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Category:Â POLITY

1. Right to life stands on higher pedestal than right to religion: Bombay HC

In news:

Context:

- Observing that the **right to life** contemplated as a **fundamental right** under the Constitution stands on a " **higher pedestal than the right of religion** â€, the Bombay High Court recently granted the custody of a minor girl child to her maternal grandmother.
- The father of the child is Muslim while the mother, who was a Hindu, had converted to Islam after marriage.
- The child's paternal and maternal grandmothers were contesting for her custody since her mother has died and her father is accused of killing her and is on a death row in the UAE.

Court observations:

- The right to live with dignity, the right to preserve childhood and the human rights of the child are contemplated within the Fundamental Right to Life under **Article 21** of the Constitution.
- Though the Constitution grants the **Right to Religion** under **Article 25**, under such circumstances, Article 21 stands on a higher pedestal than the Right of Religion.
- According to the Supreme Court, all the religions have noble principles and thoughts wherein human dignity is revered.
- And no religion teaches that the child be exposed to vices, dishonesty and falsity.

Category:Â INTERNATIONAL AFFAIRS/BILATERAL RELATIONS

1. Russia again vetoes bid to renew Syria gas attacks probe

In news:

- Russia cast a second veto in as many days at the **United Nations Security Council** to block the renewal of a probe to identify the perpetrators of chemical weapons attacks in Syria.
- A draft resolution put forward by Japan would have extended the UN-led Joint Investigative Mechanism (JIM) for 30 days to allow time for negotiations on a wider compromise. But Russia used its veto power to prevent adoption after 12 council members voted in favour of the measure, effectively ending the mission.
- It was the 11th time that Russia has used its veto power to stop council action targeting its ally Syria.
- A separate Russian draft resolution that called for changes to the JIM failed to garner enough support, with just four votes in favour.

Category:Â HEALTH ISSUES

1. Anti malaria drug could fight Zika virus

In news:

- New research: A medication used to prevent and treat malaria has the potential to fight the deadly Zika virus.
- The new study, published in the journal Scientific Reports, showed that the anti-malaria drug, called **chloroquine**, has the potential to treat Zika infections.

Category:Â ECONOMY

1. Moody's India rating upgrade: Concerns over NPAs, private funds persist

Context:

- With Moody's Investors Services issuing a clear warning, that India's rating upgrade could be downgraded if its fiscal metrics and the outlook for general government fiscal consolidation deteriorates materially.
- High debt/GDP ratio is likely to increase in the next two years on slower growth.
- More worrying will be how the deficit of states plays out in the wake of GST.

Reasons for increase in trend in Fiscal Deficit:

- · Burgeoning bad loans
- Fresh uncertainty on the revenue projections from the GST front
- Slack private investments and subdued non-tax revenue trends.
- Due to problem areas like power and telecom, farm loan waivers and Rs 2.11 lakh crore bank recapitalisation (to be funded by recap bonds).
- So the actual fiscal deficit could turn out to be much larger.
- Therefore, the government's fiscal deficit target of 3.2 per cent of the GDP may come at a cost of over Rs 70,000-crore cut in capital expenditure, according to an SBI research report.

Fiscal glide path:

- The government hopes to maintain its fiscal glide path.
- But many analysts are not a convinced, according to them even as reform measures will reduce the risk of sharp rise
 in debt but near-term concerns persist in terms of government adhering to its fiscal glide path especially in the light
 of the incremental spending undertaken to boost economic growth

Key points:

- The upgrade has come after India's economic growth unexpectedly slowed to 5.7 per cent in the June quarter, the slowest in three years, amid the disruption caused by the rollout of the GST and demonetisation shock.
- The removal of a number of commodities from the two highest tax brackets to lower brackets is unlikely to help matters on the revenue front.
- The first volume of the Economic Survey released in January had projected growth in the range of 6.75-7.5 per cent in 2017-18 against 7.1 per cent in 2016-17.
- The Index for Industrial Production (IIP) growth fell to 2.5 per cent in first six months of 2017-18 as against 5.8 per cent in same period of last year.
- Given the evident pressures on the fiscal front and the likelihood that the government may not even meet this yearâ €™s and next year's fiscal target, the rating upgrade seems to have come at a wrong time.
- Markets should worry that the government, now having received the rating upgrade, may actually slacken and relax its commitment to reducing fiscal deficit, as per the stated plan.

Category:Â SCIENCE AND TECHNOLOGY

1. The superbugs of Hyderabad

In news:

- Effluent from pharmaceutical companies contain high concentrations of antibiotics that are turning the Hyderabad city's lakes and sewers into breeding grounds of drug-resistant superbugs
- Since the pharmaceutical industry took root in the city in the 1970s, environmental pollution has threatened agriculture, aquaculture and the health of city residents
- New research in the last few years shows this pollution to be a threat of a larger, more terrifying scale

Dangerous species:

- The Kazipally well, along with ditches, lakes, and rivers around the pharmaceutical cluster, receives large doses of antibiotics, along with the traditionally monitored pollutants
- When these antibiotics come in contact with pathogenic bacteria (which cause disease in humans), the latter learn to resist the former, making human infections by these pathogens extremely hard to treat
- Antibiotic resistance is arguably the biggest threat to global health in the 21st century
- In 2014, around 700,000 people across the world died due to infections that evaded antibiotics, a number that is estimated to touch 10 million by 2050

New Studies in India:

- \bullet It isn† $^{\text{\tiny TM}}t$ clear how many Indians die from antibiotic-resistant infections each year
- One study from Delhi's Ganga Ram hospital found that between 2002 and 2009, among patients infected by Klebsiella pneumoniae (a pneumonia-causing bacterium), the percentage of these pathogens that were resistant to

carbapenems grew from 2% to 52%

• Carbapenems are a class of last-resort antibiotics which doctors use only when others have failed

Antibiotic resistance:

- A big driver of resistance is the overuse of these drugs
- When people take antibiotics they don't need, for a viral flu, for instance, the bacteria in their body learn to tolerate these drugs by acquiring resistance genes
- Resistance genes don't come out of nowhere some of them have existed for decades in soil and water, helping environmental bacteria fight natural antibiotics
- Studies in Hyderabad's pharmaceutical cluster now show that the large doses of man-made antibiotics in pollution hotspots like Kazipally force these environmental bacteria to evolve by boosting the numbers of resistance genes
- When human pathogens like Staphylococcus aureus (which causes skin and respiratory infections), mix with these
 environmental bacteria, they borrow these genes freely, making them potential killers

Government regulations:

- As of today, India does not limit antibiotics in pharma waste water
- India's first concrete move to tackle the problem was the 2017 National Action Plan for Antimicrobial Resistance, which talks about imposing limits on antibiotics in industrial waste. But these regulations are at least three years away

Antibiotic resistance leads to:

- The cost of antibiotic resistance will be enormous for both India and the world
- One estimate puts the expense of treating a resistant bloodstream infection at â,¹42,000 more than a susceptible infection
- This could devastate the healthcare system, which today takes antibiotics for granted

Way forward:

- Complying with pollution norms
- The cost of better pollution-control isn't that high
- Complying with pollution norms doesn't need more than 3-4% of the production cost

Category:Â ENVIRONMENTAL SCIENCE AND ECOLOGY

1. <u>â€~Shift to EVs won't eradicate pollution'</u>

In news:

Key Points:

- If India wants to move ahead with its target of all-electric vehicles by 2030, and also wants to truly help the environment while doing so, then it will need much more renewable energy than the 175 GW target set for 2022, according to Purpose Climate Lab, a global campaign group focused on climate and environmental issues in India.
- Unless the renewable energy target is significantly increased, the target of an entire fleet of electric vehicles will have no material benefit to the environment.

Reduce oil imports: The concept of electric transportation, especially public transportation, is a really good one because it will reduce Indiaâ $\mathfrak{E}^{\text{\tiny TM}}$ s imports of foreign oil, which is great, since those billions of dollars can then be spent to expand renewable energy programmes .

Social impact of simply shifting the fuel requirement from petrol and diesel to coal:

- Coal power plants are away from cities, in communities that don't always have the power to challenge what happens to them. They are usually poor, and away from concentrations of political and elite classes of people. Every community in the country should have the right to be protected from air pollution.
- Urban areas themselves were not entirely protected from the fumes from power plants.
- Gases like SOx and NOx, travel hundreds of kilometres to urban centres.

1. Plant emissions higher than believed

In news:

- New study prediction: Carbon released by plant respiration may be around 30% higher than previously predicted.
- The study, published in the journal Nature Communications, suggests that as the mean global temperature increases, respiration will increase significantly.

Future prospects

- Such increases may lower the future ability of global vegetation to offset carbon dioxide emissions caused by burning fossil fuels.
- Plants both capture carbon dioxide and then release it by respiration. Changes to either of these processes in response to climate change have profound implications for how much ecosystems soak up carbon dioxide emissions from burning fossil fuels.
- The findings are based on the comprehensive GlobResp database, which is comprised of more than 10,000
 measurements of carbon dioxide plant respiration from plant species around the globe.

Nothing here for Today!!!

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F. Practice Questions for UPSC Prelims Exam

G. UPSC Mains Practice Questions

GS Paper II

• The question of India's Energy Security constitutes the most important part of India's economic progress. Analyze India's energy policy cooperation with West Asian Countries.

GS Paper III

• Discuss the potential threats of Cyber attack and the security framework to prevent it.