



Defence Forces Academy

Academy with a Difference

CURRENT AFFAIRS
DEC- 2020



MAY- 2020

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Current Affairs

1. Prime Minister Narendra Modi has launched the country's first seaplane service between the Statue of Unity near Kevadiya in Gujarat's Narmada district and Sabarmati Riverfront in Ahmedabad. He travelled in the maiden flight of the twin-engine plane from pond-3 close to Sardar Sarovar Dam and landed at Sabarmati riverfront where a water aerodrome has been set up.

About the seaplane service:

- The 19-seater seaplane will be managed by private airline SpiceJet.
- The service will cover the 200km distance between Sabarmati and Kevadia, in just 45 minutes by flight, which usually takes 4 hours.
- The flight will be able to accommodate 12 passengers and tickets will cost Rs 4,800 per person.`
- There will be four flights a day between Ahmedabad and Kevadia on each side, which means four arrivals and four departures.

2. The 40th Meeting of the SAARCFINANCE Governors' Group was held virtually, under the Chairmanship of Shri Shaktikanta Das, Governor, RBI. The meeting was attended by the Governors from SAARC central banks. During the meeting, Mr Das also inaugurated the



SAARCFINANCE Sync, a closed user group secure communication network.

About SAARCFINANCE Sync:

- In his opening remarks, Governor Shri Das highlighted the close partnership and co-operation among the member countries in jointly fighting the pandemic.
- The group took stock of the macroeconomic situation in the SAARC region; discussed the current SAARCFINANCE initiatives; and the way ahead.
- The Governors reaffirmed their commitment to continued co-operation and sharing of central bank experiences.
- SAARCFINANCE is a network of central bank governors and finance secretaries of the SAARC region.
- The Reserve Bank of India (RBI) is the current chair of SAARCFINANCE.

The meeting was attended by the Governors from SAARC central banks:

- Mr Fazle Kabir, Bangladesh Bank;
- Mr Dasho Penjore, Royal Monetary Authority of Bhutan;
- Shri Shaktikanta Das (Chairperson), Reserve Bank of India;
- Mr Ali Hashim, Maldives Monetary Authority;



- Mr Maha Prasad Adhikari, Nepal Rastra Bank;
- Dr Reza Baqir, State Bank of Pakistan;
- Prof. W. D. Lakshman, Central Bank of Sri Lanka.
- Governor, Da Afghanistan Bank (DAB) was represented by a senior official of DAB.

3. In Madhya Pradesh, the Panna Tiger Reserve has been included in the 'World Network of Biosphere Reserves' list of the UNESCO. This is the 12th biosphere reserve from India to be included in the 'World Network of Biosphere Reserves', and third from Madhya Pradesh, after Pachmarhi and Amarkantak. Currently, Panna Tiger Reserve is home to 54 tigers.
 - The UNESCO World Network of Biosphere Reserves (WNBR) covers internationally designated protected areas (known as biosphere reserves) that demonstrate a balanced relationship between people and nature (like encourage sustainable development).
4. Prime Minister Shri Narendra Modi chaired the Virtual Global Investor Roundtable (VGIR) 2020 Conference, aimed at attracting investment in the country. It provided a platform for exclusive dialogue between



leading global institutional investors, Indian business leaders and the highest decision-makers from the government of India and financial market regulators. The Indian side included business leaders, financial market regulators, finance minister Nirmala Sitharaman and RBI governor Shaktikanta Das.

About Virtual Global Investor Roundtable (VGIR) 2020 Conference:

- The conference focused on discussions around India's economic and investment outlook, structural reforms and the government's vision for making the country a

\$5 trillion economy.

- The Virtual Global Investor Roundtable (VGIR) was organised by the Ministry of Finance and the National Investment and Infrastructure Fund.
- The roundtable witnessed participation from 20 of the world's largest pension and sovereign wealth funds with total assets under management of about USD 6 trillion.
- These global institutional investors represent key regions including the US, Europe, Canada, Korea, Japan, Middle East, Australia, and Singapore.

5. Mumbai Indians defeated Delhi Capitals in the final of Dream11 Indian Premier League (IPL) 2020 to lift their fifth IPL trophy. Chasing 157



runs for victory, Mumbai were helped by their captain Rohit Sharma, who hit 68 runs off 51 balls. Mumbai had defeated Chennai Super Kings in the IPL 2019 final. They have now become the only side after Chennai Super Kings to defend the title.

- Kings XI Punjab skipper KL Rahul bagged the Orange Cap for being the leading run-scorer of the IPL 2020. He racked up 670 runs from 14 games at an astronomical average of 55.83. Delhi Capitals' Kagiso Rabada won the Purple Cap after finishing at the top of the table with a total of 30 wickets at the end of IPL 2020.

Here are the award winners:

- Rohit Sharma adjudged Game Changer of the Match in the final of IPL 2020.
- Trent Boult named the Player of the Match in the final of IPL 2020.
- Kings XI Punjab skipper KL Rahul bags the Orange Cap.
- Game Changer of the Season: KL Rahul.
- Delhi Capitals' Kagiso Rabada wins the Purple Cap.
- Emerging Player of the season: Devdutt Padikkal (RCB).
- Rajasthan Royals speedster Jofra Archer emerges as the Most Valuable Player.



6. Prime Minister Narendra Modi has virtually addressed the 12th (BRICS) Summit. The Summit was held under the Chairmanship of Russian President Vladimir Putin. India will be taking over the Chairmanship of the BRICS in 2021 and host the 13th BRICS Summit in 2021. It would be the third time that India will take over the BRICS Presidency since its inception. Previously India was the Chair in 2012 and 2016.
 - The theme of the 12th edition of BRICS Summit was “Global stability, shared security and innovative growth”. The key issues discussed by the leaders included intra-BRICS cooperation and other key issues in the global context, like the reform of the multilateral system, measures to mitigate the impact of the ongoing COVID-19 pandemic, cooperation in Counter- Terrorism, trade, health, energy and people to people exchanges.
7. The Netflix show, Delhi Crime has won the Best Drama Series award at the 48th International Emmy Awards 2020. Delhi Crime is the first web-series from India to win an International Emmy Award. The show is written and directed by Richie Mehta and features actress Shefali Shah as the main character.

The complete list of 2020 International Emmy Awards winners:



- Best Drama Series: Delhi Crime (India)
- Best Comedy Series: Ninguem Ta Olhando (Nobody's Looking) (Brazil)
- Best Actress: Glenda Jackson, Elizabeth Is Missing (United Kingdom)
- Best Actor: Billy Barratt, Responsible Child (United Kingdom)
- Best TV Movie/Mini-Series: Responsible Child (United Kingdom)
- Best Short-Form Series: #Martyisdead (Czech Republic)
- Best Non-English Language US Primetime Program: 20th Annual Latin GRAMMY Awards and Reina Del Sur – Season 2
- Best Telenovela: Orfaos Da Terra (Orphans Of A Nation) (Brazil)
- Best Documentary: For Sama (United Kingdom)
- Best Arts Programming: Vertige De La Chute (Ressaca) (France)
- Best Non-Scripted Entertainment: Old People's Home For 4 Year Olds (Australia)

8. Department of Fisheries presents Fisheries Sector Awards for the first time on the occasion of the 'World Fisheries Day', to recognise their accomplishments in the field and their contribution into the growth of the sector. The Department of Fisheries under the Ministry of Fisheries, Animal Husbandry and Dairying awarded best performing States, Organisations and Districts for 2019-20.



Top States

- Marine states – Odisha
- Inland states – Uttar Pradesh.
- Hilly and NE states – Assam.

Top Organisations

- Tamil Nadu Fisheries Development Corporation Ltd. (for Marine).
- Telangana State Fishermen Cooperative societies Federation Ltd (for Inland).
- Assam Apex Cooperative Fish Marketing and Processing Federation Ltd. (for Hilly region).

Top Districts

- Best Marine District – Krishna District, Andhra Pradesh.
- Best Inland District – Kalahandi, Odisha.
- Best Hilly and NE District – Nagaon, Assam.

9. In India, 26 November is celebrated as Constitution Day or Samvidhan Diwas. On this day in 1949, the constitution was adopted which came into force on January 26, 1950, marking the beginning of a new era in the history of India.



- On 19th November 2015, during the year-long celebration of the 125th birth anniversary of Dr B R Ambedkar, Government of India declared November 26th as the Constitution Day. Previously this day was celebrated as Law Day. 26 November was chosen to spread the importance of the constitution and to spread thoughts and ideas of Ambedkar.

Current Affairs Capsule:

- The Airports Authority of India (AAI) has handed over the Lucknow airport to the Adani group on lease for a period of 50 years. Apart from this, the Adani group has taken over/will take over operations of 5 more airports.
- The Competition Commission of India (CCI) has approved the acquisition of General Insurance Business of Bharti AXA General Insurance Company Limited (Bharti AXA) by ICICI Lombard General Insurance Company Limited (ICICI Lombard) under Section 31(1) of the Competition Act, 2002.
- Securities and Exchange Board of India (SEBI) has enhanced the investment limits for Mutual Fund companies for overseas investments. Mutual Funds can make overseas investments subject to a maximum of US \$ 600 million per Mutual Fund, within the overall industry limit of US \$ 7 billion. Earlier it was USD 300 million.
- WhatsApp has partnered with five Indian banks to process its payment services. These are State Bank of India, HDFC Bank, ICICI Bank, Axis Bank



and Jio Payments Bank. The Facebook-owned messaging platform, WhatsApp Inc., has received the approval from the National Payments Corporation of India (NPCI) to launch its Unified Payments Interface (UPI) based payments services in India, to let users send or receive money across the country.

- Paytm has launched “Payout Links” for businesses, enabling them to instantly process payouts to customers, employees and vendors, without collecting their bank details. It is aimed at helping small businesses in sectors like gaming, retail, export, manufacturing and e-commerce.
- Life Insurance Corporation of India has launched a digital application for agents for onboarding to get a life insurance policy. The Digital Application is called “ANANDA”, which is an acronym for Atma Nirbhar Agents NewBusiness Digital Application. The Digital application is a tool for the onboarding process to get the life insurance policy through a paperless module with the help of the agent or intermediary.
- The Insurance Regulatory and Development Authority of India (IRDAI) has given its in-principle approval for the merger of Bharti AXA General.
- Super Typhoon Goni, claimed as the world’s strongest typhoon of 2020 has hit the south of the Philippines’ main island of Luzon. Goni is one of the strongest storms to hit the Philippines since 2013’s Haiyan, which killed more than 6,300 people.
- Portugal MP, Duarte Pacheco has won the elections for the post the President of the Inter- Parliamentary Union (IPU). The term of the Duarte Pacheco will be from 2020-2023. He will be the 30th President of the IPU and will succeed Mexican MP Gabriela Cuevas Barron who completed the tenure in October 2020.



- The incumbent President of Ivory Coast, Alassane Ouattara, has won a third 5-year term in a landslide victory, gaining more than 94 per cent of the votes polled.
- Bangladesh and US navies launched the ‘Cooperation Afloat Readiness and Training (CARAT) Bangladesh 2020’ to expand relationships and broaden maritime awareness between the two countries.
- The President of Tanzania, John Pombe Magufuli has been sworn for a second five-year term.
- The United States has officially withdrawn from the Paris climate accord on 04 November 2020. With this, the US has now become the only country to formally pull out of the deal since it was adopted in 2015.
- The second World Health Expo was inaugurated on November 11, in Wuhan, the capital city of Central China’s Hubei Province. This year’s Expo will focus on displaying the most cutting-edge science and technology in the global health industry, and help Wuhan build “city of global health industry”.
- Indian-American Kash Patel has been named as the Chief of Staff to the Acting US Defence Secretary Chris Miller. The new appointment comes a day after Donald Trump fired Defence Secretary Mark Esper and designated Chris Miller, as the Acting Secretary. Kash Patel, currently on the National Security Council staff. He replaces Jen Stewart, who resigned earlier in the day.
- Myanmar's ruling party led by Nobel laureate Aung San Suu Kyi claimed a resounding victory. National League for Democracy (NLD) party has won close to 400 seats while the opposition Union Solidarity and Development Party (USDP) has secured only 21 seats.



- The Chief Justice of India (CJI) Sharad Arvind Bobde and Justice DY Chandrachud of the Supreme Court, jointly inaugurated India's first-ever E-resource centre and the virtual court called "Nyay Kaushal" at Judicial Officers Training Institute in Nagpur.
- As a part of Mission Sagar-II, the Indian Naval Ship (INS) Airavat has reached Sudan with 100 tonnes of food aid. Under Mission Sagar-II, INS Airavat will deliver food aid to Sudan, South Sudan, Djibouti and Eritrea amid the COVID-19 pandemic.
- Union Minister of State (IC) for Tourism & Culture, Prahlad Singh Patel virtually inaugurated the "Tourist Facilitation Centre" facility at Guruvayur, in Kerala. The facility has been constructed under the project "Development of Guruvayur, Kerala" under Pilgrimage Rejuvenation and Spiritual, Heritage Augmentation Drive' (PRASHAD) Scheme of the Ministry of Tourism, at the cost of Rs. 11.57 Crores.
- The Chief of Army Staff General, MM Naravane was conferred the honorary rank of General of the Nepali Army by President Bidya Devi Bhandari. He was honoured at a special ceremony at the President's official residence 'Shital Niwas' in Kathmandu, Nepal.
- The Ministry of Information & Broadcasting has constituted a four-member committee, to assess the existing Television Rating Points (TRP) of TV channels. The committee will be chaired by Prasar Bharati CEO, Shashi S Vempati. The committee will be responsible to address the 'needs of the stakeholders' and make necessary recommendations for a rating system which shall be 'robust, transparent and accountable'.
- The Ministry of Shipping is being expanded and renamed as the Ministry of Ports, Shipping and Waterways. This information was given by Prime



Minister Narendra Modi on 8 November 2020, during a launch event of Ro-Pax terminal at Hazira and flagging off the Ro-Pax ferry service between Hazira and Ghogha in Gujarat, which will reduce the 370- km road distance between the two places to 90-km by sea route.

- The Ministry of Road Transport and Highways (MoRTH) has issued a notification that FASTags will become mandatory for all four-wheelers, including old vehicles, from January 1, 2021.
- Union Jal Shakti Minister, Gajendra Singh Shekhawat has launched India's first solar-based Integrated Multi-Village Water Supply Project (IMVWSP) in Arunachal Pradesh. The solar-based lift water supply project is 'first of its kind' in the country, and has been commissioned at a cost of Rs 28.50 crore. However, such projects will be carried out in other parts of the country too.
- Central Board of Indirect Taxes and Customs (CBIC) Chairman M. Ajit Kumar, along with members of the Board inaugurated the GST Bhawan, Panchkula, Haryana. The state of the art building will house the offices of Central GST at Panchkula. It has been built at a cost of about 31 crores rupees.
- The Government of India, the Government of Meghalaya and the World Bank has signed a \$120- million project to improve and modernize the transport sector of Meghalaya. This will help Meghalaya to harness its vast growth potential for high-value agriculture and tourism. The \$120 million loans from the International Bank for Reconstruction and Development (IBRD), has a maturity of 14 years including a grace period of six years. The International Bank of Reconstruction and Development (IBRD) is a development bank administered by the World Bank.



- Union Minister of Communications, Electronics & Information Technology and Law and Justice, Ravi Shankar Prasad has released a “My Stamp on Chhath Puja”. My Stamp is an innovative concept initiated by the Department of Posts. Any common person or corporate organisation can now book order and get a personalised photograph or an image of a Postage Stamp.
- The Union Health Minister Dr Harsh Vardhan has addressed the 33rd Stop TB Partnership Board meeting in New Delhi through Video Conference. During the meet, the minister has stressed on the need to create a mass movement for the elimination of TB with strategized advocacy, thought leadership, disruptive social entrepreneurship, powerful, societal and political commitment. It must be noted that India is running the “TB Harega, Desh Jeetega” campaign that targets to achieve the Sustainable Development Goal target related to TB by 2025, five years ahead of the global target of 2030.
- Prime Minister of India Narendra Modi and Bhutan Prime Minister Lotay Tshering virtually launched RuPay card Phase-II, to allow Bhutanese cardholders to access RuPay network in India. In August 2019, PM Modi and his Bhutanese counterpart jointly launched Phase-I of the project. Phase-II will now allow Bhutanese cardholders to access RuPay network in India.
- India will host the Summit of the G20 Group in 2023. India was earlier slated to host the summit in 2022. India and Indonesia have swapped their respective hosting year of G20 as Indonesia would also chair the Association of Southeast Asian Nations (ASEAN) in 2023. However, now the G20 Summit be hosted by Italy in 2021, Indonesia in 2022, India in 2023 and Brazil in 2024.
- Union Minister for Electronics and Information Technology, Ravi Shankar Prasad has launched the UMANG mobile app International version in coordination with Ministry of External Affairs for select countries that include



USA, UK, Canada, Australia, UAE, Netherlands, Singapore, Australia and New Zealand.

- The 2020 Afghanistan Conference was organized in Geneva from 23-24 November 2020 virtually. The External Affairs Minister of India, Dr S. Jaishankar led the Indian delegation at the conference. India has introduced a brand new section of over 100 high- impact neighbourhood initiatives in Afghanistan value USD 80 million (Rs 592 crore) because the nation's growth portfolio within the war-ravaged nation has reached over USD three billion (Rs 22,200 crore) to this point.
- The Union Territory of Ladakh has got the largest solar power project set up under the Centre's 'Make In India' initiative at Leh IAF station to provide sustainable energy alternative to fossil fuel and traditional methods of energy generation. The project namely 'Provision of Solar Photo Voltaic Powerplant 1.5 MW' has been completed within 12 months well before the completion deadline of March 31, 2021.
- Union Minister Nitin Gadkari has inaugurated and laid the foundation stones of 16 National Highway projects in Uttar Pradesh. The construction cost of these infra projects is estimated to be around Rs 7477 crore.
- The Board of Control for Cricket in India (BCCI) has announced Jio as the Title Sponsor of the 2020 edition of the Women's T20 Challenge. The partnership will also have the support of Reliance Foundation Education and Sports For All (RF ESA).
- Indian boxers Amit Panghal, Sanjeet and Ashish Kumar have won gold medals at the recently concluded Alexis Valentine International Boxing Tournament held in Nantes, France. The tournament was the first international event that Indian boxers were a part of since the lockdown.



- Lewis Hamilton (Mercedes-Great Britain) has won the Emilia Romagna Grand Prix 2020 at Autodromo Internazionale Enzo e Dino Ferrari race track, Italy.
- Australian all-rounder, Shane Watson has announced his retirement from all forms of cricket. The 39-year-old will hang up his boots after an illustrious career during which he won two ICC Men's Cricket World Cups and two ICC Champions Trophy titles. He played 59 Tests, 190 ODIs and 58 T20Is.
- West Indies batsman, Marlon Samuels has announced his retirement from professional cricket. The 39-year-old had informed Cricket West Indies (CWI) about his retirement in June this year, having last played for his country in December 2018 against Bangladesh.
- Russian, Daniil Medvedev has won Paris Master 2020 title in tennis when he beat Alexander Zverev 5-7, 6-4, 6-1 in Paris. He became the fourth Russian to capture the Rolex Paris Masters title.
- The world number one Chen Meng beat Chinese compatriot Sun Yingsha to win her maiden International Table Tennis Federation (ITTF) Women's World Cup table tennis title in held in Weihai, China. The 2020 ITTF Women's World Cup was the 24th edition of the ITTF-sanctioned event.
- Lewis Hamilton (Mercedes-Great Britain) has won the Turkish Grand Prix 2020 at Istanbul Park, Turkey. Sergio Perez (Racing Point-BWT-Mexico) secured

the second position and Sebastian Vettel of Ferrari finished third.

- Serbian tennis star Novak Djokovic has given the ATP Tour No. 1 trophy on 15 November 2020, for finishing 2020 as the year-end No. 1 (world number



one). With this, he has become the only second player in tennis history, after Pete Sampras, to receive the trophy sixth time.

- Indian cricketer, Sudeep Tyagi has announced his retirement from all forms of the cricket.
- The 2021 U-17 Women's World Cup, which was scheduled to be held in India, has been cancelled due to the Coronavirus pandemic. It has also been decided that India will host the 2022 edition of the World Cup. While Costa Rica will get the chance to host the 2022 U20 Women's World Cup.
- The Board of Control for Cricket in India (BCCI) has announced its partnership with Mobile Premier League (MPL) Sports, the athleisure wear and sports merchandise brand from Mobile Premier League, India's largest esports platform, as the new kit sponsor and official merchandise partner for the Indian Cricket Team.
- In Tennis, Daniil Medvedev (Russia) beat Dominic Thiem (Austria) to win the 2020 ATP Tour Finals, held in London. This is the biggest title of his career. The 24-year-old will finish the year at fourth position in the world rankings. In the doubles final, Dutch- Croatian duo Wesley Koolhof and Nikola Pietrangeli claimed their first title together after surpassing Jurgen Melzer and Edouard Roger-Vasselin.
- Sports Minister Kiren Rijiju has launched the 2nd edition of the "Fit India School Week" program in the presence of Fit India Mission. Sports Minister encourages school children to participate in the Fit India movement.
- Indian cricket team skipper Virat Kohli scripted another record in the game. He broke Sachin Tendulkar's record and became the quickest batsman to complete 22,000 runs. He reached the milestone in his 462nd innings.



- The 4th High-Level Meeting of the OPEC-India Dialogue was hosted by the OPEC Secretariat. The Meeting was co-chaired by HE Mohammad Sanusi Barkindo, Secretary-General of OPEC and Shri Dharmendra Pradhan, India's Minister of Petroleum and Natural Gas and Minister of Steel.
- The 13th Urban Mobility India (UMI) Conference was organized by the Ministry of Housing and Urban Affairs. It was inaugurated by Hardeep S. Puri, Minister of State (IC) Housing and Urban Affairs. The day-long conference was held via Video Conference on the theme "Emerging Trends in Urban Mobility". The conference focused on innovative measures taken at the national and international level to address the challenges posed by Covid-19 pandemic to provide accessible and convenient transport to the people.
- The 20th Summit of SCO Council of Heads of State was held on November 10, 2020, in Video Conference Format. The Meeting was chaired by the Russian President Vladimir Putin. Prime Minister Shri Narendra Modi led the Indian delegation.
- India has extended financial contribution of USD 1 million to the COVID-19 ASEAN Response Fund. This was announced by Prime Minister Narendra Modi at the 17th ASEAN-India Summit, which was held virtually.
- The External Affairs Minister Dr S. Jaishankar has represented India at the 15th East Asia Summit (EAS) on behalf of PM Modi. The Summit was chaired by the Prime Minister of Vietnam Nguyen Xuan Phuc because Vietnam is ASEAN Chair in 2020 (ASEAN holds the central role and leadership in the forum). All the 18 EAS countries participated in the virtual Summit.
- The 8th BRICS Science, Technology and Innovation Ministerial Meeting was held through a virtual platform for Science and Technology cooperation among the member countries, which are Brazil, Russia, India, China and South



Africa. The meeting was held under the Chairmanship of the Russian Federation. (Russia is the Chair for 12th BRICS Summit). The Union Minister of Science and Technology, Dr Harsh Vardhan represented the Indian delegation at the meeting.

- 15 Asia Pacific countries have signed the world's biggest free trade deal, led by China, on the sidelines of the 37th Association of Southeast Asian Nations (ASEAN) Summit. The deal called as 'Regional Comprehensive Economic Partnership (RCEP)', is the world's largest trading bloc, comprising of 10 Southeast Asian countries, as well as South Korea, China, Japan, Australia and New Zealand.
- Prime Minister Narendra Modi has addressed the 3rd Annual Bloomberg New Economy Forum through video-conferencing. The forum witnessed discussions on refuelling the economy and charting a course for the future, as the world economy is grappling with the COVID-19 pandemic.
- World Vegan Day is observed globally on 1st November every year. This day is celebrated to spread benefits of veganism for humans, non-human animals, and the natural environment. Vegan Day is an opportunity to promote the benefits of a vegan diet and veganism in general.
- The International Day to End Impunity for Crimes against Journalists is an UN-recognized day observed annually on 2 November.
- World Tsunami Awareness Day was observed across the world on 5 November.
- The International Day for Preventing the Exploitation of the Environment in War and Armed Conflict is an international day observed annually on November 6.



- The National Cancer Awareness Day is observed annually in India on November 7, to spread awareness on cancer, its symptoms and treatment.
- International Day of Radiology is observed globally on 8th November every year. The motto of International Day of Radiology 2020: 'Radiologists and radiographers supporting patients during COVID-19'.
- In India, 09 November is celebrated as "National Legal Services Day" every year by all Legal Services Authorities, to commemorate the enactment of the Legal Services Authorities Act 1987.
- World Urbanism Day, also known as "World Town Planning Day", is celebrated on 8 November globally, to recognise and promote the role of planning in creating livable communities. WUD is organised by the International Society of City and Regional Planners (ISOCARP).
- World Science Day for Peace and Development is celebrated each year on November 10 every year. This year World Science Day for Peace and Development theme is "Science for and with Society".
- National Ayurveda Day is being observed every year from 2016, on the day of Dhanwantri Jayanti. This year the 5th Ayurveda Day falls on November 13, 2020. The Potential role of Ayurveda in the management of the COVID-19 pandemic will be the focus of this year's 'Ayurveda Day' observation.
- World Diabetes Day is observed on 14th November every year. The campaign aims to raise awareness around the crucial role that nurses play in supporting people living with diabetes. The theme for World Diabetes Day 2020 is "The Nurse and Diabetes."
- In India, November 17 is observed every year as National Epilepsy Day, to create awareness about epilepsy. The month of November is observed as



'National Epilepsy Awareness Month'. This National Epilepsy Day is observed by the Epilepsy Foundation of India.

- World Toilet Day (WTD) is observed globally on 19 November to inspire action to tackle the global sanitation crisis. The day was established by the World Toilet Organization in 2001 and officially declared by the UN General Assembly in 2013. This year the theme remarks on the importance of "Sustainable sanitation and climate change".
- World Philosophy Day is observed on the third Thursday of November every year. This year World Philosophy Day falls on 19 November 2020.
- World COPD Day is observed on the third Wednesday of November every year to raise awareness about chronic obstructive pulmonary disease (COPD) and improve COPD care throughout the world. World COPD Day 2020 falls on 18 November 2020. The 2020 theme: Living Well with COPD- Everybody, Everywhere.
- World Children's Day is observed globally on 20 November every year. The day is celebrated to promote international togetherness, awareness among children worldwide, and improving children's welfare.

Defence Current Affairs:

- The Indian Air Force (IAF) successfully test-fired an air-launched version of the BrahMos supersonic cruise missile from a Sukhoi fighter aircraft in the Bay of Bengal. The aircraft took off from an airbase in Punjab & reached the Bay of Bengal after mid-air refuelling.
- The Navies of India, the US, Japan and Australia began the four-day-long phase first of the Malabar naval exercise in the Bay of Bengal. From the Indian



side, destroyer Ranvijay, frigate Shivalik, off-shore patrol vessel Sukanya, fleet support ship Shakti and submarine Sindhuraj will be part of the drill. US Navy Ship USS John S McCain (Guided-missile destroyer), Australian Navy Ship HMAS Ballarat (long-range frigate) and Japan Maritime Self Defence Ship (JMSDF) Ship JS Onami (destroyer) are participating along with Indian Navy units.

- The enhanced version of PINAKA rocket system was successfully flight tested by Defence Research and Development Organisation (DRDO) from Integrated Test Range, Chandipur off the coast of Odisha. This enhanced version of the Pinaka rocket would replace the existing Pinaka Mk-I rockets. While Mk-1 had a range of 40 km, the new variant can hit a target 45 to 60 km away.
- India receives the second batch of three Rafale Aircraft, bringing total Rafale Jets with IAF to eight. The second batch of three Rafale jets landed in Jamnagar, Gujarat on 4th November 2020, after flying non-stop from France.
- Andaman and Nicobar Command (ANC) has conducted a three-day Tri-Service Combat Exercise code-named “Bull Strike” at Teressa Island in Nicobar Group of Islands. The exercise focussed on interoperability and synergy among three services –Army, Navy and Air Force to maximise combat potential.
- A two-day joint coastal security exercise, “Sagar Kavach” was launched at Paradip Coast, Odisha. The exercise is being carried out by a joint effort of the state of Odisha and West Bengal governments.
- A model of Anti Satellite (A-SAT) Missile installed inside DRDO Bhawan was unveiled by Union Defence Minister Rajnath Singh. The installation of the A-SAT model will inspire the DRDO fraternity to take up many more such challenging missions in future.



- The Indian Navy has launched the fifth Scorpene submarine “Vagir” at Mazagon Dock of south Mumbai. The submarine is capable of taking missions such as anti-submarine warfare, anti-surface warfare, mine laying, intelligence gathering and area surveillance.
- India successfully test-fired the Quick Reaction Surface to Air Missile (QRSAM) system off the coast of Balasore in Odisha. The system achieved a major milestone by a direct hit on to a Banshee Pilotless target aircraft at medium range and medium altitude. Indian forces have carried out at least seven tests earlier of the missile system.
- The second phase of Exercise Malabar 2020 has been organised in the Northern Arabian Sea from 17 to 20 November 2020. The first Phase of Exercise Malabar 2020 was conducted in the Bay of Bengal from 03 to 06 November 2020. Exercise Malabar 2020 is the 24th edition of MALABAR. The second phase will witness joint operations, centred around the Vikramaditya Carrier Battle Group of the Indian Navy and Nimitz Carrier Strike Group of the US Navy.
- The 30th edition of India-Thailand Coordinated Patrol (Indo-Thai CORPAT) was held between the Indian Navy and the Royal Thai Navy. The Indian Naval Ship (INS) Karmuk, an indigenously built Missile Corvette and Thailand Ship (HTMS) Kraburi, a Chao Phraya Class Frigate along with Dornier Maritime Patrol Aircraft from both the navies participated in the CORPAT.
- The 2nd edition of India, Singapore and Thailand Trilateral Maritime Exercise SITMEX-20 was conducted from in the Andaman Sea. The 2020 edition of the exercise is being hosted by Republic of Singapore Navy (RSN). Indian Navy (IN) Ships including indigenously built ASW corvette Kamorta and missile corvette Karmuk participated in the exercise.



- Indian Navy has got its ninth Boeing P-8I long-range maritime reconnaissance and anti-submarine warfare aircraft, part of the nearly \$1 billion deal with the US for four additional planes signed in 2016.
- The 27th edition of India – Singapore Bilateral Maritime Exercise SIMBEX-20 has been organised from 23 to 25 November 2020 in the Andaman Sea. Indian Navy (IN) is the host for the 2020 edition of SIMBEX. The SIMBEX series of exercises are being held between the Indian Navy and Republic of Singapore Navy (RSN), annually since 1994.
- Indian Army successfully test-fired a land-attack version of the BrahMos supersonic cruise missile from the Andaman and Nicobar Islands territory. The supersonic cruise missile successfully hit its target, which was on another island.
- The Defence Research and Development (DRDO) Chairman G Satheesh Reddy has flagged off the first Production unit of Heavy Weight Torpedo (HWT), Varunastra. The Varunastra has been designed and developed by Naval Science & Technological Laboratory (NSTL) of DRDO while Bharat Dynamics Limited (BDL), Vishakhapatnam has manufactured the torpedo for the Indian Navy.
- Konark Corps of Indian Army has launched a 1971 kilometres cycling expedition in Gujarat and Rajasthan to commemorate the commencement of the Golden Jubilee Victory Celebrations of Indian Armed Forces in the Indo-Pak War of 1971.



Science Corner: Anatomy of the Brain

Overview

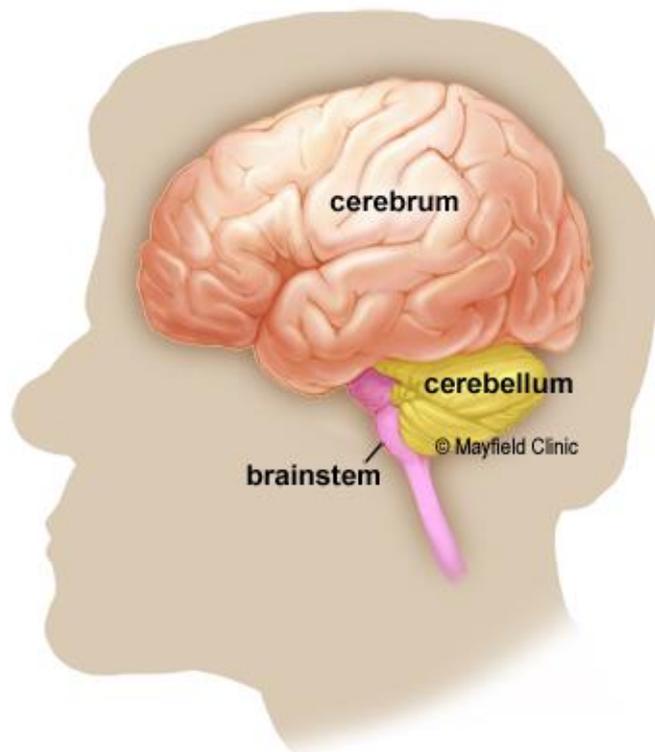
The brain is an amazing three-pound organ that controls all functions of the body, interprets information from the outside world, and embodies the essence of the mind and soul. Intelligence, creativity, emotion, and memory are a few of the many things governed by the brain. Protected within the skull, the brain is composed of the cerebrum, cerebellum, and brainstem.

The brain receives information through our five senses: sight, smell, touch, taste, and hearing - often many at one time. It assembles the messages in a way that has meaning for us, and can store that information in our memory. The brain controls our thoughts, memory and speech, movement of the arms and legs, and the function of many organs within our body.

The central nervous system (CNS) is composed of the brain and spinal cord. The peripheral nervous system (PNS) is composed of spinal nerves that branch from the spinal cord and cranial nerves that branch from the brain.

Brain

The brain is composed of the cerebrum, cerebellum, and brainstem.



Cerebrum: is the largest part of the brain and is composed of right and left hemispheres. It performs higher functions like interpreting touch, vision and hearing, as well as speech, reasoning, emotions, learning, and fine control of movement.

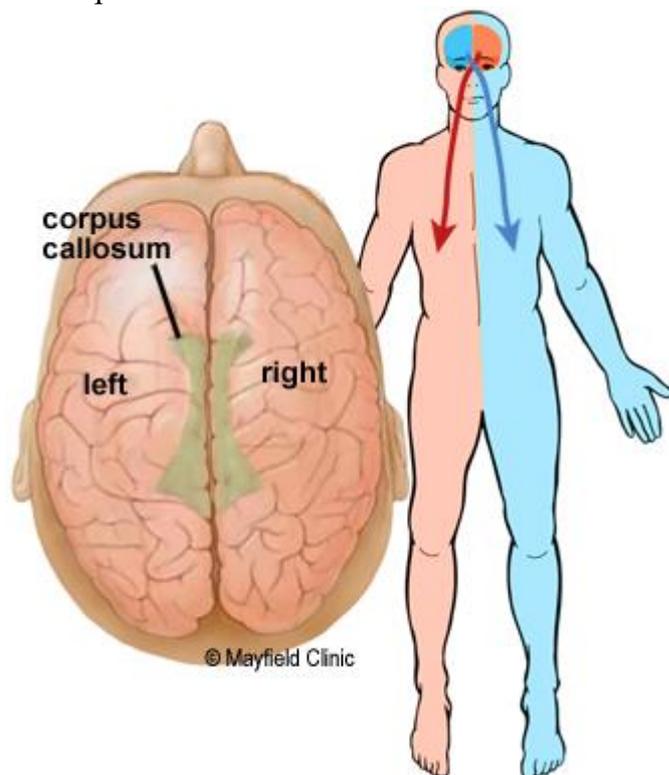
Cerebellum: is located under the cerebrum. Its function is to coordinate muscle movements, maintain posture, and balance.

Brainstem: acts as a relay center connecting the cerebrum and cerebellum to the spinal cord. It performs many automatic functions such as breathing, heart rate, body temperature, wake and sleep cycles, digestion, sneezing, coughing, vomiting, and swallowing.

Right brain – left brain

The cerebrum is divided into two halves: the right and left hemispheres (Fig. 2) They are joined by a bundle of fibers called the corpus callosum that transmits messages from one side to the other. Each hemisphere controls the opposite side of the body. If a stroke occurs on the right side of the brain, your left arm or leg may be weak or paralyzed.

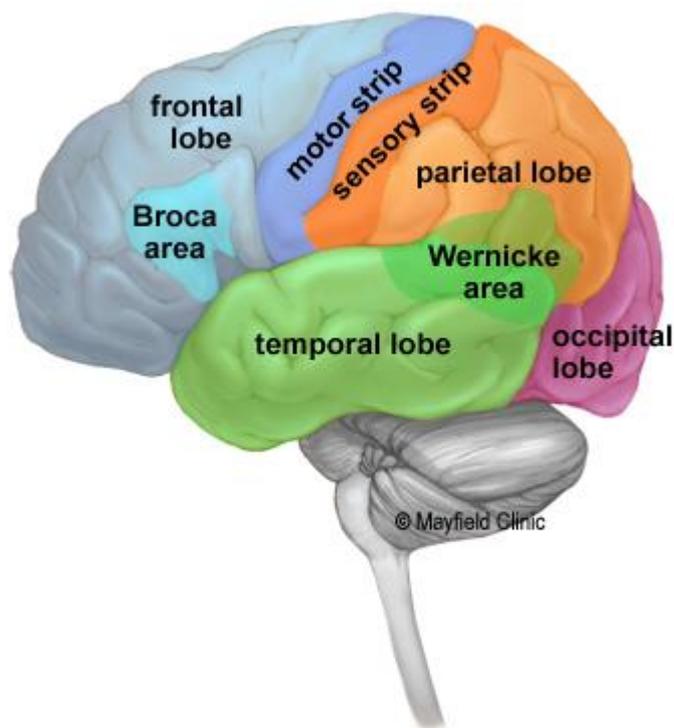
Not all functions of the hemispheres are shared. In general, the left hemisphere controls speech, comprehension, arithmetic, and writing. The right hemisphere controls creativity, spatial ability, artistic, and musical skills. The left hemisphere is dominant in hand use and language in about 92% of people.



The cerebrum is divided into left and right hemispheres. The two sides are connected by the nerve fibers corpus callosum.

Lobes of the brain

The cerebral hemispheres have distinct fissures, which divide the brain into lobes. Each hemisphere has 4 lobes: frontal, temporal, parietal, and occipital (Fig. 3). Each lobe may be divided, once again, into areas that serve very specific functions. It's important to understand that each lobe of the brain does not function alone. There are very complex relationships between the lobes of the brain and between the right and left hemispheres.



The cerebrum is divided into four lobes: frontal, parietal, occipital and temporal.



Frontal lobe

- Personality, behavior, emotions
- Judgment, planning, problem solving
- Speech: speaking and writing (Broca's area)
- Body movement (motor strip)
- Intelligence, concentration, self awareness

Parietal lobe

- Interprets language, words
- Sense of touch, pain, temperature (sensory strip)
- Interprets signals from vision, hearing, motor, sensory and memory
- Spatial and visual perception

Occipital lobe

- Interprets vision (color, light, movement)

Temporal lobe

- Understanding language (Wernicke's area)
- Memory
- Hearing
- Sequencing and organization

Language



In general, the left hemisphere of the brain is responsible for language and speech and is called the "dominant" hemisphere. The right hemisphere plays a large part in interpreting visual information and spatial processing. In about one third of people who are left-handed, speech function may be located on the right side of the brain. Left-handed people may need special testing to determine if their speech center is on the left or right side prior to any surgery in that area.

Aphasia is a disturbance of language affecting speech production, comprehension, reading or writing, due to brain injury – most commonly from stroke or trauma. The type of aphasia depends on the brain area damaged.

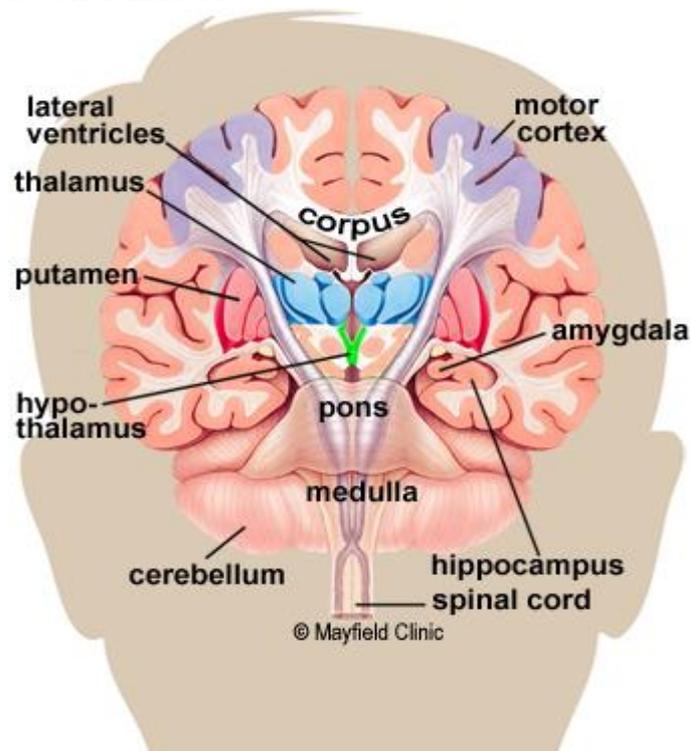
Broca's area: lies in the left frontal lobe (Fig 3). If this area is damaged, one may have difficulty moving the tongue or facial muscles to produce the sounds of speech. The person can still read and understand spoken language but has difficulty in speaking and writing (i.e. forming letters and words, doesn't write within lines) – called Broca's aphasia.

Wernicke's area: lies in the left temporal lobe (Fig 3). Damage to this area causes Wernicke's aphasia. The individual may speak in long sentences that have no meaning, add unnecessary words, and even create new words. They can make speech sounds, however they have difficulty understanding speech and are therefore unaware of their mistakes.

Cortex

The surface of the cerebrum is called the cortex. It has a folded appearance with hills and valleys. The cortex contains 16 billion neurons (the cerebellum has 70 billion = 86 billion total) that are arranged in specific layers. The nerve cell bodies color the cortex grey-brown giving it its name – gray matter (Fig.

4). Beneath the cortex are long nerve fibers (axons) that connect brain areas to each other — called white matter.



Hypothalamus: is located in the floor of the third ventricle and is the master control of the autonomic system. It plays a role in controlling behaviors such as hunger, thirst, sleep, and sexual response. It also regulates body temperature, blood pressure, emotions, and secretion of hormones.

Pituitary gland: lies in a small pocket of bone at the skull base called the sella turcica. The pituitary gland is connected to the hypothalamus of the brain by the pituitary stalk. Known as the “master gland,” it controls other endocrine



glands in the body. It secretes hormones that control sexual development, promote bone and muscle growth, and respond to stress.

Pineal gland: is located behind the third ventricle. It helps regulate the body's internal clock and circadian rhythms by secreting melatonin. It has some role in sexual development.

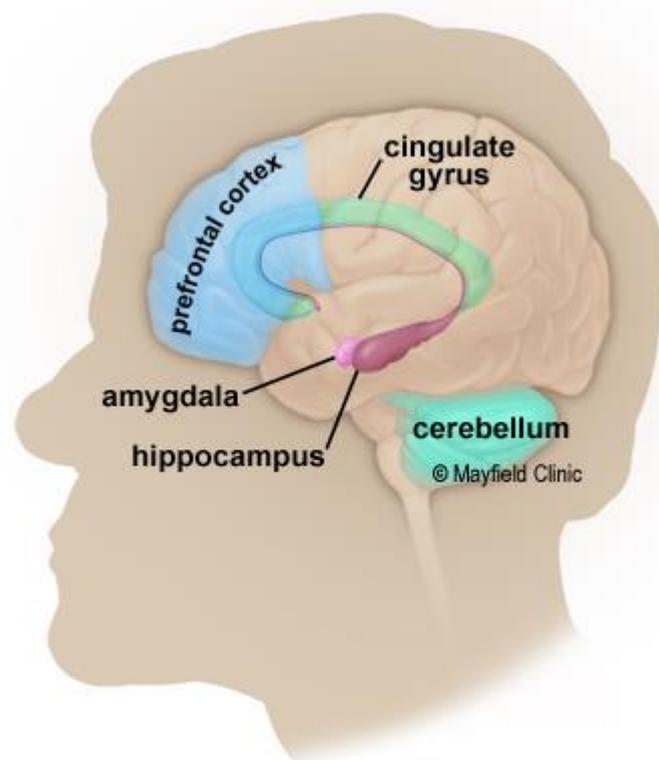
Thalamus: serves as a relay station for almost all information that comes and goes to the cortex. It plays a role in pain sensation, attention, alertness and memory.

Basal ganglia: includes the caudate, putamen and globus pallidus. These nuclei work with the cerebellum to coordinate fine motions, such as fingertip movements.

Limbic system: is the center of our emotions, learning, and memory. Included in this system are the cingulate gyri, hypothalamus, amygdala (emotional reactions) and hippocampus (memory).

Memory

Memory is a complex process that includes three phases: encoding (deciding what information is important), storing, and recalling. Different areas of the brain are involved in different types of memory (Fig. 6). Your brain has to pay attention and rehearse in order for an event to move from short-term to long-term memory – called encoding.



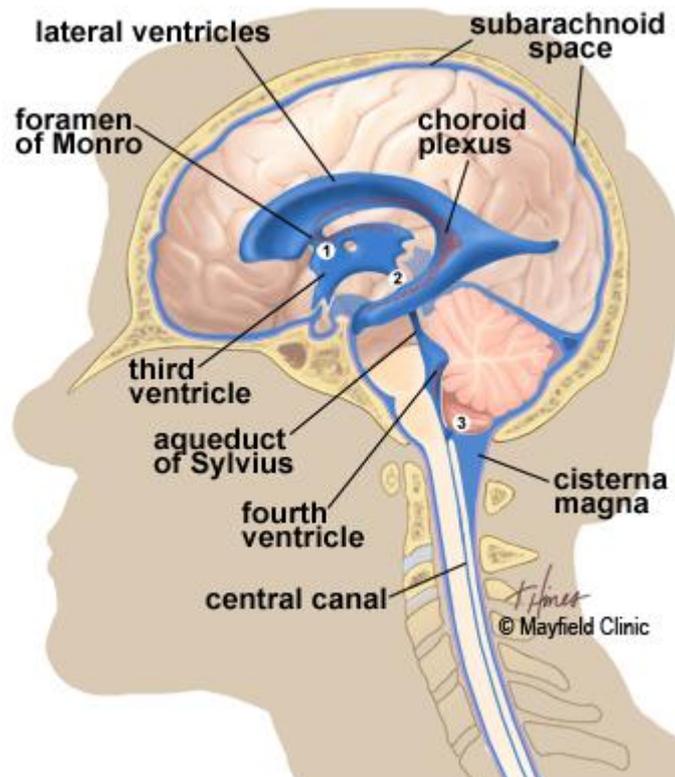
Structures of the limbic system involved in memory formation. The prefrontal cortex holds recent events briefly in short-term memory. The hippocampus is responsible for encoding long-term memory.



- Short-term memory, also called working memory, occurs in the prefrontal cortex. It stores information for about one minute and its capacity is limited to about 7 items. For example, it enables you to dial a phone number someone just told you. It also intervenes during reading, to memorize the sentence you have just read, so that the next one makes sense.
- Long-term memory is processed in the hippocampus of the temporal lobe and is activated when you want to memorize something for a longer time. This memory has unlimited content and duration capacity. It contains personal memories as well as facts and figures.
- Skill memory is processed in the cerebellum, which relays information to the basal ganglia. It stores automatic learned memories like tying a shoe, playing an instrument, or riding a bike.

Ventricles and cerebrospinal fluid

The brain has hollow fluid-filled cavities called ventricles. Inside the ventricles is a ribbon-like structure called the choroid plexus that makes clear colorless cerebrospinal fluid (CSF). CSF flows within and around the brain and spinal cord to help cushion it from injury. This circulating fluid is constantly being absorbed and replenished.



CSF is produced inside the ventricles deep within the brain. CSF fluid circulates inside the brain and spinal cord and then outside to the subarachnoid space. Common sites of obstruction: 1) foramen of Monro, 2) aqueduct of Sylvius, and 3) obex.

There are two ventricles deep within the cerebral hemispheres called the lateral ventricles. They both connect with the third ventricle through a separate opening called the foramen of Monro. The third ventricle connects with the fourth ventricle through a long narrow tube called the aqueduct of Sylvius. From the fourth ventricle, CSF flows into the subarachnoid space



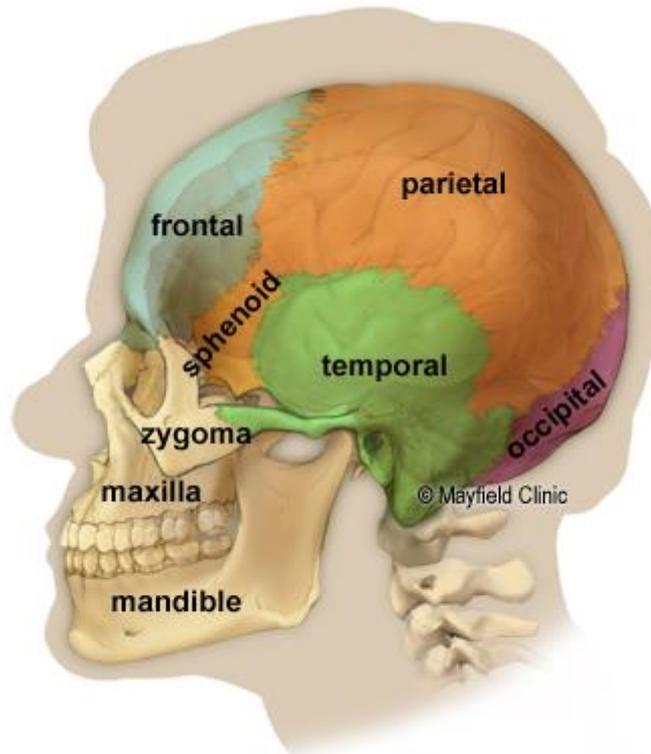
where it bathes and cushions the brain. CSF is recycled (or absorbed) by special structures in the superior sagittal sinus called arachnoid villi.

A balance is maintained between the amount of CSF that is absorbed and the amount that is produced. A disruption or blockage in the system can cause a build up of CSF, which can cause enlargement of the ventricles (hydrocephalus) or cause a collection of fluid in the spinal cord (syringomyelia).

Skull

The purpose of the bony skull is to protect the brain from injury. The skull is formed from 8 bones that fuse together along suture lines. These bones include the frontal, parietal (2), temporal (2), sphenoid, occipital and ethmoid (Fig. 8). The face is formed from 14 paired bones including the maxilla, zygoma, nasal,

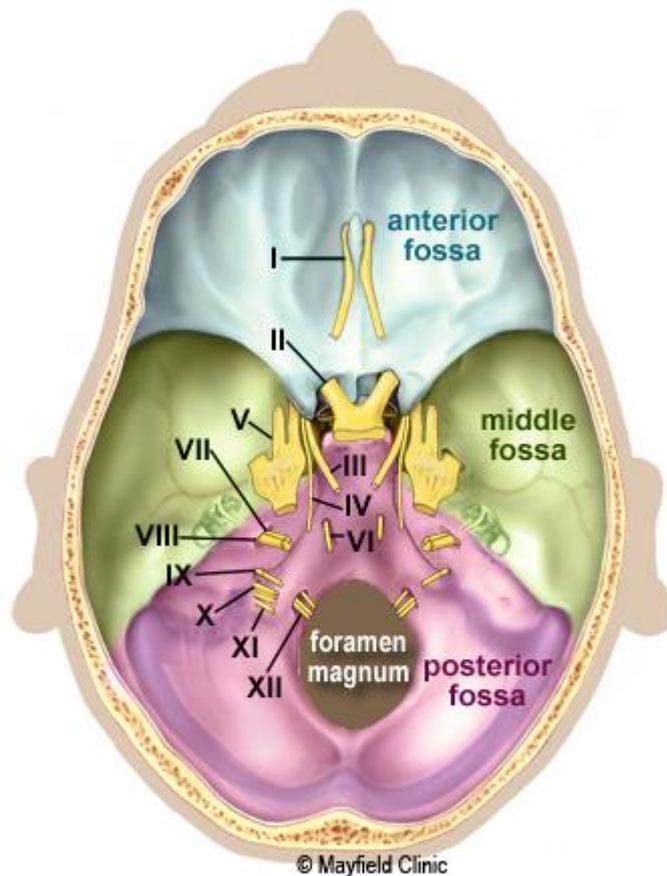
palatine, lacrimal, inferior nasal conchae, mandible, and



vomer.

The brain is protected inside the skull. The skull is formed from eight bones.

Inside the skull are three distinct areas: anterior fossa, middle fossa, and posterior fossa (Fig. 9). Doctors sometimes refer to a tumor's location by these terms, e.g., middle fossa meningioma.



A view of the cranial nerves at the base of the skull with the brain removed. Cranial nerves originate from the brainstem, exit the skull through holes called foramina, and travel to the parts of the body they innervate. The brainstem exits the skull through the foramen magnum. The base of the skull is divided into 3 regions: anterior, middle and posterior fossae.

The Roman numeral, name, and main function of the twelve cranial nerves:



Number	Name	Function
I	olfactory	smell
II	optic	sight
III	oculomotor	moves eye, pupil
IV	trochlear	moves eye
V	trigeminal	face sensation
VI	abducens	moves eye
VII	facial	moves face, salivate
VIII	vestibulocochlear	hearing, balance
IX	glossopharyngeal	taste, swallow
X	vagus	heart rate, digestion
XI	accessory	moves head
XII	hypoglossal	moves tongue

Meninges



The brain and spinal cord are covered and protected by three layers of tissue called meninges. From the outermost layer inward they are: the dura mater, arachnoid mater, and pia mater.

Dura mater: is a strong, thick membrane that closely lines the inside of the skull; its two layers, the periosteal and meningeal dura, are fused and separate only to form venous sinuses. The dura creates little folds or compartments. There are two special dural folds, the falx and the tentorium. The falx separates the right and left hemispheres of the brain and the tentorium separates the cerebrum from the cerebellum.

Arachnoid mater: is a thin, web-like membrane that covers the entire brain. The arachnoid is made of elastic tissue. The space between the dura and arachnoid membranes is called the subdural space.

Pia mater: hugs the surface of the brain following its folds and grooves. The pia mater has many blood vessels that reach deep into the brain. The space between the arachnoid and pia is called the subarachnoid space. It is here where the cerebrospinal fluid bathes and cushions the brain.

