{403}{31} = 13

Similarly,

The no. of bottles required to put 465L of diesel

= \frac{465}{31} = 15

The no. of bottles required to put 496L of mobile oil

= \frac{496}{31} = 16

:. Least no. of bottles required of 31L size

= 13 + 15 + 16

= 44

102. Amit has five friends: 3 girls and 2 boys. Amit’s wife also has 5 friends: 3 boys and 2 girls. In how many maximum number of different ways can they invite 2 boys and 2 girls such that two of them are Amit’s friends and two are his wife’s?

(a) 24  
(b) 38  
(c) 46  
(d) 58

Ans. (c)

Explaination

<table>
<thead>
<tr>
<th>Amit’s Friends</th>
<th>Amit’s wife</th>
<th>ways of selection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boys (2)</td>
<td>Girls (3)</td>
<td></td>
</tr>
<tr>
<td>Case I</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2 \times 3 \times 3 \times 3 \times 0 \times 2 \times 2_c = 1 \times 1 \times 1 \times 1 = 1</td>
</tr>
<tr>
<td>Case II</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2 \times 3 \times 3 \times 0 \times 2 \times 2_c = 1 \times 3 \times 3 \times 3 \times 1 = 9</td>
</tr>
<tr>
<td>Case III</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2 \times 3 \times 3 \times 3 \times 0 \times 2 \times 2_c = 1 \times 3 \times 3 \times 2 = 36</td>
</tr>
</tbody>
</table>

Total selection = 1 + 9 + 36 = 46

103. Five balls of different colours are to be placed in three different boxes such that any box contains at least one ball. What is the maximum number of different ways in which this can be done?

(a) 90  
(b) 120  
(c) 150  
(d) 180

Ans. (c)

Explaination

\[
n = 5 \quad \quad \quad \quad \quad r = 3
\]

:. No. of ways = \[\frac{n!}{(n-r)!} = 5! = 120\]

104. All the six letters of the name SACHIN are arranged to form different words without repeating any letter in any one word. What will be the position of the word SACHIN in that sequence?

(a) 436  
(b) 590  
(c) 601  
(d) 751

Ans. (c)

Explaination

The words start with letter A = 5! = 120

since, A is fixed and remaining 5 letters can be arranged together in 5! ways.

The words start with letter C = 5! = 120

The words start with letter H = 5! = 120

The words start with letter I = 5! = 120

The words start with letter N = 5! = 120

Now, the word will start from letter S in which SACHIN will be first word hence, the rank of sachin = 120 + 120 + 120 + 120 + 120 + 1 = 601.

105. Three dice (each having six faces with each face having one number from 1 to 6) are rolled. What is the number of possible outcomes such that at least one dice shows the number 2?

(a) 36  
(b) 81  
(c) 91  
(d) 116

Ans. (c)
106. A train completes a journey with a few stoppages in between at an average speed of 40 km/h. If the train had not stopped anywhere, it would have completed the journey at an average speed of 60 km/h. On an average, how many minutes per hour does the train stop during the journey?
(a) 20 minutes per hour
(b) 18 minutes per hour
(c) 15 minutes per hour
(d) 10 minutes per hour

Ans. (a)

Explanation

\[
\text{Stoppage time/h = \frac{\text{Change in speed}}{\text{Faster speed}}} = \frac{60 - 40}{60} = \frac{20}{60} = \frac{1}{3} = 20 \text{ min}
\]

107. The average salary of 100 employees in an office is Rs. 16,000 per month. The management decided to raise salary of every employee by 5% but stopped a transport allowance of Rs. 800 per month which was paid earlier to every employee. What will be the average monthly salary?
(a) Rs. 16,000
(b) Rs. 16,500
(c) Rs. 16,800
(d) Cannot be known since data are insufficient

Ans. (a)

Explanation

Increment = 5% of 16,000
\[= \frac{16000 \times 5}{100} = Rs. 800\]

:. Incremented Salary = Rs. 16000 + Rs. 800
\[= Rs. 16800\]

New salary after deducting transport allowance
\[= 16800 - 800 = Rs.16000\]

:. New salary = Rs. 16000.

108. Amit starts from a point A and walks to another point B, and then returns from B to A by his car and thus takes a total time of 6 hours and 45 minutes. If he had driven both ways in his car, he would have taken 2 hours less. How long would it take for him to walk both ways?
(a) 7 h 45 min
(b) 8 h 15 min
(c) 8 h 30 min
(d) 8 h 45 min

Ans. (d)

Explanation

Let \(w\) be the time taken in one way by walking and \(c\) be the time taken in one way by car.

Now, according to question,
in first case, \[w + c = 6 \text{ h } 45 \text{ min}\]
or, \[2w + 2c = 13 \text{ h } 30 \text{ min}\] (i)
in second case, \[2c = 4 \text{ h } 45 \text{ min}\] (ii)
from equation (i) and (ii), \[2w + 2c = 13 \text{ h } 30 \text{ min}\]
or, \[2w + 4 \text{ h } 45 \text{ min} = 13 \text{ h } 30 \text{ min}\]
or, \[2w = 13 \text{ h } 30 \text{ min} - 4 \text{ h } 45 \text{ min}\]
or, \[2w = 8 \text{ h } 45 \text{ min}\]
Hence, if he walks both ways, time = 8 h 45 min.

109. A and B can complete work together in 5 days. If A works at twice his speed and B at half of his speed, this work can be finished in 4 days. How many days would it take for A alone to complete the job?
(a) 10
(b) 12
(c) 15
(d) 18

Ans. (a)

Explanation

Let A can do a work in \(x\) days and B can do a work in \(y\) days.

So, According to question,
\[
\frac{1}{x} + \frac{1}{y} = \frac{1}{5} \quad \text{(i)}
\]
\[
\frac{2}{x} + \frac{1}{2y} = \frac{1}{4} \quad \text{(ii)}
\]

By solving these two equations, from equation (ii)
\[
\frac{2}{x} + \frac{1}{2y} = \frac{1}{4}
\]
or, \[\frac{1}{x} = \frac{1}{y} \quad \text{(iii)}
\]

Put the value of \(\frac{1}{y}\) in equation (i)
\[
\frac{1}{x} + \frac{1}{y} = \frac{1}{5}
\]
or, \[\frac{1}{x} + \frac{1}{x} = \frac{1}{5}
\]
or, \[\frac{2}{x} = \frac{1}{5} \quad \Rightarrow \quad x = 10
\]

:. A alone can complete the job in 10 days.

110. Groups, each containing 3 boys, are to be formed out of 5 boys—A, B, C, D and E such that no group can contain both C and D together. What is the maximum number of such different groups?
(a) 5
(b) 6
(c) 7
(d) 8

Ans. (c)

Explanation

Maximum number of such different groups—
\[= ABC, ABD, ABE, BCE, BDE, CEA, DEA\]
\[= 7\]
111. Each of the 3 persons is to be given some identical items such that the product of the numbers of items received by each of the three persons is equal to 30. In how many maximum different ways can this distribution be done?
(a) 21
(b) 24
(c) 27
(d) 33
Ans. (C)

Explanation
Identical items can be distributed in such manner that product of the number of items is equal to 30.

(3)^2 = 27 ways.

112. 6 equidistant vertical lines are drawn on a board. 6 equidistant horizontal lines are also drawn on the board cutting the 6 vertical lines, and the distance between any two consecutive horizontal lines is equal to that between any two consecutive vertical lines. What is the maximum number of squares thus formed?
(a) 37
(b) 55
(c) 126
(d) 225
Ans. (b)

Explanation

\[
\text{Total no. of squares} = 25 + 16 + 6 + 4 + 3 + 1 = 55
\]

In the figure shown above, what is the maximum number of different ways in which 8 identical balls can be placed in the small triangles 1, 2, 3 and 4 such that each triangle contains at least one ball?
(a) 32
(b) 35
(c) 44
(d) 56
Ans. (b)

Different ways

\[
\begin{align*}
1, 1, 5 & = 4 \text{ times} \\
1, 2, 3 & = 3 \times 4 = 12 \text{ times} \\
1 \times 1 \times 3 \times 3 & = 3 \times 2 = 6 \text{ times} \\
2, 2, 2, 2 & = 1 \text{ time} \\
1, 1, 2, 4 & = 3 \times 4 = 12 \text{ times} \\
\therefore \text{ Total no. of ways} & = 12 + 12 + 6 + 4 + 1 = 35 \text{ ways.}
\end{align*}
\]

114. Who was Leander Paes’s partner when he won Doubles Final in the US Open Tennis Tournament, 2006?
(a) Max Mirnyi
(b) Martin Damm
(c) Bob Bryan
(d) Mike Bryan
Ans. (b)

Explanation
Leander Paes of India and Martin Damm of CZE defeated second-seeded Max Mirnyi of Bellarussa and Jonas Bjorkman of Sweden in the final. With a score of 6-7, 6-4, 6-3, they triumphed for their first US open championship.

115. Which of the following countries signed the Tshwane Declaration in October, 2006?
(a) China and South Africa
(b) India and South Africa
(c) South Africa and Botswana
(d) Saudi Arabia and South Africa
Ans. (b)

Explanation
Tshwane Declaration affirmed the strategic partnership between India and South Africa. The Tshwane Declaration is designed to give substance and content to their relationship. Key areas of these declaration is nuclear co-operation, anti-terrorism, common approach to be taken in the WTO negotiations, to treble the volume of bilateral trade by 2010, closer defence co-operation, health care, tourism etc.

116. Recently, the European Union and other six countries including India signed the International Thermonuclear Experimental Reactor (ITER) Project. Which one of the following was not a signatory to it?
(a) Canada
(b) China
(c) Japan
(d) USA
Ans. (a)

Explanation
There are seven national and supranational parties participating in the ITER program. China, the European Union, India, Japan, Russia, South Korea and the USA are those seven partners. Canada was previously full member, but has since pulled out due to lack of funding from the Federal government. The lack of funding also resulted in Canada withdrawing from its bid for the ITER site in 2003.

117. Consider the following statements:
1. Republicans won the majority in the US House of Representative Elections held in the year 2006.
2. Republican Bobby Jindal, won a seat in the US House of Representatives for the second time.
Which of the statements given above is/are correct?
(a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2
Ans. (b)

Explanation
Democratic party captured a majority in the lower House of US Congress in the election held in 2006. On this election,
Democratic party won 231 seat and Republican won only 201 seat. After 1982, Democratic party won majority in the US House of Representative. Bobby Jindal, Indian born Republican, makes it to the US Congress for the second time. Jindal won the 2003 open primary for Governor of Louisiana, but lost in the runoff election to then Lt. Governor Kathleen Blanco.

118. What is the broad area in which the Nobel Prize winners for the year 2006 in Physiology or Medicine, worked to get the Prize?
(a) Prevention of weakening due to ageing
(b) Flow of genetic information
(c) Immunology and disease resistance
(d) Adult stem cell research

Ans. (b)

Explanation
Andrew Z. Fire and Craig Mello won the 2006 Nobel Prize in Physiology for their discovery of RNA interference—"gene silencing".
The most prestigious award in the world is supported by the Nobel Foundation of US. This award was set up in 1990 under the will to Alfred Bernhard Nobel (1833-96). Alfred Nobel was an unmarried, Swedish scientist and Chemical engineer, who discovered Nitroglycerin (C3H5N3O9) and its use in the manufacture of dynamite in 1866. The Nobel Prizes are presented annually on December 10, the death anniversary of the founder and the festival day of the foundation. Originally, it was awarded for works in five disciplines. The Prize of Economics was instituted in 1967 by Sveriges Riksbank and Swedish Bank. This award is given in six areas like Physics, Chemistry, Physiology or Medicine, Literature, Peace and Economics.

119. Which one of the following pairs of countries joined the European Union in January, 2007?
(a) Bulgaria and Romania
(b) Bulgaria and Belgium
(c) Romania and Slovenia
(d) Hungary and Croatia

Ans. (a)

Explanation
23rd July 1952—(1) Belgium, (2) The Netherlands, (3) Luxembourg, (4) France, (5) Italy and (6) West Germany.
1st Jan, 1973 (First enlargement)—(7) Denmark, (8) Ireland, (9) United Kingdom.
1st Jan, 1981 (Second enlargement)—(10) Greece accedes to the EC.
1st Jan, 1985—Greenland withdraw after gaining home rule from Denmark.
1st Jan, 1986 (Third enlargement)—(11) Portugal, (12) Spain joined the EC.
1st Jan, 1995 (Fourth enlargement)—(13) Austria, (14) Finland, (15) Sweden accede to EU.
1st Jan, 2007 (Fifth enlargement, eastern part-II), (26) Bulgaria, (27) Romania.

120. Which one of the following organisations won the CSIR Award for Science and Technology (S&T) Innovations for Rural Development, 2006?
(a) CLRRI
(b) IARI
(c) NDDB
(d) NDRI

Ans. (a)

Explanation
Chennai-based Central Leather Research Institute (CLRRI) has bagged the first Council of Scientific and Industrial Research (CSIR) award for Science and Technology innovations for rural development.

121. Parimarjan Negi has excelled in which one of the following games?
(a) Billiards
(b) Swimming
(c) Chess
(d) Weight-lifting

Ans. (c)

Explanation
Chess prodigy 13 year old Delhi Boy, Parimarjan Negi, on 1st July, 2006, has become the youngest Grandmaster in the world and second youngest in the history of the game. By completing the GM title requirements at the age of 13 years and 142 days, Negi has taken away the honour of being the youngest GM from Norway's wonder kid, Magnus Carlsen, who had become a GM in 13 years and 147 days on April 26, 2004 in Dubai. Sergey Karjakin of Ukraine holds the record of being the youngest GM ever after making the title at the age of 12 years and seven months in 2002. Negi replaces P Hari Krishna as the country's youngest ever GM. Hari Krishna reached the landmark at the age of 15 years and 99 days in August 2001. Hari had improved upon Vishwanathan Anand's 14 year old record of 18 years and 19 days.

122. With reference to the international meetings held in the year 2006, which of the following pairs is/are correctly matched?
1. NAM Summit : Havana
2. APEC Meeting : Bangkok
3. EU-India Summit : Helsinki
4. UN Climate Change Conference : Geneva

Select the correct answer by using the codes given below:
(a) 1 only
(b) 1 and 3
(c) 1, 2 and 3
(d) 2, 3 and 4

Ans. (b)

Explanation
(i) NAM Summit—The 14th Non-Aligned Movement Summit held in Havana (Cuba), on 14 Sept. 2006 to 17 Sept. 2006.
(ii) APEC Meeting—14th APEC (Asia Pacific Economic Cooperation) meeting was held at Hanoi, Vietnam on November 18 and 19, 2006.
(iii) EU-India Summit—The 7th EU Summit held in Helsinki, Finland has strengthened India and EU relations.
(iv) UN Climate Change Conference—The United Nations 11th Climatic Change Convention was held on 28 November to 8 December 2005 in Montreal, Canada.
123. For which one of the following books did Kiran Desai win the Man Booker Prize 2006?
(a) The Secret River (b) In the Country of Men (c) The Inheritance of Loss (d) Mother's Milk
Ans. (c)

Explanation
Indian origin writer, Kiran Desai, won 50,000 Pound Man Booker Prize for her second novel, “The Inheritance of Loss”, in London on October 11, 2006. The 35 year old author, daughter of well-known Indian novelist, Anita Desai, is the youngest woman to win the award. She is also the third Indian to win a Booker Prize after Salman Rushdie, and Ms. Arundhati Roy.

The Booker Prize is one of the most prestigious prizes in literature which aims to reward the best writing published in Britain, Ireland and the Commonwealth. The Booker Prize was founded in 1969 and was renamed, when the financial services Company Man Group PLC began sponsoring. The Booker Prize has been shared only in 1974 and 1992.

124. Which one of the following countries recently upgraded its defence agency to a full defence ministry?
(a) Italy (b) Japan (c) Switzerland (d) Poland
Ans. (b)

Explanation
The ministry of Defence is one of the cabinet level ministries of the Japanese government. As a result of a law enacted on December 15, 2006, it became a ministry on January 9, 2007. Prior to that, it was the Japan Defence Agency. It is headquartered in Shinjuku, Tokyo and is the largest organ of the Japanese government.

127. Which one of the following pairs is not correctly matched?
(a) William Dickson : Motion Picture film (b) Charles Babbage : Programmable computer (c) Nicholas Stern : Construction technology (d) Brian Greene : String theory
Ans. (c)

Explanation
William Dickson—He was a French inventor, who is credited with the invention of the motion picture camera under the employ of Thomas Edison.

Charles Babbage—He was an English Mathematician, Philosopher, Mechanical engineer and Computer scientist, who originated the idea of a programmable computer.

Nicholas Stern—Sir Nicholas Stern, FBA (Born on 22 April 1946) is a British economist and academic. He was the chief economist and senior Vice-President of the World Bank from 2000 to 2003, and is now a civil servant and government economic advisor in United Kingdom.

Brain Green—He is a physicist and one of the best-known string theorists.

128. Match List I with list II and select the correct answer by using the codes given below the lists:

<table>
<thead>
<tr>
<th>List-I (Company)</th>
<th>List-II (Major Area/Product)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Chevron</td>
<td>1. Wind energy</td>
</tr>
<tr>
<td>B. AT &amp; T</td>
<td>2. Oil</td>
</tr>
<tr>
<td>C. AMD</td>
<td>3. Telephone, internet</td>
</tr>
<tr>
<td>D. Enercon GmbH</td>
<td>4. Microprocessor</td>
</tr>
</tbody>
</table>

Codes:

```
<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>1</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>
```

Ans. (c)

Explanation
Chevron—Chevron Corporation is one of the world’s largest global energy companies. Headquartered in San Ramon, California, USA and active in more than 180 countries. It is engaged in every aspect of the oil and gas industry, including exploration and production, refining, marketing and transport; chemicals manufacturing and sales; and power generation.

AT and T—it is the largest provider of both local and long distance telephone services, wireless service under the brand...
Singular Wireless, and DSL internet access in the United States. It is based in San Antonio, Texas, United States.

**AMD (Advanced Micro Devices)—** It is an American manufacturer of semi-conductors based in Sunnyvale, California. The company was founded in 1969 by a group of former executives from Fairchild Semi-conductor, including Jerry Sanders-III, ED Turney, John Carey, Sven Simonsen, Jack Gifford, and three members from Gifford's team, Frank Botte, Jim Giles and Larry Stenger. AMD is the world's second-largest supplier of X86 based processors and the world's second largest supplier of graphics cards and GPUs, after taking control over ATI in 2006.

**Enercon GmbH—** Enercon GmbH based in Aurich, northern Germany, is the third largest wind turbine manufacturer in the world and the market leader in Germany.

**29. Which one of the following pairs is not correctly matched?**

(a) T.S. Krishnamurthy : Former Chief Election Commissioner of India
(b) K.C. Pant : Chairman, Tenth Finance Commission of India
(c) A.M. Khusro : Former Chairman, Union Public Service Commission
(d) R.C. Lahoti : Former Chief Justice of India

**Ans. (c)**

**Explanation**

T.S. Krishnamurthy—(i) Former Chief Election Commissioner of India.


K.C. Pant—(i) Chairman of 10th Finance Commission of India.

(ii) Former Deputy Chairman of Planning Commission of India.

A.M. Khusro—(i) Chairman of 11th Finance Commission of India.

Ramesh Chander Lahoti—(i) Former Chief Justice of Supreme Court of India.

(ii) Period, 01-06-2004 to 01-11-2005

Hence, pair (c) is not correctly matched because A.M. Khusro had never held the post of chairman of Union Public Service Commission.

**30. Which one of the following cities has been the venue of the Asian Games for the maximum number of times from the year 1951 to the year 2006?**

(a) Delhi
(b) Bangkok
(c) Tokyo
(d) Beijing

**Ans. (b)**

**Explanation**

<table>
<thead>
<tr>
<th>Year</th>
<th>Games</th>
<th>Host City</th>
<th>COUNTRY</th>
</tr>
</thead>
<tbody>
<tr>
<td>1951</td>
<td>1</td>
<td>New Delhi</td>
<td>India</td>
</tr>
<tr>
<td>1954</td>
<td>2</td>
<td>Manila</td>
<td>Philippines</td>
</tr>
<tr>
<td>1958</td>
<td>3</td>
<td>Tokyo</td>
<td>Japan</td>
</tr>
<tr>
<td>1962</td>
<td>4</td>
<td>Jakarta</td>
<td>Indonesia</td>
</tr>
<tr>
<td>1966</td>
<td>5</td>
<td>Bangkok</td>
<td>Thailand</td>
</tr>
<tr>
<td>1970</td>
<td>6</td>
<td>Tehran</td>
<td>Iran</td>
</tr>
<tr>
<td>1974</td>
<td>7</td>
<td>Bangkok</td>
<td>Thailand</td>
</tr>
<tr>
<td>1986</td>
<td>10</td>
<td>Seoul</td>
<td>South Korea</td>
</tr>
<tr>
<td>1990</td>
<td>11</td>
<td>Beijing</td>
<td>China</td>
</tr>
<tr>
<td>1994</td>
<td>12</td>
<td>Hiroshima</td>
<td>Japan</td>
</tr>
<tr>
<td>1998</td>
<td>13</td>
<td>Bangkok</td>
<td>Thailand</td>
</tr>
<tr>
<td>2002</td>
<td>14</td>
<td>Busan</td>
<td>South Korea</td>
</tr>
<tr>
<td>2006</td>
<td>15</td>
<td>Doha</td>
<td>Qatar</td>
</tr>
<tr>
<td>2010</td>
<td>16</td>
<td>Guangzhou</td>
<td>China</td>
</tr>
</tbody>
</table>

Bangkok (1966, 1970, 1978, 1998) has been the venue of the Asian Games for the maximum times i.e.: four times, Delhi—two times.

**131. Where are the headquarters of the Organization of the Islamic Conference (OIC) located?**

(a) Dubai  
(b) Jeddah  
(c) Islamabad  
(d) Ankara

**Ans. (b)**

**Explanation**

Organization of the Islamic Conference (OIC) was formally established in Jeddah, Saudi Arabia in 1969. Its headquarters are in Jeddah. It promotes cooperation among all countries in the Islamic world.

**132. Match List I with List II and select the correct answer by using the codes given below the Lists:**

<table>
<thead>
<tr>
<th>List I</th>
<th>List II</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Person)</td>
<td>(Known As)</td>
</tr>
<tr>
<td>A. Bhajan Sopori</td>
<td>1. Bharatnatyam dancer</td>
</tr>
<tr>
<td>B. Birju Maharaj</td>
<td>2. Exponent of Santoor</td>
</tr>
<tr>
<td>C. Priyadarshini Govind</td>
<td>3. Mridangam maestro</td>
</tr>
<tr>
<td>D. T.V. Gopala Krishnan</td>
<td>4. Kathak dancer</td>
</tr>
</tbody>
</table>

**Codes:**

A B C D

(a) 2 1 4
(b) 3 1 4
(c) 2 4 1
(d) 3 4 1

**Ans. (c)**

**Explanation**

| A. Bhajan Sopori | Exponent of Santoor |
| B. Birju Maharaj | Kathak dancer |
| C. Priyadarshini Govind | Bharatnatyam dancer |
| D. T.V. Gopala Krishnan | Mridangam maestro |

**133. How is Steve Fossett known as?**

(a) As a crocodile hunter  
(b) For completing the longest nonstop flight around the globe  
(c) For swimming across Atlantic Ocean  
(d) For climbing to Mt. Everest without any co-climber

**Ans. (b)**

**Explanation**

Steve Fossett Completes the longest non-stop flight in aviation history after flying around the globe in roughly 80 hours.

**134. Basel II relates to which one of the following?**

(a) International standards for safety in civil aviation  
(b) Measures against cyber crimes  
(c) Measures against drug abuse by sports persons  
(d) International standards for measuring the adequacy of a bank's capital

**Ans. (d)**
Explanation

Basel II related to International standards for measuring the adequacy of a Bank's Capital. Basel II is the second of the Basel Accords, which are recommendations on banking laws and regulations issued by the Basel Committee on Banking Supervision. In India RBI has also implemented the Basel II norms. The Basel II accord 1998 had specified a three-tier capital structure for banks.

135. Match List I with List II and select the correct answer by using the codes given below the Lists:

<table>
<thead>
<tr>
<th>List I (Person)</th>
<th>List II (Position/Organization)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Nancy Pelosi</td>
<td>1. WTO</td>
</tr>
<tr>
<td>B. Margaret Chan</td>
<td>2. Speaker, U. S. House of Representatives</td>
</tr>
<tr>
<td>C. Pascal Lamy</td>
<td>3. WHO</td>
</tr>
<tr>
<td>D. Steve Ballmer</td>
<td>4. Microsoft</td>
</tr>
</tbody>
</table>

Codes:
- A
- B
- C
- D

(a) 2 1 3 4
(b) 4 3 1 2
(c) 2 3 1 4
(d) 4 1 3 2

Ans. (c)

138. Who among the following is Chile's first woman President?
(a) D. Ortega
(b) M. Bachelet
(c) E. Morales
(d) A. Garcia

Ans. (b)

Explanation

Raghu Rai (born 1942) became a photographer in 1965 and one year later joined the "The Statesman", a New Delhi base Newspaper. In 1976, he left the "The Statesman" and became a freelance photographer. From 1982 up until 1992, Rai was the director of photography for India Today and from 1990 to 1997, he served on the jury for World Press Photo. His work featuring the Bhopal Gas Tragedy was highly acclaimed, one of which went on to win world press photo of the year 1984.

139. What was the purpose of the Operation Sukoon launched by the Government of India?
(a) Helping Indonesia in its efforts to rehabilitate the victims of earthquake in that country
(b) Evacuating the Indian Nationals from Lebanon during the conflict in the Middle East
(c) Assisting United Nations in its efforts to help the civil war victims in the Darfur region of North Africa
(d) Providing a relief package to farmers after a spate of suicides by other farmers in Andhra Pradesh

Ans. (b)

Explanation

Michelle Bachelet has become the first female president of Chile (South American Country). She was imprisoned and tortured under the right-wing dictator Augusto Pinochet in the 1970s. Her win is seen as a sign of a cultural shift in conservative, Roman Catholic Chile.

140. Who among the following wrote the book—Ayodhya : 6 December, 1992?
(a) Chandra Shekhar
(b) P. V. Narasimha Rao
(c) Jaswant Singh
(d) Arun Shourie

Ans. (b)

Explanation

Operation Sukoon was launched by India to evacuate its nationals and that of Sri Lanka, Nepal who were fleeing from the Israeli-Lebanese conflict. Sukoon means relief in Urdu. It was the first part of a two part air-sea bridge, the sea bridge was performed by operation Sukoon of the Indian Navy and the air bridge by Air India.

141. Who among the following bowlers have taken more than 500 wickets in Test Cricket?
1. Wasim Akram
2. Richard Hadlee
3. Glen McGrath
4. Courtenay Walsh

Select the correct answer using the codes given below
(a) 1 and 2
(b) 3 and 4
(c) 1, 2 and 3
(d) 1, 2, 3 and 4

Ans. (b)
### Explanation

**Player**

<table>
<thead>
<tr>
<th>Player</th>
<th>Tests</th>
<th>Wickets</th>
</tr>
</thead>
<tbody>
<tr>
<td>(i) Shane Warne (Aus.)</td>
<td>145</td>
<td>708</td>
</tr>
<tr>
<td>(ii) M. Murlitharan (Sl.)</td>
<td>124</td>
<td>563</td>
</tr>
<tr>
<td>(iii) Glen McGrath (Aus.)</td>
<td>113</td>
<td>547</td>
</tr>
<tr>
<td>(iv) Anil Kumble (Ind)</td>
<td>132</td>
<td>519</td>
</tr>
</tbody>
</table>

142. Match List I with List II and select the correct answer using the codes given below the Lists:

**List I**

<table>
<thead>
<tr>
<th>(Person)</th>
<th>A. Vishwapat Trivedi</th>
<th>B. Tulsi R. Tanti</th>
<th>C. Shashi Ruia</th>
<th>D. S. Bikhchandani</th>
</tr>
</thead>
</table>

**List II**

<table>
<thead>
<tr>
<th>(Company)</th>
<th>1. Essar Group</th>
<th>2. Info Edge India (which runs naukri.com)</th>
<th>3. Indian (Indian Airlines)</th>
<th>4. Suzlon Energy</th>
</tr>
</thead>
</table>

**Codes**

- A = 2
- B = 4
- C = 1
- D = 3

**Ans.** (d)

### Explanation

A. Vishwapat Trivedi: The Govt. has cleared the appointment of Mr. Vishwapat Trivedi as a Chairman and Managing Director of Indian Airlines.

B. Tulsi R. Tanti: Suzlon Energy

C. Shashi Ruia: Essar Group

D. S. Bikhchandani: Info Edge India (which runs naukri.com)

143. Consider the following statements:

1. North Atlantic Co-operation Council (NACC) is the name of the new organization which has replaced the North Atlantic Treaty Organization (NATO).
2. The United States of America and the United Kingdom became the members of the NATO when it was formed in the year 1949.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

**Ans.** (b)

### Explanation

The North Atlantic Co-operation Council (NACC) was a NATO Organization founded in 1991 and was the precursor to Euro Atlantic Partnership Council. It initially brought together NATO and nine central and eastern European nations in a consultative forum. In 1997, the NACC was replaced by the Euro-Atlantic Partnership Council (EAPC). The North Atlantic Treaty Organisation is a military alliance established by the signing of the North Atlantic Treaty on April 4, 1949. With headquarters in Brussels, Belgium, the organization established a system of collective defence where by its member states agree to mutual defence in response on attack by any external party and promote liberty around the world. Both US and UK were founding member of NATO. So statements (1) is incorrect but statement (2) is correct. Hence, answer is (b).

144. Wangari Maathai, the Nobel Prize winner from Kenya is known for her contribution to which one of the following?

- (a) Journalism
- (b) International economics
- (c) Sustainable development
- (d) Child development

**Ans.** (c)

### Explanation

In 2004 Wangari Maathai was awarded the Nobel Peace Prize for “her contribution to sustainable development, democracy and Peace”. She is the first African woman to receive the award. She is internationally recognized for her persistent struggle for democratic right and environmental conservation.

145. How is Gabriel Garcia Marquez well known as?

- (a) Known for research in agriculture
- (b) A renowned football coach
- (c) A great writer who won the Nobel Prize for literature
- (d) Known for research in railway engineering

**Ans.** (c)

### Explanation

Gabriel Garcia Marquez is a great writer who won the Nobel Prize for literature. He also known as Gobo (born March 6, 1928 in Aracata ca, Magdalena) is a Colombian novelist, journalist, publisher, political activist and recipient of the 1982 Nobel Prize in literature. He best known for his novel ‘One Hundred Years of Solitude’, In Evil Hour, Memories of My Melancholy Whores, The General in His Labyrinth etc.

146. The Pulitzer Prize is associated with which one of the following?

- (a) Environmental protection
- (b) Olympic Games
- (c) Journalism
- (d) Civil Aviation

**Ans.** (c)

### Explanation

Pulitzer Prize instituted in 1970 and name after the United States Publisher Joseph Pulitzer (1847-1911). It is conferred annually in the United States for accomplishment in journalism, literature and music under the management to the Pulitzer Prize Board at Columbia University. Each winner receives a gold medal as well as a cash award of $10,000 (raised in 2003 from $7,500).

147. Near the end of the year 2006, which one of the following countries was suspended from the Commonwealth after a military coup?

- (a) Kenya
- (b) Myanmar
- (c) Fiji
- (d) Tanzania

**Ans.** (c)

### Explanation

The 53 nation British Common Wealth suspended Fiji. It was the third time in 20 years that common wealth suspended the country following a coup. Fiji’s military ruler Frank Bainimarama was on Jan 5, 2007 sworn in as the interim
Prime Minister. This will reinforce his hold on power though he has given up the President’s post. Assuming plenipotentiary powers on December 5, 2006, the military chief had appointed himself President, dissolved parliament, appointed a lame-duck interim Prime Minister, who now stepped aside and promised elections.

148. Consider the following statements:
1. The series of the International paper sizes is based on A0 size whose area is 0.5 m² (approximately).
2. The area of A4 size paper is 1/8th of that of the A0 size paper.
Which of the statements given above is/are correct?
(a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2

Ans. (d)

Explanation
The International paper size standard, ISO 216, is based on the German DIN 476 standard for paper sizes. Using the metric system, the base format is a sheet of paper measuring 1 sq.m. in area (A0 paper size). A4 size is 1/16 the size of A0.


149. Match List I with List II and select the correct answer using the codes given below the Lists:

<table>
<thead>
<tr>
<th>List I (Writer)</th>
<th>List II (Books)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. V. S. Naipaul</td>
<td>1. The Siege of Krishnapur</td>
</tr>
<tr>
<td>B. Salman Rushdie</td>
<td>2. In a Free State</td>
</tr>
<tr>
<td>C. Paul Scott</td>
<td>3. Midnight's Children</td>
</tr>
<tr>
<td>D. J. G. Farrell</td>
<td>4. Staying On</td>
</tr>
</tbody>
</table>

Codes:
A  B  C  D
(a) 2  3  4  1
(b) 4  1  2  3
(c) 2  1  4  3
(d) 4  3  2  1

Ans. (d)

Explanation
A. Bhanu Bharti
B. Mike Pandey
C. Mohd. Zahir Khayyam
D. Vinda Karandikar

List I (Eminent Person)
List II (Known As)
1. Music composer
2. Poet and litterateur
3. Theatre director
4. Wildlife film maker

Codes:
A  B  C  D
(a) 1  4  3  2
(b) 3  2  1  4
(c) 1  2  3  4
(d) 3  4  1  2

Ans. (d)

Explanation
A. Bhanu Bharti
B. Mike Pandey
C. Mohd. Zahir Khayyam
D. Vinda Karandikar

List I (Eminent Person)
List II (Known As)
1. Theatre director
2. Wildlife film maker
3. Music composer
4. Poet and litterateur