

# NDA II 2017\_General Ability

**Total Time: 150** 

Total Marks: 600.0

### **Solution 1**

The discussion was **concluded** after a long and fruitful exchange of views.

## Explanation:

The antonym of wound up is begin or commence.

Hence, the correct answer is **option D**.

## Solution 2

He was fully **aware of** the need for making adjustments.

# Explanation:

The antonym of alive to is doubtful, unaware or unsure.

Hence, the correct as nwer is **option C**.

### Solution 3

The police officer tried to <u>frighten</u> the witness but in vain.

# Explanation:

The antonym of intimidated is calm and comfort.

Hence, the correct answer is **option C**.

#### Solution 4

We must adopt **severe** measures to control population growth.

# Explanation:

The antonym of drastic is easy and calm.

Hence, the correct answer is **option D**.

### Solution 5

He is extremely *careful* in his approach.

## Explanation:

The antonym of meticulous is inaccurate or negligence.

Hence, the correct answer is **option B**.

#### Solution 6

The experts' **detailed** examination brought to light some important clues.

## Explanation:

The antonym of minute is huge and large.

Hence, the correct answer is **option B**.

### Solution 7

The decision of the Union Government to <u>cancel</u> the Urban Land Ceiling Act has been welcomed by all.

## Explanation:

The antonym of repeal is approve or sanction.

Hence, the correct answer is **option C**.

#### **Solution 8**

This is his **first** appearance on the screen.

# Explanation:

The antonym of maiden is last.

Hence, the correct answer is **option A**.

#### Solution 9

At the end of the marathon, everybody was *tired*.

# Explanation:

The antonym of exhausted is active.

Hence, the correct answer is **option D**.

#### **Solution 10**

He gave me a *fake* coin.

## Explanation:

The antonym of counterfeit is authentic or actual.

Hence, the correct answer is **option B**.

#### **Solution 11**

My mother has been working hard for the last two weeks and she feels **energetic**.

## Explanation:

The synonym of run down is exhausted.

Hence, the correct anwer is **option B**.

#### **Solution 12**

The President condemned the act of **sobriety** during the celebration of the festival.

## Explanation:

The synontm of violence is force or intensity.

Sobriety means someone who is sober.

Hence, the correct answer is **option D**.

## **Solution 13**

The students made a <u>niggard</u> contribution to the flood relief fund.

## Explanation:

The synonym of generous is good, helpful or charitable.

Niggard means someone who is ungenerous or a miser.

Hence, the correct answer is **option A**.

#### Solution 14

He was just industrious by temperament.

## Explanation:

The synonym of idle is empty or unproductive. Industrious means someone who is hard-working.

Hence, the correct answer is **option C**.

#### Solution 15

Most of the decisions taken by the officer were *correct*.

**Explanation:** 

The synonym of unjust is biased or wrong.

Hence, the correct answer is **option C**.

### **Solution 16**

He is a loving father and takes great **dissatisfaction** in his children.

Explanation:

The synonym of delight is joy and satisfaction.

Hence, the correct answer is **option B**.

### **Solution 17**

He was quite *indifferent* about his son's career.

Explanation:

The synonym of concerned is worried.

Hence, the correct answer is option B.

### **Solution 18**

They are *diffident* of success.

Explanation:

The synonym of confident is bold and fearless.

Diffident means lack of self-confidence.

Hence, the correct answer is option C.

#### **Solution 19**

We *called off* the search for the missing person.

Explanation:

The synonym of carried on is to continue.

Hence, the correct answer is option D.

### **Solution 20**

This T.V. has many *foreign* components.

Explanation:

The synonym of indigenous is primitive or domestic.

Hence, the correct answer is **option B**.

#### **Solution 21**

After this incident I went to Nainital, and returned after nearly a month. I had *barely* taken

Hence, the correct answer is **option B**.

#### Solution 22

After this incident I went to Nainital, and returned after nearly a month. I had barely taken **off** my clothes

Hence, the correct answer is **option C**.

#### Solution 23

After this incident I went to Nainital, and returned after nearly a month. I had barely taken off my clothes when I saw Gangu standing **with** a new baby

Hence, the correct answer is **option C**.

#### Solution 24

After this incident I went to Nainital, and returned after nearly a month. I had barely taken off my clothes when I saw Gangu standing with a new baby. He was **jumping** with joy.

Hence, the correct answer is **option A**.

#### Solution 25

After this incident I went to Nainital, and returned after nearly a month. I had barely taken off my clothes when I saw Gangu standing with a new baby. He was jumping with joy. Even Nanda **could** not have

Hence, the correct answer is **option A**.

#### Solution 26

After this incident I went to Nainital, and returned after nearly a month. I had barely taken off my clothes when I saw Gangu standing with a new baby. He was jumping with joy. Even Nanda could not have **felt** such joy

Hence, the correct answer is **option C**.

#### Solution 27

After this incident I went to Nainital, and returned after nearly a month. I had barely taken off my clothes when I saw Gangu standing with a new baby. He was jumping with joy. Even Nanda could not have felt such joy

on getting Krishna.

Hhence, the correct answer is **option C**.

## **Solution 28**

After this incident I went to Nainital, and returned after nearly a month. I had barely taken off my clothes when I saw Gangu standing with a new baby. He was jumping with joy. Even Nanda could not have felt such joy on getting Krishna. His face had the same **glow** that

Hence, the correct answer is **option B**.

### Solution 29

After this incident I went to Nainital, and returned after nearly a month. I had barely taken off my clothes when I saw Gangu standing with a new baby. He was jumping with joy. Even Nanda could not have felt such joy on getting Krishna. His face had the same glow that **appears** on the face of a

Hence, the correct answer is **option B**.

#### Solution 30

After this incident I went to Nainital, and returned after nearly a month. I had barely taken off my clothes when I saw Gangu standing with a new baby. He was jumping with joy. Even Nanda could not have felt such joy on getting Krishna. His face had the same glow that appears on the face of a **starving** man after a full meal.

Hence, the correct answer is option B.

### **Solution 31**

The proper sequence is S, Q, P, R.

## Explanation:

The spirit of man has faced all kinds of dangers and his growing intelligence has slowly and painfully surmounted all the obstacles that have come in his way.

Hence, the correct answer is **option B**.

#### Solution 32

The proper sequence is **R**, **P**, **Q**, **S**.

## Explanation:

After our school boys had won a well-contested hockey match they came to school in high spirits so that they might communicate the news of their victory to the headmaster who is a keen sportsman and takes a very lively interest in school games.

Hence, the correct answer is **option C.** 

#### Solution 33

The proper sequence is P, S, R, Q.

## Explanation:

Even a leisurely game like cricket demanding grace rather than strength can cause much ill-will as we saw in the controversy over body-line bowling and over the rough tactics of the Australian team that visited England in 1921.

Hence, the correct answer is **option A**.

## **Solution 34**

The proper sequence is **Q**, **R**, **P**, **S**.

## Explanation:

Scientists point out that it is an aftermath that has now reached its peak of sunspot activity of the eleven-year cycle.

Hence, the correct answer is **option C**.

#### Solution 35

The proper sequence is S, P, R, Q.

## Explanation:

As the ship streams for the San Diego those of us aboard have a personal demonstration of powerful ocean movement as walls of gray water from a distant storm in the North Pacific rock and toss the ship making the greener among us miserable with sea sickness.

Hence, the correct answer is **option C**.

### **Solution 36**

An electrical circuit is the complete path *traversed by electric current*.

### Explanation:

An electrical circuit is the complete path traversed by an electric current.

Hence, the correct answer is **option C**.

#### Solution 37

**He waved us a by-by** as he boarded the train which disappeared into

the tunnel.

## Explanation:

He waved us a bye-bye as he boarded the train which disappeared into the tunnel.

Hence, the correct answer is option A.

### **Solution 38**

There is **no error** in the given sentence.

## Explanation:

There was great deal that had to be scrapped, that must be scrapped; but surely India could not have been what she undoubtedly was, and could not have continued a cultured existence for thousands of years.

Hence, the correct answer is **option D**.

#### Solution 39

With regard to interior decoration, it is the attention given to the less overt aspects of using space **that give it life**, **an identity**, **a quality** that makes it exciting and unusual.

## Explanation:

With regard to interior decoration, it is the attention given to the less overt aspects of using space that gives it a life, an identity and quality that makes it exciting and unusual.

Hence, the correct answer is **option B**.

#### Solution 40

There is **no error** in the given sentence.

# Explanation:

A small parcel of novels is better than none.

Hence, the correct answer is option D.

### **Solution 41**

He looks as if he **is** weary.

Hence, the correct answer is **option A**.

#### Solution 42

My house is insured **against** theft and fire.

Hence, the correct answer is **option B**.

### Solution 43

The result of the prolonged discussion was <u>disappointing</u>.

Hence, the correct answer is **option B**.

#### Solution 44

You are lucky **to have been born** in the 20th century.

Hence, the correct answer is **option B**.

#### **Solution 45**

Sita is true to **her words**.

Hence, the correct answer is **option B**.

## **Solution 46**

Years *have passed* since I saw her last.

Hence, the correct answer is **option A**.

### **Solution 47**

When he heard that terrible noise he asked me what was going on.

Hence, the correct answer is **option D**.

## **Solution 48**

Could you lend me some money? I am very **short** of cash at the moment.

Hence, the correct answer is **option C**.

### Solution 49

I saw her when she was standing **by** the side of the old statue.

Hence, the correct answer is **option A**.

#### Solution 50

True friends never **desert** their loved ones in adversity.

Hence, the correct answer is **option D**.

#### Solution 51

8 percent was set as a target of average growth of GDP of India over

the plan period 2012-2017 by the Approach Paper to the Twelfth Five-Year Plan.

## Explanation:

As per the draft document released by the Planning Commission, the 12th Five Year Plan 2012-17 aims at a growth rate of 8%. Targets of the 12th Five Year Plan (2012-17) are as follows:

- Real GDP growth at 8%
- Agriculture growth at 4%
- Manufacturing growth at 10%
- Every state must attain higher growth rate than the rate achieved during 11th plan.

Hence, the correct answer is **option B**.

#### Solution 52

**Higher education** is not a subject that has been devolved to the Panchayati Raj Institutions by the 11th Schedule of the Constitution of India.

## Explanation:

There are 29 subjects under 11th Schedule of the Constitution of India in which primary and secondary education included not higher edecuation. Some of the subjects are safe water for drinking, rural housing, etc.

Hence, the correct answer is **option C**.

#### Solution 53

**Arnold Toynbee** used the term 'Industrial Revolution' for the first time in English to describe the changes that occurred in the British industrial development between 1760 and 1820.

## Explanation:

Arnold Joseph Toynbee was a British historian, philosopher of history, research professor of international history at the London School of Economics and the University of London.

Hence, the correct answer is **option C**.

#### Solution 54

**Subhash Chandra Bose** is the author of the book 'The Indian Struggle, 1920-1934'.

#### Explanation:

The book covers the 1920–1942 history of the Indian independence

movement to end British imperial rule over India. The book was banned by the British colonial government.

Hence, the correct answer is **option C**.

#### Solution 55

It opposed the levy of tariff on imports is incorrect about the Swadeshi Campaign in 1896.

## Explanation:

Swadeshi means of one's own country. During the movement it meant people should use Indian products to strengthen the nation through promotion of Indian industries and provide better employment opportunities to the unemployed craftsmen. The promotion of Swadeshi advocated the boycott of foreign goods this idea aroused nationalistic sentiments of the people it stressed that the boycott of foreign goods which were mostly British would hurt British economic interests and thus the British would be forced to accept Indian demands.

Hence, the correct answer is **option C**.

#### Solution 56

**The East India Association** was founded in London by Dadabhai Naoroji in 1866.

## Explanation:

The East India Association was founded by Dadabhai Naoroji in 1866, in collaboration with Indians and retired British officials in London. It superseded the London Indian Society and was a platform for discussing matters and ideas about India, and to provide representation for Indians to the Government. Naoroji delivered the first lecture to the Association on 2 May 1867. The Association's first President was Lord Lyveden.

Hence, the correct answer is **option B**.

#### Solution 57

Mariana Trench is located in the ocean floor of **Western Pacific Ocean**.

## Explanation:

The Mariana Trench or Marianas Trench is the deepest part of the world's ocean's. It is located in the western pacific ocean an average of 200 kilometres to the east of the Mariana Islands, in the Western Pacific East of Philippines.

Hence, the correct answer is **option B**.

#### **Solution 58**

Taklamakan Desert is situated in **Central Asia**.

## Explanation:

The Taklamakan Desert (also Taklimakan) is a desert of Central Asia, in the Xinjiang Uyghur Autonomous Region of the People's Republic of China. The Taklamakan Desert has an area of 337,000 km^2 (130,000 sq mi), making it slightly smaller than Germany.

Hence, the correct answer is **option D**.

### **Solution 59**

Rudraprayag is situated at the confluence of rivers Alaknanda and **Mandakini**.

## Explanation:

This town is at a distance of 40 km from Srinagar located at the confluence of two rivers Alaknanda & Mandakini. River Alaknanda which starts from Alakpuri glacier comes from Badarinath Dham. River Mandakini flows from Kedarnath and joins Alaknanda at this place. After Rudraprayag the river is known as Alaknanda.

Hence, the correct answer is **option B**.

### Solution 60

The correct code is 2 - 3 - 1 - 4.

## Explanation:

Jodhpur, Bhopal, Bilaspur and Ranchi will fall from west to east.

Hence, the correct answer is **option B**.

#### Solution 61

The Kashmir region receives additional amount of precipitation during the winter brought by **western disturbances**.

## **Explanation:**

Western Disturbance originates in the Mediterranean region and brings sudden winter rain to the northwestern parts of the Indian subcontinent. It is a non-monsoonal precipitation driven by the westerlies. The moisture in these storms originates over the Mediterranean Sea and the Atlantic Ocean.

Hence, the correct answer is **option B**.

#### Solution 62

**Himalayan mountain region** has the Kalakot tertiary coal field.

## Explanation:

Kalakot coal field is in Jammu and Kashmir, south of Pirpanjal.

Hence, the correct answer is **option C**.

#### Solution 63

Tendons are made up of tightly compacted bundles of collagen fibres. Collagen is a fibrous protein which is a major component of connective tissue.

Hence, the correct answer is option B.

#### **Solution 64**

Elephantiasis is a human disease caused by some parasitic worms, most common of which is *Wuchereria bancrofti*. It is a roundworm which is spread in humans through the bites of infected mosquitoes.

Hence, the correct answer is option C.

### Solution 65

Melanin pigment, besides giving specific colouration to human skin, hair, and iris, is also known to be an absorbant of UV rays. Thus it protects humans from the harmful effects of the UV rays.

Hence, the correct answer is option A.

#### **Solution 66**

Patients having gouty arthritis should avoid taking food components rich in nucleic acids, as their catabolism result in the formation of uric acid. This will further elevate the level of serum uric acid.

Hence, the correct answer is option B.

#### Solution 67

Microbes are used in numerous industries. They are used to treat the sewage wastes, to produce alcoholic beverages through fermentation, and to produce variety of bioactive molecules and antibiotics. A number of antibiotics are obtained from microbes, such as penicillin, cephalosporin, streptomycin, etc.

Hence, the correct answer is option C.

#### **Solution 68**

Golden rice is a genetically modified crop plant in which genes encoding for beta-carotene are incorporated. Beta-carotene is a precursor of

vitamin-A, thus its incorporation makes the golden rice to have enriched quantities of Vitamin-A.

Hence, the correct answer is option B.

#### Solution 69

The centripetal acceleration is expessed as,

$$a_c = v^2/r$$

where,  $a_C$  = Centripetal acceleration

v = speed

r = radius

If the speed (v) remains constant, then the bigger the r is, the smaller  $a_c$  will be. Since a gentle curve has a bigger radius than a sharp curve, the centripetal acceleration of the object will be smaller for a gentle curve than that for a sharp curve.

Hence, the correct answer is option A.

## **Solution 70**

Since, 
$$F\left(x\right)=-rac{dU}{dx}$$
  $\Rightarrow dU=-F\left(x
ight)dx$   $U=-\int F\left(x
ight)dx$   $U=-\int \left(Ax^2-Bx
ight)dx$   $U=-rac{Ax^3}{3}+rac{Bx^2}{2}$   $U=-rac{x^2}{6}\left[2Ax-3B\right]$ 

Hence, the correct answer is option B.

## **Solution 71**

Henry (symbolised as H) is the S.I. unit of inductance.

Hence, the correct answer is option C.

### Solution 72

We know that the gravitational force is independent of the mass of the body. So if dropped from the same height, all three objects will reach the ground simultaneously, as in vacuum, the resistance offered by air will be zero, and same amount of gravitational force will act on all three objects.

Hence, the correct answer is option D.

#### Solution 73

Electron emission from a metallic surface by the application of light is known as photoelectric emission.

Hence, the correct answer is option B.

### Solution 74

The sunlight takes approximately 8 minutes to reach the Earth from the Sun. Before reaching the Earth's surface, the photons emitted from the Sun has to travel through the vacuum in the space, and thus make at least 8 minutes to reach the Earth.

Hence, the correct answer is option B.

## **Solution 75**

Radioactivity is measured by a GM counter or Geiger Counter. It is a device which detects and measures particles in ionising radiations, such as alpha and beta particles, gamma rays, etc.

Hence, the correct answer is option A.

#### Solution 76

Convex mirrors are used as rear-view mirrors in the vehicles. Convex mirrors provide erect, virtual and diminished images of the distant objects with a wider field of view. This enables the driver to view much larger area in comparison to plane mirrors.

Hence, the correct answer is option B.

#### Solution 77

Ultra-violet rays are used to detect forgery in currency notes. An authentic currency will fluoresce when illuminated with UV light because of a special strip embedded in the note. This strip cannot be forged and thus helps in identifying the fake currency notes.

Hence, the correct answer is option A.

## **Solution 78**

The majority charge carriers in p-type semiconductor are holes as P-type semiconductor are formed by doping trivalent impurities to intrinsic

semiconductor. Thus, discrete layers consisting of vacancies known as holes are created above the valence band of the semiconductor. Thus, number of holes > number of electrons in P-type semiconductor. Hence, holes are the majority carriers in P-type semiconductor.

Hence, the correct answer is option D.

#### Solution 79

The ionisation energy of hydrogen atom in the ground state is 13.6 eV.

Hence, the correct answer is option B.

### **Solution 80**

Initially when the water starts boiling, the bubbles formed are composed of dissolved air in the water. Later, once the boiling point of the water is reached and water boils vigorously, the bubbles composed of water vapours are formed.

Hence, the correct answer is option D.

#### **Solution 81**

HCl and CH<sub>3</sub>COOH, when dissolved in water, get dissociated and release H<sup>+</sup> ions, thus making acidic solutions with good electrical conductivity. CH<sub>3</sub>OH, being a weak acid, dissociates poorly in the water, and thus is non-conductive in nature. NaOH dissociates completely into Na<sup>+</sup> and OH<sup>-</sup> ions, thus making a basic solution with good electrical conductivity.

Hence, the correct answer is option D.

#### Solution 82

Organofluorine compounds are prepared using HF as the fluorine source, including Teflon, fluoropolymers, fluorocarbons, and refrigerants such as freon. Production of fluorides; most high-volume inorganic fluoride compounds are prepared from hydrofluoric acid. Hence, the correct answer is option D.

## **Solution 83**

Among the given alternatives,  $^{40}_{18}\mathrm{Ar}^+$  has the same number of electrons as  $^{35}_{17}\mathrm{Cl}$ , as it is an electron deficient ion, and has 17 electrons, same as that in Cl atom.

Hence, the correct answer is option C.

## **Solution 84**

Six times the mass percent of C as compared to mass percent of H. Hence, the correct answer is option C.

#### **Solution 85**

The proposition 'equal volumes of different gases contain equal numbers of molecules at the same temperature and pressure' is known as Avogadro's hypothesis. According to this hypothesis, at the same temperature and pressure conditions, any gas contains  $6.022 \times 10^{23}$  molecules (Avogadro number).

Hence, the correct answer is option A.

#### **Solution 86**

It proposed that the Indian magistrates would try Europeans in criminal cases is the correct statements about the Ilbert Bill.

## Explanation:

Ilbert Bill is named after Courtenay Peregrine Ilbert, who was appointed as legal adviser to the Council of India. The bill was introduced in 1883 by Viceroy Ripon, who actually desired to abolish the racial prejudice from the Indian Penal Code. Ripon had proposed an amendment for existing laws in the country and to allow Indian judges and magistrates the jurisdiction to try British offenders in criminal case at the District level.

Hence, the correct answer is **option A**.

#### Solution 87

**The Attorney General of India** can attend the meetings of both Houses of Parliament while not being a member of either House.

## Explanation:

The Attorney General for India is the Indian government's chief legal advisor. He is appointed by the President of India and holds office during the pleasure of the President. He must be a person qualified to be appointed as a Judge of the Supreme Court, also must have been a judge of some high court for five years or an advocate of some high court for ten years or an eminent jurist, in the opinion of the President and must be a citizen of India.

Hence, the correct answer is **option D**.

### **Solution 88**

\*Disclaimer : The given options are incorrect.

**Majnun Shah** was believed to be a leader of the Sannyasis and Fakirs conspiring against the British in 1857.

## Explanation:

For Fakirs, Mananun Shah was main leader. He travelled from places to places to inspire to continue struggle. He was killed and after his death, his brother Musa Shah took the leadership and continued rebel for some time. Later, Chirag Shah led the Fakirs to launch attack on British establishments. However, later internal dissensions became reason for weakening of the revolt.

Hence, the correct answer is none of the options provided.

\*Disclaimer : The given options are incorrect.

#### Solution 89

**Saadat Khan** was the founder of the Avadh Kingdom in the 18th century.

## Explanation:

Saadat Khan, the first Nawab of Awadh, laid the foundation of Faizabad at the outskirt of ancient city of Ayodhya. Faizabad developed as a township during the reign of Safdar Jang, the second nawab of Avadh. Saadat Khan was appointed Nawab in 1722 and established his court in Faizabad near Lucknow. He took advantage of a weakening Mughal Empire in Delhi to lay the foundation of the Awadh dynasty. Until 1819, Awadh was a province of the Mughal Empire administered by a Nawab.

Hence, the correct answer is option B.

#### Solution 90

**Henry Vivian Derozio** was the founder of the Young Bengal Movement.

## Explanation:

The Young Bengal movement was a group of radical Bengali free thinkers from Hindu College in Calcutta. They were also known as Derozians, after their firebrand teacher at Hindu College, Henry Louis Vivian Derozio. The Young Bengals were inspired and excited by the spirit of free thought and revolt against the existing social and religious structure of Hindu society.

Hence, the correct answer is **option A**.

#### Solution 91

Muslim League and Hindu Mahasabha actively participated in the movement is incorrect about the Quit India Movement.

## Explanation:

Hindu Mahasabha opposed Quit India Movement because of the following reasons :

- It was launched by INC, an organization Hindu Mahasabha was hardly at good terms with. Especially in the 1930s, the HM distanced itself more from the INC because, in addition to being 'pro-Muslim', INC was also getting inclined towards communism and socialism.
- The Japanese were slowly capturing colonies in the South-East Asia, and the frightening stories of inhuman treatment they were subjecting on the people of those captured colonies were reaching India.
- Hindu Mahasabha knew that the Britishers are the only force that could save India from falling into the hands of a scarily fascist Japan. By taking a pro-British stance, HM also betrayed Subhash Chandra Bose's INA.

Muslim League opposed Quit India Movement because they were apprehensive about the fact that if Britsh leave, Hindus will take over the country and will suppress Muslims. Encouraged Muslim youth to actively support the British government.

Hence, the correct answer is **option C**.

### Solution 92

**B. Sai Praneeth** is the winner of the Singapore Open Super Series Badminton Men's Singles title 2017.

## Explanation:

B Sai Praneeth defeated world No 29 Kidambi Srikanth 17-21, 21-17, 21-12 in an all-Indian men's singles final to lift the Singapore Open Superseries badminton title.

Hence, the correct answer is **option C**.

### **Solution 93**

Koradi Thermal Power Station is located in *Nagpur*.

## Explanation:

Koradi Thermal Power Station is operated by Maharashtra State Power Generation Company Limited. The plant operates 8 units and has a total power generation capacity of 1700 MW.

Hence, the correct answer is **option A**.

#### Solution 94

**Cultural Heritage and Sustainable Tourism** was the theme of the International Day for Monuments and Sites (World Heritage Day) 2017.

## Explanation:

The International Day for Monuments and Sites (World Heritage Day) is held on 18 April each year around the world with different types of activities, including visits to monuments and heritage sites. conferences, round tables and newspaper articles. Each year has a theme. The theme of the International Day for Monuments and Sites (World Heritage Day) 2017 is Cultural Heritage and Sustainable Tourism.

Hence, the correct answer is **option B**.

### **Solution 95**

In April 2017, USA dropped MOAB (Massive Ordnance Air Blast, popularly known as the Mother of All Bombs) in the suspected hideouts of the militants in *Afghanistan*.

## Explanation:

More than 90 Islamic state militants were killed when the US military dropped an 11-ton bomb on eastern Afghanistan.

Hence, the correct answer is **option C**.

#### Solution 96

**Special Secretary, Department of Economic Affairs** is the Chairman of the Interdisciplinary Committee constituted recently by the Government of India to examine Framework for virtual currencies.

#### Explanation:

In order to examine the existing framework, Department of Economic Affairs, Ministry of Finance has constituted an Inter-Disciplinary Committee chaired by Special Secretary (Economic Affairs) and representatives from Department of Economic Affairs, Department of Financial Services, Department of Revenue (CBDT), Ministry of Home Affairs, Ministry of Electronics and Information Technology, Reserve Bank of India, NITI Aayog and State Bank of India.

Hence, the correct answer is **option C**.

### **Solution 97**

SAMPADA scheme is being implemented by the *Ministry of Food Processing Industries*.

## Explanation:

The Government of India (GOI) has approved a new Central Sector Scheme – Pradhan Mantri Kisan SAMPADA Yojana (Scheme for Agro-Marine Processing and Development of Agro-Processing Clusters) with an allocation of Rs. 6,000 crore for the period 2016-20 coterminous with the 14th Finance Commission cycle. The scheme will be implemented by Ministry of Food Processing Industries (MoFPI). Pradhan Mantri Kisan SAMPADA Yojana.

Hence, the correct answer is **option C**.

#### Solution 98

The shortest day length that occurs in the northern hemisphere is on **22nd December**.

## Explanation:

The shortest day and the longest night of the year in the Northern Hemisphere occur during winter solstice which is usually observed on 22 December. In the Southern Hemisphere, it is the summer solstice and the longest day of the year.

Hence, the correct answer is **option D**.

#### Solution 99

The correct code is **1** and **3**.

## Explanation:

Gauge conversion and automatic signals have taken place in recent years.

Hence, the correct answer is **option C.** 

#### Solution 100

In India, the maximum amount of rainfall is received from **South-West Monsoon**.

## **Explanation:**

The temperature of northern and central Indian subcontinent increases in summer. Due to this pressure over the northern and central Indian subcontinent deacreases. To fill this void, the moisture-laden winds from the Indian Ocean (South-west) rush into the subcontinent. It occur's june through september.

Hence, the correct answer is **option C**.

#### Solution 101

Gulf of Mannar, Nokrek, Pachmarhi and Simlipal biosphere reserves

in India are included in the World Network of Biosphere Reserves.

## Explanation:

The Indian government has established 18 Biosphere Reserves in India, which protect larger areas of natural habitat, and often include one or more National Parks. They are also buffer zones which are open to some economic uses. Ten of the eighteen biosphere reserves are a part of the World Network of Biosphere Reserves based on the UNESCO Man and the Biosphere (MAB) Programme list.

Hence, the correct answer is option A.

#### **Solution 102**

The correct code is 1, 2 and 3.

## Explanation:

Magnetite is a ferrous mineral containing iron and is used in compasses and other navigation devices because of its magnetic properties.

Hence, the correct answer is option D.

#### **Solution 103**

Vitamin K plays an essential role in blood clotting mechanism. It helps in activating the proteins or blood coagulation factors that are involved in clot formation.

Hence, the correct answer is option D.

#### **Solution 104**

The term 'probiotics' are used to refer to the live microbial food supplements. Probiotics consist of such live microbes (specially yeast and bacteria), which are good for health. These microbes are helpful in keeping our gut healthy and thus improve the digestive system of the body.

Hence, the correct answer is option D.

## **Solution 105**

Lactic acid *Bacillus* is known to cause acidification and curdling of milk. It produces lactic acid which coagulates the milk proteins and thus helps in curd and cheese formation.

Hence, the correct answer is option A.

#### **Solution 106**

Maurice Hugh Frederick Wilkins shared the Nobel Prize in 1962 along

with Francis Crick and James Watson for their discoveries concerning the molecular structure of nucleic acid.

## Explanation:

Maurice Hugh Frederick Wilkins shared the Nobel Prize in 1962 along with Francis Crick and James Watson for their discoveries concerning the molecular structure of nucleic acids.

Hence, the correct answer is **option B**.

#### Solution 107

At higher altitudes, the atmospheric pressure is low, due to which less energy is needed to bring water to the boiling point. Due to this reason, water boils at a lower temperature at high altitudes.

Hence, the correct answer is option A.

#### **Solution 108**

Concave mirrors are used in headlights of vehicles as they send parallel rays. When a light source, such as bulb, is placed at the focus of the concave mirror, powerful parallel rays are reflected. As a result, the light is allowed to focus as a single beam towards infinity, and a clear image of the distant object is formed.

Hence, the correct answer is option B.

#### Solution 109

According to the Archimedes' principle, the body loses some weight when immersed in water. Therefore, when submerged in water, the weight of the object will decrease in comparison to that in air.

Hence, the correct answer is option B.

#### Solution 110

Light year is a measure of distance. It refers to the distance travelled by light in one year.

Hence, the correct answer is option B.

### **Solution 111**

Satellite does not require any energy for orbiting. Once the satellite has been launched in an orbit by giving the required orbital velocity, then no energy is further required for its orbiting.

Hence, the correct answer is option D.

## **Solution 112**

According to the law of conservation of energy, energy can neither be created nor be destroyed, but transformed from one form of energy to another.

Hence, the correct answer is option C.

#### Solution 113

Step-up transformers are used to increase voltage and are thus used in power stations to produce very high voltage.

Hence, the correct answer is option D.

### **Solution 114**

X-rays carries the maximum energy per photon.

Hence, the correct answer is option A.

### **Solution 115**

As we know, the balanced chemical equation for heating of carbon is  $C + O_2 \rightarrow CO_2$ 

So from the equation, 12 g of carbon reacts with 32 g of oxygen to produce 44 g carbon dioxide.

This means, 12 g of C gives 44 g of CO<sub>2</sub>

1 g of C will give = 
$$\frac{44}{12}$$
 g =  $\frac{11}{3}$  g of CO<sub>2</sub>

So, 1 kg of C will give = 11/3 kg  $CO_2$ 

Hence, the correct answer is option A.

### **Solution 116**

In galvanization process, zinc is coated over iron or steel objects as a thin layer to prevent rusting or corrosion. Zinc, being more electropositive than iron, is more reactive and thus in presence of moist air, it oxidises in preference to the iron. In this way, oxygen and water are unable to reach the metal beneath the zinc layer, and rusting of metal is prevented.

Hence, the correct answer is option A.

## **Solution 117**

Oxygen is the second most abundant gas in the Earth's atmosphere (21%), followed only by nitrogen (78%).

Hence, the correct answer is option A.

#### **Solution 118**

Out of the given options, greying of hair is a chemical change. Hairs get their colour from a coloured pigment called melanin. This pigment is produced and injected into the hair by the melanocytes that surround the hair follicles. If, due to some reasons, production of melanin from these melanocytes gets stopped, grey hairs are produced.

Hence, the correct answer is option B.

#### **Solution 119**

Sodium carbonate, or Na<sub>2</sub>CO<sub>3</sub>, is also known as washing soda.

Hence, the correct answer is option C.

#### **Solution 120**

Potassium permanganate is an oxidising agent. It oxidises dissolved iron, manganese, and hydrogen sulfide into solid particles that can then be filtered out of the water, thus making it fit for drinking. It also prevents the growth of iron-oxidising bacteria in the water.

Hence, the correct answer is option D.

## **Solution 121**

The correct chronological order is 3 - 1 - 2 - 4.

## Explanation:

Champaran Satyagraha took place in the year 1917, Moplah Rebellion in 1921, Bardoli Satyagraha in 1928 and lastly, Salt Satyagraha or the Dandi march took place in 12th Mar 1930 to 6th Apr 1930.

Hence, the correct answer is **option B**.

#### Solution 122

**Ibn Battuta's Rihla** travelogues has given an insight on the reign of Muhammad bin Tughluq.

## Explanation:

Ibn Battuta has discussed his travels and incursions in contemporary Islamic world and documented them in Rihla. He was appointed as Qazi by Muhammad Tughlaq and was also appointed ambassador to China.

Hence, the correct answer is **option A.** 

### **Solution 123**

**Shaikh Bahauddin Zakariya** was not a Chishti but a Sufi saint.

## Explanation:

Baha-ud-din Zakariya, also spelled as Bahauddin Zakariya, and also known as Baha-ul-Haq and Bahauddin Zakariya Multani, was a Sufi of Suhrawardiyya order. from Kot Kehror, a town of the Layyah District near Multan, Punjab, Pakistan.

Hence, the correct answer is **option D**.

#### Solution 124

In April 2017, India celebrated 100 years of Mahatma Gandhi's **Satyagraha in Champaran**.

## Explanation:

The Prime Minister Shri Narendra Modi on 10 April 2017 inaugurated an exhibition titled "Swachhagraha – Bapu Ko Karyanjali – Ek Abhiyan, Ek Pradarshani" in the national capital to mark the 100 years of Mahatma Gandhi's first experiment of Satyagraha in Champaran.

Hence, the correct answer is **option C**.

#### **Solution 125**

Rainbow formation involves dispersion of sunlight. The dispersion of light is the phenomenon of splitting of a beam of white light into its seven constituent colours when passed through a transparent medium. In the case of rainbow formation, the small droplets of rain water, that remain suspended in the atmosphere, act as small prisms, and disperse the sunlight into seven colours.

Hence, the correct answer is option A.

#### Solution 126

Bats detect obstacles and preys in their path through echolocation. It is a phenomenon in which reflected sound waves are used to navigate. Bats produce ultrasonic sound waves, ranging in frequency from 20 kilohertz (kHz) to 200 kHz, which are used for echolocation.

Hence, the correct answer is option B.

### **Solution 127**

The direction of energy transfer is given by the second law of thermodynamics. According to this law, 'heat cannot flow by itself from a body at a lower temperature to a body at a higher temperature, unless an external work is performed on the system'.

Hence, the correct answer is option C.

#### **Solution 128**

X-rays, microwaves, and radio waves, all three fall under the category of electromagnetic waves. Sound waves, on the other hand, are longitudinal, mechanical waves.

Hence, the correct answer is option D.

#### Solution 129

All the statements given in the options are correct, except the one that states that human eye contains a diverging lens. The lens present in human eye is a convex lens, which is also known as converging lens as it is converging in nature.

Hence, the correct answer is option A.

#### Solution 130

Ultrasonic waves are the sound waves having high frequencies, above the hearing range (above 20 kHz). They can travel in various media like solids, liquids, and gases, but cannot pass through vacuum. Just like other sound waves, they can be reflected, refracted and absorbed. This property of theirs is used in detecting flaws like cracks, porosity, in the internal structure of a material. They are also used to drill holes in very hard materials, like diamonds.

Hence, the correct answer is option A.

## **Solution 131**

According to the Travel and Tourism Competitiveness Index (TTCI), 2017, released by the World Economic Forum, among the 136 economies across the world, India ranked **40th**.

## Explanation:

The Travel and Tourism Competitiveness Index (TTCI) 2017 was released on 5 April 2017 by the World Economic Forum (WEF). India was ranked 40th among the 136 economies across the world in the Index. The position of India has improved over 52nd rank in 2015 and 65th in 2013.

Hence, the correct answer is **option B**.

### **Solution 132**

**Depression:** Let's Talk was the theme of the World Health Day, 2017 celebrated by the World Health Organization .

## Explanation:

On this occasion, the World Health Organization (WHO) is leading a oneyear global campaign on depression which is the leading cause of illhealth and disability worldwide. The goal of the campaign is that more people with depression, everywhere in the world, both seek and get help. Depression is the leading cause of ill-health and disability worldwide.

Hence, the correct answer is **option C**.

#### **Solution 133**

**Ministry of Science and Technology** has launched a new programme on Interdisciplinary Cyber-Physical Systems (ICPS) to foster and promote R & D.

## Explanation:

The Department of Science and Technology of the Union Ministry of Science and Technology launched a new programme "Interdisciplinary Cyber Physical Systems (ICPS)" to foster and promote R&D. A Cyber Physical System is a mechanism controlled or monitored by computer-based algorithms, tightly integrated with internet and its users. It is an engineered system that are build from and depend upon, the seamless integration of computational algorithms and physical components. Hence, the correct answer is **option B**.

#### **Solution 134**

The correct statements are **both 1 and 2**, i.e. the style of temples is commonly found in the areas between Himalayas and Vindhayas and the most striking feature of this style is its pyramidal shikhara.

### Explanation:

Nagara temples have two distinct features – one, the temple is a square with a number of graduated projections in the middle of each side giving a cruciform shape with a number of re-entrant angles on each side. Two, In elevation, a Shikhara, i.e., tower gradually inclines inwards in a convex curve, using a concentric rotating-squares and circles principle.

Hence, the correct answer is **option C**.

#### Solution 135

Ashoka's connection with Buddhism is evident from *Major Rock Edict* 13.

#### Explanation:

The Edicts of Ashoka are a collection of inscriptions on the Pillars of Ashoka and boulders & cave walls made by the Emperor Ashoka of the

Mauryan Empire during his reign from 269 BC to 232 BC. Edict 13 reflects the great remorse the king felt after observing the destruction of Kalinga. The destructive war with Kalinga transformed the Emperor Ashoka to a stable and peaceful emperor and he became a patron of Buddhism.

Hence, the correct answer is **option A**.

### **Solution 136**

The Cabinet Mission Plan for India envisaged *Union of States*.

## Explanation:

The Cabinet Mission proposed the formation of a Union of India, comprising both the British India and the Princely States. The Union would remain in charge of only foreign affairs, defence and communications leaving the residuary powers to be vested in the provinces. A proposal was envisaged for setting up an Interim Government, which would remain in office till a new government was elected on the basis of the new Constitution framed by the Constituent Assembly.

Hence, the correct answer is **option D**.

## **Solution 137**

The creation of the institution of Lokpal was first recommended by the **Administrative Reforms Commission**.

## Explanation:

The Administrative Reforms Commission (ARC) recommended the enacting of the Office of a Lokpal, convinced that such an institution was justified, not only for removing the sense of injustice from the minds of citizens, but also to instill public confidence in the efficiency of the administrative machinery.

Hence, the correct answer is **option D**.

#### Solution 138

Acid rains are caused due to presence of air pollutants like sulfur dioxide and nitrogen oxide, that are emitted and released in atmosphere by the burning of fossil fuels. These pollutants react with the water molecules in the atmosphere and produce acids, that pour down on the Earth's surface in the form of acid rain.

Hence, the correct answer is option C.

#### **Solution 139**

The desirable range of pH for drinking water is 6.5 to 8.5.

Hence, the correct answer is option A.

#### Solution 140

In the given reaction, carbon is getting oxidised as it loses hydrogen from methane and gains oxygen to form CO<sub>2</sub>.

Hence, the correct answer is option A.

#### Solution 141

Sunrise in Eastern Arunachal Pradesh would be about **two hours** before the sunrise in western Gujarat.

## Explanation:

India has a longitudinal extent of 30 degree. Due to this there is time lag of two hours between the sunrise on the easternmost part and the westernmost horizons of India. Due to the rotation, the earth takes 4 min to rotate through 1 degree of longitude. The difference in time is one hour for 15 degee longitude. There for longitudinal extent of 30 degee of india there is time lag of 2 hour.

Hence, the correct answer is **option B**.

#### Solution 142

The correct descending order is 3 - 2 - 1 - 4.

## Explanation:

Kerala accounts for 52.30 % of forest cover, Odisha 32.98 %, Karnataka 19.58 % and Andhra Pradesh 17.27 %.

Hence, the correct answer is **option C**.

#### Solution 143

Out of the aforementioned options, *Tamil Nadu* has the longest coastline in India.

### Explanation:

Gujarat has the longest coastline of 1210 kms, next comes Andhra Pradesh which is of 960 kms and then comes Tamil Nadu which is of 880 kms.

Hence, the correct asnwer is **option B**.

#### **Solution 144**

**Chattisgarh** has the largest area under forest cover in India.

## Explanation:

Chattisgarh accounts for 41% of the forest cover in India.

Hence, the correct asnwer is **option B**.

### Solution 145

**Dolomite** is not an igneous rock.

## Explanation:

Igneous rocks are formed through the cooling and solidification of magma or lava. Dolomite is a sedimentary rock.

Hence, the correct answer is **option C**.

#### Solution 146

The Coriolis effect is the result of **Earth's rotation**.

## Explanation:

The invisible force that appears to deflect the wind is the Coriolis force. The Coriolis force applies to movement on rotating objects. It is determined by the mass of the object and the object's rate of rotation. The Coriolis force is perpendicular to the object's axis. The Earth spins on its axis from west to east. The Coriolis force, therefore, acts in a north-south direction. The Coriolis force is zero at the Equator.

Hence, the correct answer is **option C**.

### **Solution 147**

The Mekong Delta is located in **Vietnam**.

### Explanation:

The Mekong delta is situated in Cambodja and southern Vietnam, where the Mekong river reaches the South China Sea. The Mekong is one of the longest rivers in the world. It originates at the Tibetan Plateau and flows nearly 3000 km in south eastern direction.

Hence, the correct answer is **option D**.

### **Solution 148**

**Ganga - Penganga** is the incorrect pairs of rivers and tributaries.

### Explanation:

Penganga is a tributary of river Godavari.

Hence, the correct anwer is **option B**.

### Solution 149

The above-mentioned characteristics are associated with **formulation and initial stage** cycles of its development.

## Explanation:

The above mentioned characteristics like a warm sea temperature of >26 °C, high relative humidity of atmosphere at a height of >700 m and atmospheric instability are associated with formulation and initial stage of tropical cyclone.

Hence, the correct answer is **option A**.

### **Solution 150**

In the Mesopotamian records, **Meluhha** was used for the Indus Valley (Harappan).

## Explanation:

The Meluhha were most probably the inhabitants of the Indus Valley Civilization. They traded with the Mesopotamian Sumer civilization.

Hence, the correct asnwer is **option B**.