# VISION IAS

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## GENERAL STUDIES (TEST CODE : 759)

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|---|---|---|---|
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| Medium Hindi/Eng. | English | Registration Number | 27904. |
| Center | | Date | 25/09/2016 |

### INDEX TABLE

| Q. No. | Maximum Marks | Marks Obtained |
|---|---|---|
| 1 | 12.5 | |
| 2 | 12.5 | |
| 3 | 12.5 | |
| 4 | 12.5 | |
| 5 | 12.5 | |
| 6 | 12.5 | |
| 7 | 12.5 | |
| 8 | 12.5 | |
| 9 | 12.5 | |
| 10 | 12.5 | |
| 11 | 12.5 | |
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| 13 | 12.5 | |
| 14 | 12.5 | |
| 15 | 12.5 | |
| 16 | 12.5 | |
| 17 | 12.5 | |
| 18 | 12.5 | |
| 19 | 12.5 | |
| 20 | 12.5 | |

Total Marks Obtained:

Remarks:

### INSTRUCTIONS

1. Do furnish the appropriate details in the answer sheet (viz. Name, Registration Number and Test Code).
2. There are TWENTY questions printed in ENGLISH.
3. All questions are compulsory.
4. The number of marks carried by a question/part is indicated against it.
5. Answers must be written in the medium authorized in the Admission Certificate, which must be stated clearly on the cover of this Question-Cum-Answer (QCA) Booklet in the space provided. No marks will be given for answers written in medium other that the authorized one.
6. Word limit in questions, if specified, should be adhered to.
7. Any page or portion of the page left blank in the Question-Cum-Answer Booklet must be clearly struck off.

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103, 1st Floor, B/1-2, Ansal Building, Behind UCO Bank, Dr. Mukherjee Nagar, Delhi – 110009

## EVALUATION INDICATORS

1. Alignment Competence
2. Context Competence
3. Content Competence
4. Language Competence
5. Introduction Competence
6. Structure - Presentation Competence
7. Conclusion Competence

Overall Macro Comments / feedback / suggestions on Answer Booklet:

1.

2.

3.

4.

5.

6.

**All the Best**

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**Answer all the questions in NOT MORE THAN 200 WORDS each. Content of the answers is more important than its length. All questions carry equal marks.**
**12.5X20=250**

1. India has the lowest tax-to-GDP ratio among countries with a similar per capita income on a purchasing power parity basis. Explain the reasons for the low tax-to-GDP ratio in India. What measures can be taken to correct this situation?

Thomas Piketty has pointed out India's low tax to GDP ratio as an obstacle to redistribution role of the government

Reasons for low tax-GDP ratio

I STRUCTURAL ISSUES

(1) Large tax exemptions raise 'tax expenditure', i.e, difference between statutory and effective tax rate.

(2) Inequalities in income distribution means most of the population lies below the tax paying slab

(3) Agricultural income is exempted from taxation

## II COMPLIANCE ISSUES

① Under-reporting of income: Less than 1% population reported income greater than 1 crore. This does not match expenditure on luxury goods.

② Base Erosion and Profit Shifting (BEPS) is increasingly done by MNCs

③ Income from other sources is disguised as agricultural income.

## Measures to achieve higher tax-GDP ratio

(I) Addressing structural issues

① Rationalisation of tax structure to eliminate exemptions

② Generation of quality jobs in organised sector will reduce inequalities and under-reporting of income

(3) Taxing agricultural income for large landlords will raise revenues & address rural inequalities

II Addressing compliance issues

(1) Implementing Parthasarthy Committee recommendations for simplification of tax administration

(2) International cooperation through G20 platform etc for harmony in tax structure across nations

GST adoption will broaden tax base and ~~state~~ ensure compliance for indirect taxes. Direct Taxes Code should also be pursued for further reforms.

2. In spite of various initiatives, the condition of the power sector still remains one of the core challenges for India. Comment.

Despite achieving lowest peak load gap, the dream of '24X7 affordable and ~~effic~~ environment friendly Power for All' is a distant dream.

POWER SECTOR

Generation → Transmission → Distribution

Issues with power sector and various initiatives to tackle them are -

(I) GENERATION

(1) Dependence on imported coal of thermal power plants: This was addressed to a large extent through auctions of coal blocks

(2) Financial health of power plants :
Peak Load Factor still remains low due to financial constraints. In India, crosssubsidies in freight sector of railways lead to high raw material costs

(3) Environment friendly energy mix : Dependence on thermal power plants is more than 80%. This is being addressed by developing Advanced Ultra Critical Technology for fuel efficiency

(II) TRANSMISSION

(1) Transmission infrastructure, especially inter state infrastructure is deficient.

(2) Micro grids ~~are no~~ could not attract private investments despite incentives through National Tariff Policy

III Distribution

(1) Unelectrified households : Since Deen Dayal Upadhyaya Grameen Jyoti Yojana monitors village ~~elect~~ electrification, households do not recieve power.

(2) Renewable Purchase Obligations are seldom met. This is evident from low demand of Renewable Energy Certificates (RECs)

(3) A T&C Losses are still high.

(4) Financial health of discoms is poor due to low tariffs, despite UDAY scheme.

Hence, the sector requires holistic reforms in order to achieve target of 'Power for All' by 2019.

3. Examine the reasons for poor performance of public sector banks in India. Give an account of the steps taken by the government and RBI to improve their performance. Also analyse whether the risks arising from the consolidation of the Indian banking sector outweigh the potential longer-term benefits.

The share of NPAs of PSBs have risen to 60% of their total debt from 4% in 2014. ~~PBs~~ PSBs have disproportionately higher share in total NPAs.

Reasons for poor performance

(I) Financial repression on asset side is much higher for PSBs due to social obligations like Priority Sector Lending, bank branches in rural areas etc

(II) Political interference in lending decisions

(III) Human resource deficiencies due to archaic hiring mechanisms, no scope for lateral entry etc.

IV

Steps taken by Government & RBI

I Reassessment

- RBI has initiated 'Asset Quality Review' for proper identification of stressed assets
- Joint Lender Forum has been set up for identification of NPAs

II Recapitalisation

- Government has planned Gross Budgetary Support (GBS) of 70,000 crore over 4 years.

III Resolution

- Strategic Debt Restructuring Scheme has been introduced by RBI for converting debt into equity

- S4A scheme for operational projects has been introduced
- Insolvency and Bankruptcy Code has been passed by Parliament to facilitate swift exit.

(IV) Reform are initiated on recommendation of PJ Nayak Committee like
- Creation of Bank Boards Bureau

Analysing consolidation of Banks

| Risks | Long term benefits |
|---|---|
| (1) Merger of two sick banks wont help | (1) In long run, operations cost will become ~~more~~ efficient |
| (2) Difference in work culture will create difficulties | (2) Best practices can be inculcated in all PSBs |

Hence the consolidation, if planned strategically, can outweigh it costs to pay way for long run benefits.

**4.** Tax treaties intended to avoid double taxation have in many cases become instruments for double non-taxation. Elaborate. List the major amendments in the India-Mauritius DTAA and the advantages that are expected to accrue due to it.

Taxes are levied in two ways - source based or residence based. In order to avoid 'double taxation' due to different countries adopting different mechanism, DTAAs are signed.

India - Mauritius DTAA & double non taxation

- On capital gains, accruing on investments from Mauritius, Mauritius was allowed to impose tax & not India
- However capital tax rate imposed by Mauritius was negligible
- This led to round tripping of funds through Mauritius

Major amendments

- Capital tax will be levied by India on investments from Mauritius
- It will be applicable to capital gains above a threshold

Advantages

- Tax avoidance will be plugged, resulting in revenue gains for government.
- Level playing field for domestic & international investors will be created
- Round tripping of domestic funds for money laundering will be discouraged
- Foreign investments from Singapore will also be ~~taxed.~~ ~~capito~~ taxed.

Given 50% of FDI comes from Mauritius route, this is a significant step. More such amendments in case of agreements with Cyprus & Netherlands should follow. This is a right step towards introduction of General Anti Avoidance Rules (GAAR) in 2017.

5. Emerging ICT and their appropriation by society constitutes a threat that demands new competencies and practices to be developed and integrated in the existing police work. Discuss with examples.

Emerging ICT is demanding reforms across sectors. This is true for police work also.

This can be seen from following examples.

(I) NEW THREATS and CRIMES

(1) Cyber crimes against women like cyber stalking, pornography etc require new capabilities

(2) Cyber threats like phishing scams, virus and malware requires police to develop familiarity with such crimes.

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(II) Using ICT for effective policing

(1) Use of CCTV and advanced technology for surveillance is required, especially for public places

(2) 'Emergency apps' for women should be introduced, e.g. Mumbai Police has done it.

(3) Use of big data for intelligence gathering should be explored.

(III) Using ICT for efficiency in police administration

(1) Crime & Criminals Tracking Network System (CCTNS) will allow coordination and cooperation among different agencies

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(2) Online registration of FIRs, publication of identification documents etc will ease service delivery.

(3) Supreme Court has directed uploading of copy of FIR within stipulated time This requires digitalisation of police stations.

Hence ICT poses new challenges as well as opportunities for police administration in India.

6. What are P-Notes and how do they impact the financial system in India? In this context, also highlight the recent regulatory measures taken by SEBI to deal with them.

P-Notes ~~are~~ (Participatory Notes) are issued by institutional investors to facilitate foreign investors to participate in India's financial markets.

Impact on financial system

1. It facilitates entry of foreign capital in India's stock market

2. Since this is 'hot money', it increases volatility in the stock market.

3. It is being used for round tripping of illegit funds

Regulatory measures taken by SEBI

(1) Strict KYC norms : SEBI has suggested equivalent KYC norms for the investors to discourage money laundering.

(2) Issuers of P-Notes should record the details of actual beneficiary of P-Notes.

These are steps in right direction as they will discourage money laundering through this route

7. The rising levels of e-waste generation in India have been a matter of concern in recent years. Examine the underlying causes of this scenario and the challenges associated with it. How can the new E-Waste Management Rules, 2016 help in meeting these concerns?

Causes of e-waste problem in India

(1) Expansion of digital economy is leading to greater e-waste generation

(2) Lack of proper 'back supply chains' for e-waste

(3) Lack of awareness regarding proper disposal of e-waste

(4) Dumping of e-waste by developed countries in India & other under-developed economies

Challenges are

(1) There is huge informal e-waste processing sector in India

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(2) There are health concerns ~~of~~ for these workers due to exposure to toxic heavy metals

(3) Environmental degradation due to leaching of heavy metals in ground water & soil is another concern.

Government has responded to the problem of e-waste by introducing e-Waste Rules. This will help in meeting the concern in following ways -

(1) Definition of e-waste has been expanded to include CFLs etc.

(2) Extended Producers' Responsibility has been

introduced to set up back supply chains

3) Role of state government in bringing informal recycling units into organised sector has been highlighted

The new E-waste Management Rules have addressed the concerns of all stakeholders - recyclers, environment and economy. Its swift implementation on ground will help in transforming 'waste into value'

8. Terror groups, much like corporate bodies have well and truly embraced and exploited the benefits of globalisation. Discuss the statement with reference to terror financing and propaganda activities.

Recent terrorist attacks in Paris, Australia etc points to the expansion of terrorist activities across the globe.

Terrorist groups like IS have exploited the benefits of globalisation to expand their activities. This can be seen as follows

(I) TERROR FINANCING

(1) Dependence on modern financial architecture for money laundering has increases.

(2) Reliance over narcotics trade, arms trade to finance their activities have increased. Narco-terrorism

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is flourishing fast. Trade across Golden Crescent & Golden Triangle is a manifestation of this trend.

(3) Energy trade. IS is financing its activities through oil exports.

PROPAGANDA ACTIVITIES

(1) Use of social media to mobilise support across the globe

(2) Hiring activities are also carried out through digital network. eg. around 18 Indians have been reported to join IS ranks

(3) Terrorizing videos etc are also streamed online so that these reach across the globe.

Therefore, the need of the hour is to erect safeguards against misuse of interconnectedness of countries. India needs a National Social Media Policy to plug terrorists' propaganda

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**9.** What is net-metering? Critically analyse its potential in incentivising distributed generation in India.

Under net metering, the current flows through both directions. Hence a household not only receives power, but can also feed it into the network. The net usage is metered as per the tariff structure.

This is usually done to incentivise decentralised solar power generation through roof top installations.

Potential in incentivising decentralised generation

(1) Pricing of extra power units generated during summer months will incentivise installation of

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rooftop projects

(2) Case of Germany. It relied on a system of Feed in Tariff to successfully adopt solar power generation

(3) Solar cum crop harvesting by farmers can be incentivised only through net metering

Challenges

(1) High initial installation costs: These need to be financed through credit subsidies

(2) Unmetered connections will be a hindrance to smart metering

(3) Infrastructure costs for overhaul of transmission & distribution network are high

Net metering should be supported by credit subsidies and expansion of micro grids for raising financial viability of the solar power generation

**10.** Explain the challenges associated with predicting the monsson accurately. Can shifting to a completely dynamical model from the one used by the IMD presently help in improving the accuracy of predicting the monsoon?

In an agriculture based economy like India, the importance of accurately predicting monsoon cannot be overemphasised

Challenges in predicting monsoon.

(1) Under develop capacities of IMD was biggest challenge. Until 2013, private companies like Skymet had better prediction record.

(2) Multiplicity of factors, like El Nino, Indian Ocean Dipole etc impact monsoon.

(3) Inter-regional differences are there due to local factors. These are

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difficult to account for

(4) Impending climate change is posing new challenges to prediction models

Shifting to a completely dynamical model has following advantages -

(1) It will facilitate inclusion of all the variables.

(2) Temporal changes like strength of El Nino in different years can be analysed well.

Though complexity of the dynamical model poses challenges, the future needs can be fulfilled through adoption of new technologies like fast computation, 3D remote sensing using INSAT 3DR etc.

11. The Compensatory Afforestation Fund Bill would require to work along with the Forest Rights Act in order to achieve the aims of environment protection while also ensuring rights of the tribal people. Comment.

Compensatory Afforestation Fund Bill aims to set up a national fund and state funds under Public Account of India & states respectively. It also creates permanent bodies for administration of these funds.

How bill will ensure environmental protection?

(1) Mobilisation of funds for compensatory afforestation and ~~comp~~ cover Net Present Value (NPV) of diverted forests

(2) Since 90% of funds will remain in state funds, state forest departments will be equipped to conduct afforestation.

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| Challenges facing Compensatory Afforestation Bill | Solutions offered by FRA |
|---|---|
| (1) Computation of Net Present Value is a challenge | (1) Tribal representation will help in including social impact of forest diversion |
| (2) State forest departments are under equipped to implement it | (2) Joint Forest Management (JFM) can solve issue of human resource Gap. |
| (3) Land for compensatory afforestation is unavailable | (3) Gram Sabhas can decide on allocation of |

| | |
|---|---|
| | land for compensatory afforestation |
| (4) Type of trees used for compensatory afforestation decides quality of forest created, e.g. in Bhadrapur region, invasive species have done great harm | (4) Familiarity of tribals with ecosystem will enable them to choose tree type as per their livelihood needs |

Therefore, it can be seen that a symbiotic relationship between the two can help achieve environmental as well as tribal goals together.

**12.** It has been argued that India's strained patent protection and IP administration has failed to keep pace with growing technological advances. In this context, examine the provisions of the new Intellectual Property Rights (IPR) Policy, 2016. Also explain how the new policy can help boost innovation and entrepreneurship in the country.

New IPR policy aims to create an 'Innovative India, Creative India' by setting up a conducive IPR ecosystem.

Its seven objectives can be clubbed under three categories

1. Legal framework and enforcement of IPR
2. Generation and Commercialisation of IP
3. IP administration reforms

Analysing provision on three dimension

I LEGAL FRAMEWORK & ENFORCEMENT

| Issues | How it addresses them? |
| --- | --- |
| (1) It faces criticism from developed countries like US for compulsory licensing, absence of data exclusivity etc | (1) It aims to remain TRIPS compliant, along with removing anomalies |
| (2) Poor enforcement & delays in judicial remedies is another issue | (2) Strict enforcement by creating IP cells at state level will be done. E.g Government has taken strict posture against online copyright infringements |

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ADMINISTRATION ISSUES

| | |
|---|---|
| 1) Slow processing of patent applications | 1) It focuses on developing capacities of patent offices through international cooperation |
| 2) Under capacity of patent office | 2) It designates DIPP (Department of Industrial Protection & Promotion) as nodal agency |
| 3) Multiple ministries deal with different types of IPR | |

Generation and Innovation: Following provisions are there

1) Sector specific programmes
2) Mandatory patent registration for inventions by professors
3) Patent awareness by inclusion in university studies

For boosting innovation, it should also facilitate free flow of knowledge and prevent brain drain.

**13.** Though the frequency of both droughts and floods has increased in many states of the country, the preparedness level for mitigating their impacts still has significant gaps. Discuss in the context of India.

According to 'Disaster Management in India Report 2004', 80% of our landmass is vulnerable to droughts & 8-10% to floods.

Also, the flood frequency since 1960 has increased by 160% according to Rashtriya Barh Aayog. This shows gaps in preparedness levels.

CASE OF DROUGHTS

1. Early Warning Mechanisms are deficient due to underdeveloped monsoon prediction capacities

2. ~~Addressing~~ Augmenting water supply.

- Rain water harvesting techniques are not adopted

- Recharge structures like injection wells are not constructed on wide scale

(3) Demand management

- Agriculture uses 80% of water resources, still ~~on~~ 60% of GCA (Gross Cropped Area) is rain dependent
- Water intensive crops are incentivised due to MSP for rice & wheat
- Municipal waste water treatment plants are few.

(4) RELIEF

- Adhoc structures lead to delays in declaring a region as drought affected.

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(7) MNREGA funds were delayed, causing distress

CASE OF FLOODS

(1) Early warning systems do not make use of satellite technology to predict river water level

(2) Flood protection structures like embankments etc are not constructed widely

(3) Encroachments on flood plain, siltation of channels, concretization of open spaces, improper storm water drainage etc are human factors inducing floods.

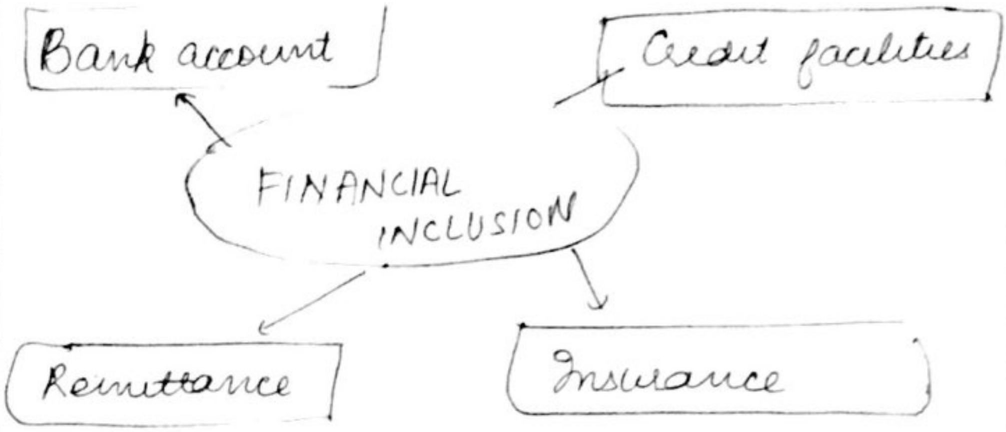
National Disaster Management Plan, based on Sendai Framework, is right step for shift to risk management from disaster management

**14.** In view of the high levels of inequality in India, it is imperative to not only broaden access to education and health but also financial services. Discuss. Also highlight the efforts made by the government in recent times to address inequality by promoting financial inclusion.

Participation in economic growth can be increased through financial inclusion, apart from labour force participation.

Hence over the years, government has taken a number of steps like cooperative banks, nationalisation of banks, Bank-SHG linkage model, Priority Sector lending etc for raising financial inclusion.

More recent measures are as follows




Banking:

(I) Jan Dhan Accounts have been opened ~~at~~ in mission mode.

(II) Niche banking: Payments Banks, etc have been licensed for raising financial inclusion

Credit facilities

(1) Overdraft facilities has been extended for Jan Dhan Accounts

(2) Kisan Credit Card provides institution credit for post harvest cover also

(3) Interest Subvention scheme provides

subsidised credit

(4) MUDRA Yojana, Stand Up India programme etc provides loans for start ups (self employment)

III Remittance

(1) India Post Payment Bank has been approved

(2) Unified Payment ~~service~~ Interface will revolutionise instant payments.

IV Insurance

(1) National Pension Scheme is being promoted through Atal Pension Yojana

(2) Pradhan Mantri Fasal Bima Yojana provides comprehensive agricultural insurance

**15.** Examine the need for indigenization of the defence industry in India. While highlighting its challenges, analyse how the new Defence Procurement Policy (DPP) and relaxations in FDI norms can address these challenges.

India is the largest importer of military equipments in the world. This points to the need for indigenization.

Need for indigenization is due to

1. Large import bill puts pressure on forex reserves
2. It hurts strategic autonomy.
3. Make in India programme emphasises on defence sector.

Defence Procurement Policy

1. It favours procurement of equipments with large domestic content. This will give boost to

domestic manufacturers.

(2) It facilitates technology transfer through domestic manufacturing requirements

FDI in defence

(1) It will facilitate domestic manufacturing by MNCs

(2) It will enhance strategic autonomy due to presence of manufacturing capacities within Indian territory

(3) It will facilitate technology transfer

(4) It will create backward linkages

of MNCs with small producers.

Hence it can be seen that the combination of open FDI policy with support to domestic manufacturers through DPP will enable indigenization in near future

16. Digital technologies have the potential to dramatically transform higher education. Giving a special emphasis to MOOCs, analyse the statement in the context of India.

Role of digital technologies in education

(1) Tele-education is helpful especially for isolated regions.

(2) Modern teaching tools help in improving learning levels

(3) Digital platform ~~provides~~ enables peer-peer learning, periodic feedback etc

MOOCs present another advantage of digital technologies in education sector.

Importance of MOOCs

(1) Specialised courses can be accessed through students across the country
Eg Specialisation of IIT Kanpur in computer engineering can benefit engineers in other colleges

(2) Equity: It will help in equalizing the quality of higher education

(3) Feedback & certificates help in raising employability of youth.

(4) Students can benefit from international courses, especially when FDI in higher education is not allowed till now. Sites like Coursera etc facilitate this.

**17.** The Civil Aviation Policy 2016 would help in building a more modern, safe, secure and sustainable aviation industry while also boosting regional connectivity and tourism. Discuss.

Civil Aviation Policy 2016 was launched to raise the revenues & employment generation of sector.

Main features

(1) 5:25 scheme has been relaxed to facilitate domestic carriers to fly international flights. This is crucial for their commercial viability

(2) Strict safety measures will be introduced to improve India's ranking

(3) Regional Connectivity Scheme will

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compensate airlines for price controls aimed to connecting isolated regions. This will be done through viability gap funding

(4) Development of airports will be pursued through Hybrid Annuity Model.

(5) Maintenance, Repair & Overhaul (MRO) Services will be developed to reap benefits of India's competitive advantage

**18.** What is the significance of start-ups for Indian economy? Critically analyse the provisions of "Start-up India" program and the challenges that lie ahead in its effective implementation.

Significance of start ups

(1) India has third largest number of tech-start ups in the world

(2) They will generate employment opportunities

(3) They are important for raising productivity of economy as they ride on innovative solution

(4) Social entrepreneurship aims to solve social problems through a viable model

(5) Vulnerable sections : Dalit ~~capt~~ capitalism will help in ending their economic dependence

Start up India program has been launched to create an enabling framework for start up

Main features

(1) Setting up of business is eased through online registration

(2) Finance support is given through promoting venture capital, setting up of Fund of Funds for start ups.

(3) Fiscal incentives are given in form of tax ~~exemptions~~ holiday ~~on~~ for first ~~profit~~ three years

(4) Incubator model led promotion is envisaged

(5) Labour laws & environmental laws exemptions are there.

(6) Exit from business will be

facilitated through Insolvency & Bankruptcy code etc

Challenges

(1) Lack of incubator network across the country. This prevents them from reaping tax benefits

(2) Lack of awareness regarding promotional measures

(3) Alternative Investment Funds (AIFs) like venture capital etc are not tax exempted.

Hence, hand holding support, with special emphasis on rural start ups, will enable swift implementation of plan.

19. What do you understand by methanol economy? Discuss its environmental and economic advantages. How does methanol compare with other new generational fuels such as ethanol and hydrogen?

Methanol economy is the one which derives its energy needs majorly from methanol, rather than conventional resources like oil, gas etc.

Advantages

(1) Cleaner fuel as it does not emit $NO_x$ & $SO_x$.

(2) Greater efficiency in comparison to other fuels.

(3) Since it depends on biomass for feedstock, biomass burning will be avoided.

(4) Scientists have devised ways to convert $CO_2$ into methanol. This will lead to GHG mitigation.

In comparison to ethanol & hydrogen, it fares better as it can contribute to GHG mitigation as discussed above. However designing combustion engines etc is an added cost it entails.

**20.** Differentiating between Augmented Reality and Virtual Reality, explain why it is argued by many that these technologies are not just about gaming but can change our lives.

Augmented Reality is super-imposition of digital/virtual objects over real/physical objects.

Virtual Reality is made up of entirely virtual objects, presented in a 3 dimensional way that it looks like physical world.

Apart from their applications in gaming, they have life changing applications like

(1) Health sector: It will revolutionise tele-medicine sector.

Surgeons can prepare for surgery

from miles away.

(2) Education sector: learning levels will increase due to real models of subject matter, e.g. under water biodiversity studies etc

(3) Video conferencing space will be revolutionised improving team work, governance etc.

This shows that the ~~sector~~ technologies will be the future of telecommunications sector.