

## ForumIAS

## GENERAL STUDIES

Name Of Candidate	D. ZENITH CHANDRA		
Roll No.	19100 51056	Date:	18-12-2021

Time Allowed: Three Hours

Maximum Marks: 250

INDEX TABLE			INSTRUCTION	
Q. No.	Max. Marks	Marks Obtained		
1			1. Please do furnish Name, Email, Roll No and Mobile in the answer sheet.	
2			2. There are TWENTY questions printed in ENGLISH & HINDI, all questions are compulsory.	
3			3. The number of marks carried by a question/part is indicated against it.	
4			4. 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.	
5			5. Word limit in questions, if specified, should be adhered to. Any page or portion of the page left blank in the Question-Cum Answer Booklet must be clearly Struck off.	
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12			<i>Any specific messages for ForumIAS Mentors/ Evaluators with respect to your copy? Write it here.</i>	
13			-----	
14			-----	
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<b>Total:</b>	<b>250</b>			
<b>Evaluator's Discretion:</b>			<b>For Student Only</b>	
			<b>Start Time  </b>	<b>End Time  </b>
<b>Total Marks:</b>			<b>Mode Of Examination:</b>	Online <input checked="" type="checkbox"/> Offline <input type="checkbox"/>
<b>Evaluator's Discretion:</b> This is the marks awarded at the discretion of the evaluator based on your overall impression, on the basis of (but not limited to) your handwriting, presentation, use of diagrams, flowcharts, facts and figures or absolutely anything that he/she liked in your copy.			<b>For Office Use Only</b>	
			<b>ECN CODE:</b>	<b>EG:</b>
			<b>Evaluation Date:</b>	

**Note:** You can discuss your evaluated copy with the Mentor. Raise a ticket from your portal to schedule a mentor call or visit the offline centre to meet mentor (all 7 days, Timings - 11 AM to 6 PM). Further if you are unsatisfied with the evaluation, you can seek re-evaluation of the copy.

Parameters	Excellent	Very Good	Good	Average	Poor	Very Poor
Language						
Structure						
Presentation						
Handwriting						
Content						
Attempt						

**ADDITIONAL REMARKS**

Q.1) The role of state in a liberalized economy is best suited as a facilitator and not as an engaged participant. Critically analyse this statement with respect to privatization drive of the government.

(10 Marks, 150 words)

उदारीकृत अर्थव्यवस्था में राज्य की भूमिका एक सहभागी के रूप में नहीं, बल्कि एक सुविधाप्रदाता के रूप में सबसे उपयुक्त है। सरकार के निजीकरण अभियान के संबंध में इस कथन का समालोचनात्मक विश्लेषण करें। (10 अंक, 150 शब्द)

Government of India undertook  
LPG reforms (Liberalization, Privatization,  
Globalization) with New Economic Policy 1991

↳ It led to deregulation of industrial sectors  
Promotion of foreign investments

State — as facilitator and not participant

- ① Need to carry out land & labour reforms
- ② proper regulation of private investments & public private partnership
- ③ ensuring access to affordable credit
- ④ Prom respecting wealth creators
- ⑤ Favourable tax regime & avoiding retrospective taxation

## Issues with Privatization

- ① abuse of dominant position of market  
eg anti-competitive behaviour - Google
- ② Market may not serve rural / remote locations
- ③ creation of monopolies affect poor consumers & lead to concentration of wealth
- ④ Crony-capitalism, Influencing government decisions (lobbying)

## Way Forward

- ① proper regulation of private sector
- ② strengthening competition Commission of India
- ③ a simple & progressive taxation policies to reduce economic inequalities
- ④ Government presence in strategic sector is need of the hour  
(Defense, space)

### Feedback

(For OFFICE use only)

Structure/ Presentation
Question Interpretation
Content
Value Addition
Total

Q.2) What are the major changes brought in the Deposit Insurance and Credit Guarantee Corporation (Amendment) Act 2021? How will it promote the interest of small account holders and depositors? (10 Marks, 150 words)

जमा बीमा और ऋण गारंटी निगम (संशोधन) अधिनियम 2021 में कौन से बड़े बदलाव लाए गए हैं? यह छोटे खाताधारकों और जमाकर्ताओं के हितों को कैसे बढ़ावा देगा? (10 अंक, 150 शब्द)

Deposit Insurance & Credit Guarantee Corporation Act amended in order to secure interests of depositors & strengthening DICGC

Provisions of Act

- ① Increasing Deposit insurance cover to 5 lakh
- ② reforms in deposit insurance sector
- ③

Impact on small account holders & depositors

- ① It will ensure en security to deposits of depositors

- ② improved competition in market, leads to more choices for depositors
- ③ It enables savings habits of depositors
- ④ boost to investments, as savings can be channelized towards capital access to investors

### Feedback

(For OFFICE use only)

Structure/ Presentation
Question Interpretation
Content
Value Addition
Total

Q.3) Discuss how the food processing sector can be the panacea for addressing the triple whammy of low value addition, high post-harvest losses and disguised unemployment associated inherently with the Indian agriculture. (10 Marks, 150 words)

भारतीय कृषि के साथ स्वाभाविक रूप से जुड़े कम मूल्यवर्धन, कटाई के बाद के नुकसान और प्रचलित बेरोजगारी के रूप में तिहरी मार की समस्या से निपटने के लिए खाद्य प्रसंस्करण क्षेत्र रामबाण कैसे हो सकता है। चर्चा करें।

(10 अंक, 150 शब्द)

Food processing sector is emerging sector in India.

### Role of FPI

- ① It reduces post-harvest losses
- ② It ensures value addition to agricultural produce
- ③ It increases shelf life of produce
- ④ caters to changing market needs & consumer preferences regarding to ready-to-eat food
- ⑤ Secondary / Tertiary processing of foods will address nutritional needs of people
- ⑥ It will also boost agricultural & food processed exports

- ⑧ It can also provide employment opportunities to surplus labour in agriculture
- ⑨ It <sup>also</sup> increases non-farmer income of rural households
- ⑩ low ~~st~~ (or) minimal skill requirement will improve uneducated men/women labourers

## Issues

- ① Informal sector - Food processing
- ② Tough market competition
- ③ inadequate cold chain infrastructure
- ④ access to credit is major constraint

## Way Forward

- ① Implementing PM SAMPADA Yojana operationalizing mega Food parks in all states
- ② effective linkages with farmer sector
- ③ Investment, infrastructure support to FPI

Thriving FPI sector will lead to

food security  
income security of farmers

## Feedback (For OFFICE use only)

Structure/ Presentation
Question Interpretation
Content
Value Addition
Total



Q.4) What explains the paradox of higher farmer suicide rate in more prosperous states than in poorer states? (10 Marks, 150 words)

गरीब राज्यों की तुलना में अधिक समृद्ध राज्यों में किसान आत्महत्या दर के अधिक होने का विरोधाभास क्या बताता है? (10 अंक, 150 शब्द)

Farmer suicides is one of pressing problem in agriculture sector

Reasons for Farmer suicides in prosperous states

- ① High cost of inputs i.e. fertilizers, pesticides
- ② Low revenue <sup>(price)</sup> realization due to market uncertainties
- ③ Fragmented land holding & inadequate mechanization of agriculture
- ④ Drought-prone areas - farmers are more prone to suicides due to erratic rainfall  
eg Vidharba (Maharashtra), ~~Telangana~~
- ⑤ Lack of access to irrigation facilities  
eg Telangana (till 2014)
- ⑥ Informal moneylenders leading to Debt trap

## low farmer suicides in poorer states

- ① Diversification of livelihoods i.e.  
Animal husbandry, bee keeping  
eg Amul cooperative
- ② Seasonal migration to cities for  
employment in lean season

## Way Forward

- ① Agricultural market reforms  
eNAM, Price deficiency Payments
- ② Deepening & widening of MSP to other  
crops & all farmers
- ③ Ever green revolution in all agri-related  
sectors.
- ④ Institutional access to credit through  
scheduled commercial banks, RRBs.
- ⑤ promoting Farmer producer organizations

It is our moral <sup>governmental</sup> responsibility to  
protect farm community and preventing

their suicides

### Feedback (For OFFICE use only)

Structure/ Presentation
Question Interpretation
Content
Value Addition
Total

Q.5) India's policies on environmental regulation are discordant, lofty on intent but feeble on outcomes. Critically examine this statement with special emphasis on plastic waste management in the country. (10 Marks, 150 words)

पर्यावरण नियमन पर भारत की नीतियां असंगत हैं, इरादे से बुलंद हैं लेकिन परिणामों पर कमजोर हैं। देश में प्लास्टिक अपशिष्ट प्रबंधन पर विशेष बल देते हुए इस कथन का समालोचनात्मक परीक्षण कीजिए। (10 अंक, 150 शब्द)

India's environmental regulation policies cover from wild life protection, forest conservation, water conservation to waste management

Plastic waste management — lofty on intent

- ① Government promulgated Plastic waste management rules 2016
- ② It provides for Extended producer responsibility
- ③ It also promotes reduce, reuse, recycle of plastic waste
- ④ It encourages formal processing of plastic waste & segregation at source
- ⑤ Swachh Bharat Mission, AMRUT mission also emphasizes proper plastic waste management.

## Inadequate outcomes - Plastic waste

- ① inadequate implementation of extended producer responsibility
- ② continued use of single use plastic
- ③ lack of proper regulation of rag pickers
- ④ Burning of plastic waste leading to toxic emissions

## Way Forward

- ① circular plastic economy needs to be promoted
- ② India Plastic Pact needs to be implemented.
- ③ preventing dumping of plastic waste from foreign nations
- ④ proper marine litter policy

Even though plastic is indispensable material, emphasis on sustainable utilization is necessary.

### Feedback

(For OFFICE use only)

Structure/ Presentation
Question Interpretation
Content
Value Addition
Total

Q.6) Discuss the impact of illegal construction and encroachment on disaster vulnerability, biodiversity and ecology of mountain regions in the country. (10 Marks, 150 words)

देश में पर्वतीय क्षेत्रों की आपदा के प्रति सुभेद्यता, जैव विविधता और पारिस्थितिकी पर अवैध निर्माण और अतिक्रमण के प्रभाव की चर्चा कीजिए। (10 अंक, 150 शब्द)

Mountain regions in India constitute Himalayas, Western Ghats, North East Hills etc.

Human impacts on mountain region

- ① Developmental activities affecting eco sensitivity of mountains  
eg Mining in Western Ghats (Kerala) <sup>Floods 2018</sup>  
Tourist resorts
- ② Improper waste disposal affecting Local biodiversity
- ③ Construction of hydro power projects affecting Himalayan geology
- ④ Road construction - use of dynamites on Hilly terrain  
eg Chardham Road project

③ Illegal coal mining in Garo, Khasi hills in Meghalaya

## Way Forward

- ① Scientific & rational policy making concerning Hill Ecology
- ② Environment Impact Assessment studies necessarily carried out
- ③ sustainable mining practices with adoption of new technology
- ④ carryout mitigation measures to nullify adverse affects of Road, Dam projects  
eg Afforestation, slope stabilization measures.

mountain regions are critical to local ecology, & biodiversity, & tribal survival. Proper conservation is need of the hour.

### Feedback

(For OFFICE use only)

Structure/ Presentation
Question Interpretation
Content
Value Addition
Total

Q.7) What do you mean by scientific social responsibility (SSR)? In light of draft policy of SSR, discuss how can SSR strengthen science-society linkages and usher in a cultural change in the conduct of science for the benefit of society at large in the country? (10 Marks, 150 words)

वैज्ञानिक सामाजिक उत्तरदायित्व (SSR) से आप क्या समझते हैं? SSR की मसौदा नीति के आलोक में, चर्चा करें कि SSR विज्ञान-समाज संबंधों को कैसे मजबूत कर सकता है और देश में बड़े पैमाने पर समाज के लाभ के लिए विज्ञान के संचालन में सांस्कृतिक परिवर्तन की शुरुआत कर सकता है? (10 अंक, 150 शब्द)

Scientific social responsibility refers to process in which scientists interact with society to disseminate scientific practices & promote scientific temper

→ Government related draft policy on SSR to encourage scientists regarding SSR, similar to CSR for companies

SSR → science-society linkages

- ① It will promote critical & rational thinking in humans,
- ② It can promote humanism by addressing social ills like casteism, communalism
- ③ It encourages equality of gender

- Ⓐ Responsible attitude of people towards environment on basis of scientific evidence
- Ⓔ Proper life style changes - by reducing Consumerism
- Ⓒ It strengthens national unity & integrity and promotes ~~best~~ brotherhood

Scientists need to take proactive measures in realizing vision & draft SSR policy.

### Feedback

(For OFFICE use only)

Structure/ Presentation
Question Interpretation
Content
Value Addition
Total





Q.8) Analyze the critical importance of genome sequencing in pandemic control.

(10 Marks, 150 words)

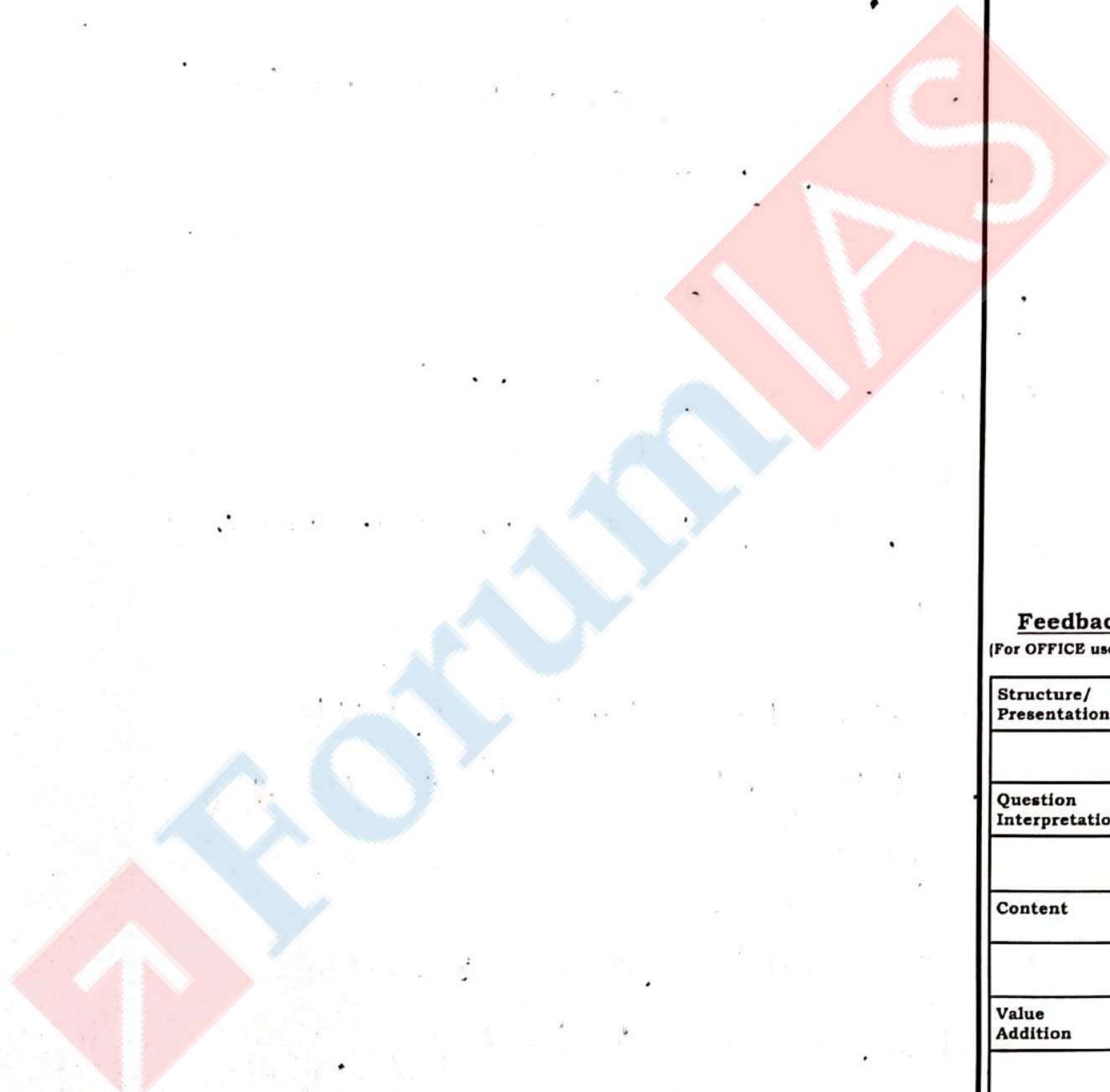
महामारी नियंत्रण में जीनोम अनुक्रमण के महत्वपूर्ण महत्व का विश्लेषण करें।

(10 अंक, 150 शब्द)

Genome sequencing<sup>(GS)</sup> refers to process of identifying sequence of genes (DNA pairs) . A-T-G-C

### Importance of GS in pandemics

- ① It enables policy makers to take evidence-based decisions
- ② It will promote development of vaccines & drugs
- ③ It also throw light on possible mutation of virus, thereby emerging strains
- ④ It boost healthcare research & development in biotechnology.



**Feedback**  
(For OFFICE use only)

<b>Structure/ Presentation</b>
<b>Question Interpretation</b>
<b>Content</b>
<b>Value Addition</b>
<b>Total</b>

Q.9) Examine the need of a clearly articulated National Security Strategy for systematic, consistent and coherent approach towards national security. (10 Marks, 150 words)

राष्ट्रीय सुरक्षा के प्रति व्यवस्थित, सतत और सुसंगत दृष्टिकोण के लिए स्पष्ट रूप से स्पष्ट राष्ट्रीय सुरक्षा रणनीति की आवश्यकता का परीक्षण करें। (10 अंक, 150 शब्द)

National security strategy refers to doctrine which postulates necessary institutional structural measures to ensure internal security, national security

Need of National Security Strategy

- ① To address emerging security challenges in world - Terrorism
- ② Increasing incidents of Drugs trafficking, Arms smuggling
- ③ Human trafficking acquired national security dimension
- ④ Rise of Taliban in our neighbourhood
- ⑤ Increasing trends of militancy in J&K due to internal & external factors

① Cross-border insurgency & activities  
eg Naga outfits in Myanmar

② Need to strengthen capacities,  
capabilities of security agencies

## Way Forward

① Political will

② Bureaucratic - military coordination

③ Capital investments in Defense  
activities

④ Better coordination, Tri-service  
cooperation

Having National security security makes  
India, internally & externally secure &  
strong

### **Feedback**

(For OFFICE use only)

Structure/ Presentation
Question Interpretation
Content
Value Addition
Total

Q.10) The issues associated with Left Wing Extremism (LWE) are both developmental and ideological. Analyze the trend in Left Wing Extremism (LWE) affected areas over the past decade and evaluate India's strategy to tackle LWE. (10 Marks, 150 words)

वामपंथी उग्रवाद (LWE) से जुड़े मुद्दे विकासात्मक और वैचारिक दोनों हैं। पिछले एक दशक में वामपंथी उग्रवाद (LWE) प्रभावित क्षेत्रों में प्रवृत्ति का विश्लेषण करें और एलडब्ल्यूई से निपटने के लिए भारत की रणनीति का मूल्यांकन करें।

(10 अंक, 150 शब्द)

Left Wing Extremism (LWE) is concentrated in 10 Red Corridor states in India.

Development challenges/issues - LWE

- ① Inadequate economic development of region
- ② lack of adequate connectivity infrastructure
- ③ low private investments
- ④ Increased poverty & unemployment among tribals
- ⑤ Development projects - affecting lives & livelihood. (Displacement, Resettlement - Issues)

LWE - ideological issue

- ① Naxal barī - movement in West-Bengal

- ② later, it spread to tribal regions in Chhattisgarh, Odisha, Andhra Pradesh

- ③ They carry out attacks on <sup>unresolved</sup> issues regarding land alienation

## India's strategy to tackle LWE

- ① Specially trained forces  
 Greyhounds - AP  
 Bastariya Battalion - Chattisgarh
- ② Deployment of Central Reserve Police Force,  
CoBRA battalion
- ③ Developmental activities like creating telecom infrastructure
- ④ Investing in health, education facilities in tribal areas
- ⑤ enactment of Forest Rights Act & giving community rights of forest rights to tribals.

LWE can be tackled by both law & order and welfare in backward regions

### Feedback

(For OFFICE use only)

Structure/ Presentation
Question Interpretation
Content
Value Addition
Total

Q.11) While imposing a tax is a legitimate exercise of sovereign's power, retrospective taxation undermines the credibility of a nation as a stable legal regime and discourages international investments. Discuss in light of recent controversies. (15 marks, 250 words)

जबकि कर लगाना संप्रभु शक्ति का एक वैध परिपाटी है, पूर्व कराधान एक स्थिर कानूनी व्यवस्था के रूप में एक राष्ट्र की विश्वसनीयता को कमजोर करता है और अंतर्राष्ट्रीय निवेश को हतोत्साहित करता है। हाल के विवादों के आलोक में चर्चा करें। (अंक 15, शब्द 250)

Cairne Energy, Vodafone disputes  
highlights the issue of retrospective taxation  
in India.

Retrospective taxation refers to imposition of  
tax on company with very retrospective  
effect i.e. from back date (past)

→ However, every sovereign nation has  
powers to impose taxes & can decide its  
fiscal policy

→ In order to increase budgetary revenues  
& to curb fiscal deficit, government  
resort to taxation

→ In case, of alleged malpractices in market,  
government introduces retrospective taxation.

Issues with Retrospective taxation

- ① → It lead to uncertainty in nation's taxation policies
- ② → It will also arise disputes ~~with~~ between investors (companies) & governments
- ③ It affects the India's position as attractive investment destination
- ④ It may lead to low Foreign direct investment
- ⑤ It can also affect foreign relations because ~~treat~~ of Bilateral investment treaties eg UK
- ⑥ It also leads to disputes between Nations at WTO



## Way Forward

- ① Government ~~as~~ enacted Taxation (Amendment) Act 2021 in order to bar retrospective taxation.
  - ② However, it also highlights country's sovereign right to tax
  - ③ In case disputes arise, settlement of disputes through arbitration/mediation to arrive acceptable solutions
  - ④ reforming Bilateral investment treaties
  - ⑤ improving ease of tax compliance & ~~also~~ taking measures to avoid BEPS (Base erosion, profit shifting)
  - ⑥ providing ease of doing business climate for investors
- Implementing above measures enable India to achieve goals of tax revenue collection and attracting investments.

### **Feedback**

(For OFFICE use only)

Structure/ Presentation
Question Interpretation
Content
Value Addition
Total

Q.12) India's stressed asset and bankruptcy reforms started on a good note, but now seems to have lost steam. Identify various issues faced in effective implementation of Insolvency and bankruptcy code in the country. How can the newly created Bad Bank help in overcoming the problem of bad debt and stabilizing the financial system? (15 marks, 250 words)

भारत की दबावग्रस्त संपत्ति और दिवालियापन सुधार एक अच्छे नोट पर शुरू हुए, लेकिन अब लगता है कि यह महत्व खो रहे हैं। देश में दिवाला और दिवालियापन संहिता के प्रभावी कार्यान्वयन में आने वाले विभिन्न मुद्दों की पहचान करें। नव निर्मित बैड बैंक खराब कर्ज की समस्या पर काबू पाने और वित्तीय प्रणाली को स्थिर करने में कैसे मदद कर सकता है? (अंक 15, शब्द 250)

Insolvency and Bankruptcy code enacted to ~~introd~~ address firm balance sheet problem in India.

Highlights of IBC 2016

- ① Resolution of stressed assets
- ② Fixing time limits to find acceptable resolution
- ③ Maximizing (recovery) returns on stressed asset
- ④ Preventing moral hazard i.e transferring stressed asset to promoters themselves
- ⑤ Trained manpower - skilled insolvency professionals
- ⑥ Institutional mechanisms (tribunals) to

Issues pertaining to IBC:

- ① Time limits are breached - delay in resolution
- ② Recovery from stressed assets is also low
- ③ Liquidation of assets in case of bankruptcy also not yielding enough matching requirement of funds
- ④

Bad Bank

(ARC)  
It refers to Asset Reconstruction Company which takes bad loans from banks with haircut.

→ Government recently constituted it in order to address persistent NPAs plaguing

- ① It will clean up bank balance sheets from NPA's (Non-performing assets)
- ② It will also infuse professionalism in managing bad loans
- ③ It can also maximize recoveries from bad assets (debt)
- ④ Banks can come out of prompt Corrective action (CBI)
- ⑤ Now, Banks can adopt robust financial procedures accordance with BASEL committee recommendations — 'CAMELS'

Proper policy framework, trained professional, institutional support are key requirement for proper operation of ARCs (Bad Banks)

**Feedback**  
(For OFFICE use only)

Structure/ Presentation
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Content
Value Addition
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Q.13) Stagnant farm incomes, present a strong case to develop agriculture in India as an enterprise. Discuss how the new farms laws can help in development of farming as an enterprise and increasing the farm incomes. (15 marks, 250 words)

स्थिर कृषि आय, भारत में कृषि को एक उद्यम के रूप में विकसित करने के लिए एक मजबूत केस प्रस्तुत करती है। चर्चा करें कि कैसे नए कृषि कानून कृषि को एक उद्यम के रूप में विकसित करने और कृषि आय बढ़ाने में मदद कर सकते हैं।

(अंक 15, शब्द 250)

Low farm incomes due to various policy, market issues is cause of concern.

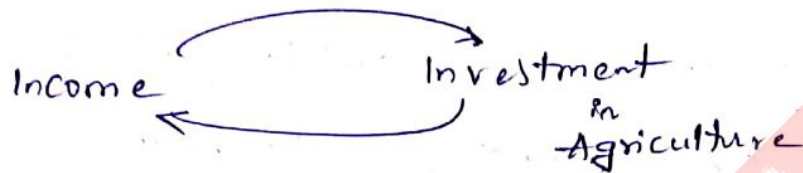
Stagnant farm income - reasons

- ① Increasing cost of inputs  
eg. Fertilizers, pesticides
- ② Spurious seeds, inputs affecting crop productivity
- ③ Lack of access to <sup>affordable</sup> capital from institutional sources (banks, FRRs)
- ④ Low price realization in markets due to collusion among traders
- ⑤ Inadequate storage facilities leading to damage of produce due to rain, heat etc

- ⑥ Post-harvest losses & wastage.

## Need to develop agriculture as enterprise

- ① It will boost farmer incomes
- ② It will create <sup>virtuous</sup> vicious cycles i.e.



- ③ It will also reduce post-harvest losses
- ④ It will lead to diversification of market opportunities for farmers - internal & external
- ⑤ Boost to exports & foreign exchange earnings
- ⑥ It promotes food processing industry
- ⑦ It reduces farm suicides & distressed migration to urban areas

⑧ -  
 Government enacted 3 farm laws in order to addr carry out reforms in agriculture sector.

## Merits of Farm laws

- ① balancing interests of consumers & producers — Essential Commodities Act
- ② incentives investment in storage, warehouse facilities
- ③ Price realization for farmers due to diversifying market opportunities
- ④ Farmers become agripreneurs due to direct linkages with companies & selling produce (Contract farming)
- ⑤ Deregulation of agri markets

## Demerits

- ① lack of patronage from farmers especially from western UP, Punjab, Haryana
- ② concerns regarding exploitation of farmers in case of contract farming
- ③ Corporatization of agriculture & Government may recede from its role

Need to address above concerns and empowering

### Feedback

(For OFFICE use only)

Structure/ Presentation	
Question Interpretation	
Content	
Value Addition	
Total	

Q.14) What is climate smart agriculture? Despite its critical role in climate change mitigation and substantial state intervention to promote climate smart agriculture, the progress made in adoption of climate smart agriculture is unimpressive. Discuss. (15 marks, 250 words)

जलवायु स्मार्ट कृषि क्या है? जलवायु परिवर्तन उपशमन में इसकी महत्वपूर्ण भूमिका और जलवायु स्मार्ट कृषि को बढ़ावा देने के लिए पर्याप्त राज्य के हस्तक्षेप के बावजूद, जलवायु स्मार्ट कृषि को अपनाने में की गई प्रगति अप्रभावी है। चर्चा करें।

(अंक 15, शब्द 250)

Climate smart <sup>CSA</sup> agriculture refers to agricultural practices which are eco-friendly

### Components of CSA

- ① Precision Farming technique
- ② Use of organic, natural inputs
- ③ Improving farming / cultivation practices to reduce GHG emissions eg Rice (Paddy fields)
- ④ Promoting Drought-resistant varieties

### Merits of CSA

- ① It will improve farm production and productivity
- ② Less prone to pest, disease attacks



① reduces global warming due to decreased methane emissions

④

### state interventions

- ① ICAR's — climate resilient agriculture practices
- ② sikkim — promoting organic farming
- ③ initiatives on zero budget natural farming eg Vidarba (Maharashtra), Andhra Pradesh.

### slow progress on CSA — reasons

- ① lack adequate policy framework
- ② low political will at state level  
as
- ③ lack of awareness among farmers regarding best practices pertaining to climate smart agriculture

- ④ low private investments on CSA
- ⑤ concerns regarding crop yield
- ⑥ requirement of climate-smart inputs
- ⑦ low R&D expenditure in agriculture

## Way forward

- ① Investing in climate smart agriculture
  - ↳ incentives to farmers
  - ↳ government policy support
- ② awareness creation among farmers through Kisshi Vigyan Kendras (KVKs)
- ③ forming Farmer Producer Organizations (FPOs), Cooperatives

Climate-smart agriculture enables food security, climate security, Income security for farmers

### Feedback

(For OFFICE use only)

Structure/ Presentation
Question Interpretation
Content
Value Addition
Total

Q.15) How is urban flooding different from rural flooding? Discuss the reasons for and implications of increased instances of urban flooding in recent times. (15 marks, 250 words)

शहरी बाढ़ ग्रामीण बाढ़ से किस प्रकार भिन्न है? हाल के दिनों में शहरी बाढ़ के बढ़ते मामलों के कारणों और प्रभावों पर चर्चा करें। (अंक 15, शब्द 250)

India is prone to floods particularly in riverine states due to overswelling of rivers

## Urban Flooding

- ① It refers to occurrence of floods in urban areas
- ② Rapid urbanization, concrete surfaces, pavements aggravating floods
- ③ It adversely affects city economy -  
↳ infrastructure, mobility
- ④ Example : Chennai, Mumbai

## Rural Flooding

- ① It leads to flooding in rural areas, countryside
- ② lack of adequate river training measures
- ③ It affects agriculture damage of crops due to waterlogging
- ④ Example : Uttarakhand

## Reasons for Urban flooding

- ① encroachments into flood plain zones
- ② low infiltration, seepage of flood water due to paved surfaces
- ③ affecting river course due to urban developmental activities
- ④ lack of proper urban planning
- ⑤ unscientific waste disposal  
eg plastic choking drainage networks
- ⑥ lack of proper rainwater sewerage systems - inadequate maintenance

## Implications - urban flooding

- ① affects road pavements particularly of bitumen roads
- ② submergence of railway tracks  
eg Mumbai - local trains

- ② affects trade & commerce in urban area
- ③ water pollution of water-borne diseases eg Cholera,
- ④ affects schools, hospitals and other critical care services

## Way Forward

- ① Proper Zonal planning in urban area
- ② sponge cities like that of china
- ③ Bioswale type arrangements
- ④ Urban Afforestation - Pune (Wajre)
- ⑤ Investing in preparedness, mitigation measures  
eg Early warning systems  
strengthening embankments of rivers

Implementing above measures will lead to achieving Sandai Framework (7 targets) by 2030.

### Feedback

(For OFFICE use only)

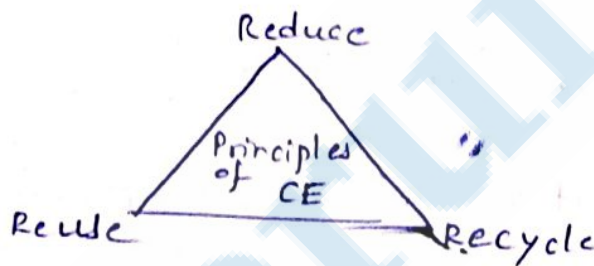
Structure/ Presentation
Question Interpretation
Content
Value Addition
Total

Q.16) What do you mean by a circular economy? Discuss how can this concept help in resolving the dilemma of achieving rapid economic growth and reducing environmental footprint.

(15 marks, 250 words)

चक्रिय अर्थव्यवस्था से आप क्या समझते हैं? चर्चा करें कि यह अवधारणा तेजी से आर्थिक विकास प्राप्त करने और पर्यावरणीय फुटप्रिंट को कम करने की दुविधा को हल करने में कैसे मदद कर सकती है। (अंक 15, शब्द 250)

CE  
Circular economy refers to systems in which output / waste of economic activity becomes input for another sector/industry  
 → It is opposite to linear economic model (produce - utilize - dispose)



Circular economy - Economic growth

- ① It will lead to optimum utilization of resources
- ② It can reduce import dependency
- ③ It promotes entrepreneurship activities in

- ④ It encourages private & public investments in green technologies
- ⑤ changing consumer patterns towards eco-friendly products
- ⑥ Improved access to finance +  
eg Green Bonds, Green Climate Fund

Footprint  
Circular economy - reduces Environmental

- ① It will promote efficiency in production consumption practices
- ② Reduces carbon air pollution  
eg Use of fly ash in cement production,  
brick manufacturing
- ③ promotes climate-resilient infrastructure  
eg Plastic roads in Bengaluru  
(from plastic waste)
- ④ addresses disposal problem  
Red mud utilization from Aluminium industry

## Way Forward

- ① mobilizing ~~finances~~ finances from domestic, international sources
- ② promoting innovation <sup>in CE</sup> & robust framework for IPRs protection
- ③ Investing in awareness creation regarding global best practices  
eg Sweden → waste management  
South Korea

## Government initiatives

- ① Compressed Bio gas plants (from agriculture produce)
- ② Construction & Demolition waste Treatment plants in Telangana (Hyderabad)
- ③ Waste to energy plants in Delhi

Implementing above measures enable India to achieve sustainable development goals by 2030

### Feedback

(For OFFICE use only)

Structure/ Presentation
Question Interpretation
Content
Value Addition
Total



Q.17) Green hydrogen presents an opportunity for the economy to modernize without the need to 'carbonize'. Discuss the statement and suggest strategies for leveraging benefits of green hydrogen. (15 marks, 250 words)

ग्रीन हाइड्रोजन अर्थव्यवस्था को 'कार्बोनाइज' किए बिना आधुनिकीकरण करने का अवसर प्रस्तुत करता है। इस कथन पर चर्चा करें और ग्रीन हाइड्रोजन के लाभों का लाभ उठाने के लिए रणनीतियों का सुझाव दें। (अंक 15, शब्द 250)

Green hydrogen refers to hydrogen produced from renewable sources

### Green hydrogen - Benefits

- ① It ensures energy security for India & world
- ② It addresses import dependency on oil, gas
- ③ Promotion to hydrogen-based transportation  
eg H-CNG vehicles
- ④ Use of hydrogen as energy source to industries leads to green industrialization
- ⑤ It can also address agricultural energy needs — irrigation
- ⑥ reduces global shocks pertaining to oil, gas on domestic economy.

- ⑦ Hydrogen fuel cells can be used in road transportation (vehicles)  
↳ It's only emissions are water vapour
- ⑧ It, thereby, leads to decarbonization of transport & reduces sulphur, nitrogen, carbon emissions

### Issues in <sup>Green</sup> hydrogen

- ① High cost of production ~~from~~ of hydrogen
- ② Inadequate R&D investments in the field
- ③ Issues with respect to nature of hydrogen  
highly inflammable
- ④ Underdeveloped supply chain pertaining to hydrogen

### Way Forward

- ① Promoting competition in Green Hydrogen production — leads to reduced prices

- ② Government policy support  
↳ National Hydrogen Energy mission
- ③ complementing with other hydrogens  
eg Blue hydrogen, Grey hydrogen
- ④ Green finance to such projects
- ⑤ Adequate market access
- ⑥ robust supply chain & value chain  
for hydrogen

↳ Green hydrogen along with renewable energy sources will address climate problems & energy security

### Feedback

(For OFFICE use only)

Structure/ Presentation
Question Interpretation
Content
Value Addition
Total

Q.18) What do you understand by deep net and dark net? Highlighting various security threats posed by dark net, discuss challenges in its regulation. (15 marks, 250 words)

डीप नेट और डार्क नेट से आप क्या समझते हैं? डार्क नेट द्वारा उत्पन्न विभिन्न सुरक्षा खतरों पर प्रकाश डालते हुए, इसके नियमन में चुनौतियों पर चर्चा करें। (अंक 15, शब्द 250)

Deep Net & Dark net are ~~per~~ refered to ICT (Information & Communication) technologies which offers varied access to Internet.

Deep Net : It is utilized for private / confidential business networks

Dark Net : It refers to Internet which is inaccessible to normal users and used for illegal activities

Security Threats due to Dark Net

① <sup>As</sup> Dark net is out of regulatory network, it facilitates illegal trade in arms, drugs

② transactions pertaining to transnational organized crime

- ③ Criminal syndicates thrive on operations & utilization of darknet
- ④ Financing terror activities, which jeopardizes National security
- ⑤ It will also lead to radicalization & dehumanization of people
- ⑥ It also facilitates online trade pertaining to illegal organ harvesting, human trafficking

### Challenges in regulation

- ① Darknet is outside regulatory ambit
- ② Use of 'TOR' (onion layer system of security)
- ③ absence of trained manpower/staff to tackle it
- ④ lack of global framework in addressing

- ① Countries which are witnessing increased digitization are prone to it
- ② lack of adequate technology to tackle it
- ③ Difficulty in fixing accountability on global players

## Way Forward

- ① Training & skilling of manpower to tackle illegal activities on Darknet
- ② Investing in technology upgradation, adoption of law enforcement agencies
- ③ collective global cooperation, coordination

Darknet poses no threat to not only National security but also global security.

Therefore, taking preventive measures is need of hour

### Feedback

(For OFFICE use only)

Structure/ Presentation
Question Interpretation
Content
Value Addition
Total

Q.19) Analyse the internal security implication of Taliban's rule in Afghanistan for India and suggest counter measures to address emerging security challenges. (15 marks, 250 words)

भारत के लिए अफगानिस्तान में तालिबान के शासन के आंतरिक सुरक्षा निहितार्थ का विश्लेषण करें और उभरती सुरक्षा चुनौतियों का समाधान करने के लिए काउंटर उपायों का सुझाव दें। (अंक 15, शब्द 250)

Post USA withdrawal in September 2021, led to emergence of Taliban rule in Afghanistan.

→ US-Taliban Agreement in <sup>2021</sup> Doha also also implications on present state of Afghan affairs

Internal security issues to India

- ① There can be uptick in terror activities
- ② Radicalization of youth in J&K through social media.
  - ↳ Increase in militancy in
- ③ Pak-based terror outfits may get trained in Afghan soil, which may carry out terror attacks |
- ④ Hijacking of Aeroplanes

↳ IC-814 case

- ① Increase in illegal drug trafficking  
(as Taliban depends on Narcotics trade)
- ② Communal tensions in India & it affects  
communal harmony  
• e.g. Kerala youths joining ISIS, etc.
- ③ sleeper cells in India may get activated

### Way Forward

- ① With like-minded nations, India need  
to put pressure on Taliban to  
secure its interests
- ② Need to evolve UN-level solutions  
to Afghan crisis
- ③ Training of security personnel &  
new ways to tackle multiple crimes  
simultaneously using technology.



- ④ strengthening surveillance & intelligence mechanisms
- ⑤ safeguarding borders particularly near line of control
- ⑥ reforms in port management & governance
- ⑦ protecting maritime borders & inter-service coordination between Navy, Coastguard, State Police
- ⑧ sensitizing people in critical regions & public perception management

... Addressing emerging security challenges by implementing above measures is need of the hour.

### Feedback

(For OFFICE use only)

Structure/ Presentation
Question Interpretation
Content
Value Addition
Total

Q.20) Blurred lines between civilian and military use of technologies have created invisible enemies and new set of internal security challenges. Discuss in light of concerns related to use of drone, cyber and bio-technology. (15 marks, 250 words)

प्रौद्योगिकियों के नागरिक और सैन्य उपयोग के बीच धुंधली रेखाओं ने अदृश्य दुश्मन और आंतरिक सुरक्षा चुनौतियों का नया सेट बनाया है। ड्रोन, साइबर और जैव-प्रौद्योगिकी के उपयोग से संबंधित चिंताओं के आलोक में चर्चा करें। (अंक : 15, शब्द 250)

Technology is double-edged sword.  
It is potentially used, misused & abused for nefarious activities.

Dual-use technologies are posing challenges to security agencies in every country.

Drone technology

① It is beneficially used for pesticide spraying, field surveying, medicine supplies to remote areas

② However, It is being used for drugs, arms trafficking  
eg. Inds - Pakistan border

③ It can also be used to carry out attacks

- ④ It can also pose threat to aviation, in obstructing a free airspace
- ⑤ Drone attacks by Houthi rebels on Saudi Arabia oil facilities

### Cyber Technology

- ① It <sup>(revolutionized)</sup> boosted communication systems in modern world
- ② Digital societies, Digital societies is new norm
- ③ It is key to Industrial Revolution 4.0.  
However, it is posing challenges such as
  - ① ● Radicalization of youth  
eg Christchurch attacks 2019
  - ② promoting illegal activities - arms, drugs, human trafficking - Dark Net
  - ③ cyber attacks on business, financial systems eg Ransomware attacks, DDoS attacks

## Bio Technology

- ① It has potential applications in crop productivity, disease treatment in humans
- ② It is misused for vested interests of COVID 19 pandemic
- ③ Bio warfare, Bio-terrorism is emerging threats to global health security

## Way Forward

- ① Drone Regulation 2021 <sup>Rules</sup> - effective implementation is necessary
- ② IT Rules 2021 - ensuring accountability of social media platforms
- ③ strengthening & achieving consensus on Biological Weapons Convention

### Feedback

(For OFFICE use only)

Structure/ Presentation
Question Interpretation
Content
Value Addition
Total