

### NEWSPAPER HIGHLIGHT

Bihar government has sent a fresh proposal to the Archaeological Survey of India to get the 40 km long Cyclopean wall, a more than 2,500 years old structure at Rajgir, listed in the UNESCO World Heritage Site. It was built before 3rd century BC, to protect the ancient city of Rajgir from invaders.

A web portal designed by the government in consultation with insurance companies will provide instant information on road accidents with a few clicks and help accelerate accident compensation claims, bringing relief to victims' families. The Ministry of Roads, Transport and Highways (MoRTH) has developed the portal named 'e-DAR' (eDetailed Accident Report). Digitalised Detailed Accident Reports (DAR) will be uploaded on the portal for easy access. The web portal will be linked to the Integrated Road Accident Database (iRAD). From iRAD, applications to more than 90% of the datasets would be pushed directly to the eDAR.

A unique bird race organised near the waterbodies and at wetlands, grasslands, forest, hills and scrub habitats around Jaipur recently has found preponderance of water centric bird species in the vicinity of the Rajasthan capital. The comprehensive bird species spotting was the first activity of its kind undertaken in Jaipur.

The Navy which had taken an early lead towards indigenisation decades ago and in 2014 promulgated the Indian Navy Indigenisation Plan (INIP) 2015-2030 to enable indigenous development of equipment and systems is further ramping up indigenisation efforts especially in weapons and aviation related items. This falls in line with the Government's push to cut down on defence imports and boost domestic manufacturing which has gained further urgency due to the ongoing Russian war in Ukraine and the large scale dependency of Indian military on Russian arms and equipment.

India's pharmaceutical sector could get access to export incentives if the Commerce Ministry succeeds in securing higher budgetary allocations for the Remission of Duties and Taxes on Export Products (RoDTEP) scheme, Union Minister

### NEPTUNE CRUISE MISSILE

1.Ukraine claimed to have severely damaged the Russian navy's Black Sea Flagship 'Moskva' off the coast of Odessa using the Neptune Missile. **The Neptune is a Ukrainian coastal anti-ship cruise missile system. It is capable of destruction of naval vessels in a range of 300 km.**

2.It was developed in haste by the Ukraine military as the Russian threat to the coastal areas of Ukraine was growing rapidly since the occupation of Crimea in 2014. It was inducted into the Ukrainian Navy in March 2021.

3.The design of the Neptune missile is based on a Russian Kh-35 cruise missile which goes by the NATO name of AS-20 Kayak. The cruise missile was developed in haste by the military as the Russian threat to the coastal areas of Ukraine was growing rapidly since the occupation of Crimea in 2014.

### MOSKVA

1.Moskva is a guided missile cruiser of the Russian Navy named after the city of Moscow. It has a displacement of 12,490 tons. Moskva was originally built in the Soviet era in Ukraine's Mykolaiv.

2.It is the flagship of the Black Sea Fleet of the Russian Navy and carries a crew of around 500 personnel. In 1983, it was originally commissioned as the Slava ('glory').

3.It is the lead ship of Slava-class guided missile cruisers or Project 1164 Atlant. It was re-commissioned in 2000 as the Moskva with refurbished weapon systems and electronics.

### PREVENTION OF CRUELTY ACT,1960

1.The Government has recognized that the Prevention of Cruelty to Animals Act, 1960 must be amended to introduce more stringent penalties. The Prevention of Cruelty to Animals Act, 1960 was authored by acclaimed dancer and animal lover, Rukmini Devi Arundale.

2.This Act aims to prevent the infliction of unnecessary pain or suffering on animals and for that purpose to amend the law relating to the prevention of cruelty to animals. As per the provisions of this law, the government of India formed the Animal Welfare Board of India (AWBI).

3.**The Act defines animals as any living creature other than humans. It also discusses different forms of cruelty, exceptions, and killing of a suffering animal in case any cruelty has been committed against it,** so as to relieve it from further suffering. It also provides the guidelines relating to experimentation on animals for scientific purposes.

4.It provides the guidelines relating to exhibition of the performing animals, and offences committed against the performing animals. This Act provides for the limitation period of 3 months beyond which no prosecution shall lie for any offences under this Act.The prevention of cruelty to animals is a state subject.

5.The data in this regard is not maintained in the Central Government. However, the AWBI is regularly getting information on the cruelty to animals for which the AWBI is writing to the State Governments and local authorities to take necessary action as per the prevailing laws.

### COLOUR BLINDNESS

1.The **Supreme Court has directed the Film and Television Institute of India (FTII) not to exclude candidates suffering from colour blindness from its courses on film making and editing.** Colour blindness or colour deficiency is the inability to see colours in the normal way. Colour blind individuals often cannot distinguish between certain colours - usually greens and reds, and sometimes blues as well.

2.Two types of cells in the retina detect light Rods - Distinguish between light and dark, and Cones - Detect colour. There are three types of cones that see colour - red, green, and blue - and our brains use the information from these cells to perceive colour. Causes - Colour blindness can be the result of the absence of one or more of these cone cells, or their failure to

**Piyush Goyal said on Friday. The government had left out sectors such as iron and steel, chemicals and pharmaceuticals, which is now India's fifth largest exports contributor, from the RoDTEP scheme notified last August and made effective from January 2021.**

**Sri Lanka's economic recovery will depend on the reforms undertaken with the IMF's support, but the government will not ignore the country's poor, Finance Minister Ali Sabry said.**

**Nepal is running low on foreign currency reserves needed to import medicines, oil products, cars and a range of other items, and will run out in seven months if things don't improve, a central bank official said.**

**Moscow said Friday that 18 members of the EU mission in Russia had been told to leave the country and blamed Brussels for destroying ties. "Eighteen employees of the EU Delegation to Russia have been declared 'persona non grata' and will have to leave the territory of the Russian Federation in the near future," the Foreign Ministry said in a statement.**

**Moody's said Russia may be in default because it tried to service its dollar bonds in roubles, which would be one of the starkest consequences of Moscow's exclusion from the Western financial system since President Vladimir Putin's invasion of Ukraine. If Moscow is declared in default, it would mark Russia's first major default on foreign bonds since the years following the 1917 Bolshevik revolution, though the Kremlin says the West is forcing a default by imposing crippling sanctions.**

**China said its military staged exercises on Friday to reinforce its threat to use force to bring Taiwan under its control, as U.S. lawmakers visiting Taiwan made a pointed and public declaration of their support for the self-governing island democracy while issuing a warning to China.**

**A Ukrainian military factory outside Kyiv that produced missiles allegedly used to hit Russia's Moskva warship was partly destroyed by overnight Russian strikes.**

**Egypt, one of the world's biggest importers of wheat which has been importing the grain from Russia and Ukraine, has agreed to source wheat from India, Union Minister for Commerce and Industry Piyush Goyal said.**

work properly. In a situation where all three cone cells are present but one of them is malfunctioning, mild colour blindness may occur.

**3.**Most colour blind people are born with the condition (congenital colour blindness), but some can develop it later in life. Congenital colour vision deficiencies are usually passed on genetically. A problem with colour vision that arises later in life could be the result of disease, trauma, or ingested toxins. Medical conditions that may increase the risk of getting colour blindness include glaucoma, diabetes, Alzheimer's, Parkinson's, alcoholism, leukaemia, and sickle-cell anaemia.

**4.**Severity - Colour blindness may be of different kinds and degrees. Mildly colour blind people often see all colours properly only when the light is good. There are others who cannot tell one colour apart from another no matter how good the light is. In the most severe kind of colour blindness, vision is black-and-white, that is, everything appears as a shade of grey. Color blindness generally affects both eyes, and the condition remains roughly the same for as long as the individual is alive. Treatment - Colour blindness cannot as yet be treated or reversed. However, it can be corrected to some extent by wearing special contact lenses or colour filter glasses.

**5.**Diagnosis - In the case of a child, parents can notice the deficiency for the first time when the child is beginning to learn colours. The child may have difficulty in seeing colours or in recognising the brightness of colours in ways that would be considered 'normal'. The child may also show an inability to distinguish between shades of the same or similar colours. At risk - Men suffer from a higher incidence of colour blindness than women.

**6.****Around the world, every tenth male is estimated to have some form of colour deficiency. In India, the Supreme Court in the FTII case quoted, "Estimated 8% of male population and less than 1% female population have red and green colour deficiency being the most common form of colour-blindness."**

#### **DORNIER-228**

1.The Dornier-228, a made-in-India aircraft, has taken to the skies on its maiden commercial flight to Arunachal Pradesh from Assam. Dornier-228 (Do-228) or Hindustan aircraft is a 17-seater non-pressurised aircraft that has a turboprop engine. It is capable of day and night operations, short take-off and landing, and can land and take off from semi-prepared runways. Dornier 228 was designed and first manufactured by Dornier GmbH.

2.After securing product licence, Hindustan Aeronautics Limited (HAL) started the manufacturing Do-228 in India. [Hindustan Aeronautics Limited is a Central Public Sector Unit under Ministry of Defence.]

3.Move - Dornier-228 aircraft has been used by the armed forces till now. Alliance Air had signed a Memorandum of Understanding (MoU) with HAL to operate Dornier aircraft. [Alliance Air is a public sector airline company.] This MoU was signed under UdeDeshKaAam Nagrik (UDAN) scheme to boost connectivity in the northeast.

4.As per the MoU, HAL handed over the first multi-purpose Dornier -228 aircraft to Alliance Air. With this flight, Alliance Air has become India's first commercial airline to fly the Indian-made aircraft for civil operations. HAL built Dornier-228 to specifically meet the manifold requirements of utility and commuter transport, air-taxi operations, coast guard duties and maritime surveillance.

#### **FLEX FUEL VEHICLES**

1.The Indian Sugar Mills Association (ISMA) has called for a faster launch of flex-fuel vehicles (FFVs) to achieve 20 per cent of ethanol blending. What are flexible fuel vehicles (FFVs)-**An FFV is a modified version of vehicles that could run both on gasoline and doped petrol with different levels of ethanol blends. FFVs will allow vehicles to use all the blends and also run on unblended fuel.** FFVs have compatible engines to run on more than 84 percent ethanol blended petrol.

**2.**Benefits: FFVs are aimed at reducing the use of polluting fossil fuels and cutting down harmful emissions. Alternative fuel ethanol is Rs 60-62 per litre while petrol costs more than Rs 100 per litre in many parts of the country, so by using ethanol, Indians will save Rs 30-35 per litre. For India, FFVs will present a different advantage as they will allow vehicles to use different blends of ethanol mixed petrol available in different parts of the

**There is a delay in the delivery of the second regiment of S400 from Russia due to the ongoing war in Ukraine. However, some training equipment and simulators arrived in India, official sources confirmed.**

**Shipments of some Apple products, as well as Dell and Lenovo laptops are likely to face delays if China's COVID-19 lockdowns persist, analysts said, as curbs force assemblers to shut down and closed-loop arrangements get harder to maintain. China's race to stop the spread of COVID19 has jammed highways and ports, stranded workers and left countless factories awaiting government approval to reopen disruptions that are rippling through global supply chains.**

country.

**3.**Also, these vehicles are a logical extension of the Ethanol Blended Petrol (EBP) programme launched by the Union Ministry of Petroleum and Natural Gas in January 2003. Since India has surplus produce of corn, sugar and wheat, the mandatory blending of ethanol programme will help farmers in realising higher incomes. For the overall Indian economy, higher usage of ethanol as an automobile fuel will help save import costs as the country meets more than 80 per cent of its crude oil requirements through imports.

**4.**Disadvantages/challenges of using FFVs: Customer acceptance will be a major challenge since the cost of ownership and running cost are going to be very high compared with 100 per cent petrol vehicles. Running cost (due to lower fuel efficiency) will be higher by more than 30 per cent when run with 100 per cent ethanol (E100). **Flex Fuel Engines cost more as ethanol has very different chemical properties than petrol. Ethanol has very low (40 per cent) Calorific value as compared to Gasoline, very High Latent heat of vaporization causing cooling of charge/combustion etc.** Ethanol also acts as a solvent and could wipe out the protective oil film inside the engine thereby could cause wear and tear.