

NEXT IAS

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6 AUG 2024

anubhav 2024



(To be filled by candidate)

TEST CODE : ANV2403

Test No. : 02

Name of Candidate: Esle Jain Mobile No. [REDACTED]

Roll No. : esleear.jain.02@gmail.com Start Time 9:30 End Time 12:50

Date of Examination: 25th August, 2024 Medium : English ☒ Hindi ☐

Q. No.	Maximum Marks	Marks Obtained
1.	10	
2.	10	
3.	10	
4.	10	
5.	10	
6.	10	
7.	10	
8.	10	
9.	10	
10.	10	
TOTAL MARKS - 100		

Q. No.	Maximum Marks	Marks Obtained
11.	15	
12.	15	
13.	15	
14.	15	
15.	15	
16.	15	
17.	15	
18.	15	
19.	15	
20.	15	
TOTAL MARKS - 150		

GRAND TOTAL -/ 250

EVAL CODE: EVAL DATE:

GENERAL INSTRUCTIONS

1. Immediately on receipt of the QCA booklet, please check that this QCA booklet does not have any misprint or torn or missing pages or items, etc. If so, get it replaced by a fresh QCA booklet.
2. Candidates must mention all relevant details like Name, Email, Roll No, Mobile, etc. in the space allocated.
3. Candidate is expected to attempt all 20 questions within the given timeline.
4. Answers must be written in the medium authorized at the time of admission.
5. Candidates must write answers for the specific question under the respective question itself. Any answer written outside the space allotted may not be given credit.
6. Please write neatly. Avoid illegible writing.
7. Do not write/mark irrelevant matters in the QCAB.

सामान्य निर्देश

1. QCA पुस्तिका प्राप्त होने पर कृपया तुरंत जांच लें कि इस QCA पुस्तिका में कोई पृष्ठ या सामग्री आदि गलत छपी हुई या फटी हुई या गायब तो नहीं है। यदि ऐसा है, तो इसे एक नई QCA पुस्तिका से बदल लें।
2. अभ्यर्थियों को सभी प्रासंगिक विवरण जैसे नाम, ईमेल, रोल नंबर, मोबाइल नंबर आदि का आवंटित स्थान पर उल्लेख करना होगा।
3. अभ्यर्थियों से अपेक्षा की जाती है कि वह आवंटित समय-सीमा के भीतर ही सभी 20 प्रश्नों के उत्तर-लेखन का प्रयास करें।
4. प्रत्येक उत्तर, प्रवेश के समय चुनी गयी भाषा के माध्यम में ही लिखे जाने चाहिए।
5. अभ्यर्थियों को विशिष्ट प्रश्न के उत्तर संबंधित प्रश्न के नीचे ही लिखने होंगे। आवंटित स्थान के बाहर लिखे गए किसी भी उत्तर को क्रेडिट नहीं दिया जाएगा।
6. कृपया साफ-सुथरा लिखें। अपठनीय लेखन से बचें।
7. QCAB में अप्रासंगिक तथ्यों को न लिखें / न ही चिह्नित करें।

REMARKS:

OFFICE USE ONLY

Student Concerns / Query

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Evaluator's Feedback / Response

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MARKING SCHEME *

Marks Per Ques	Below Average	Average	Above Average
10 Marks	Below 3.00	3.00 - 3.75	4.00 and above
15 Marks	Below 4.50	4.50 - 5.75	6.00 and above

* Subject to change without prior notice.

IMPORTANT QR CODES

Topper's Copy



Common mistake and Correct Filled QCAB



Copy Scanner App



Next IAS Test Centre Location

MACRO COMMENTS

The Purpose of evaluation@nextias.com is to provide constructive suggestions on 'How to improve Answer Writing and thereby score better marks.'

STRENGTHS OF THE CANDIDATE

AREAS OF IMPROVEMENT



IMPROVEMENT SUGGESTIONS

1. घरेलू बचत भारतीय अर्थव्यवस्था की संवृद्धि में किस प्रकार योगदान देती है? क्या आपको लगता है कि घरेलू बचत दर में गिरावट भारतीय परिवारों में ऋणग्रस्तता और संकट में वृद्धि का संकेत देती है? (उत्तर 150 शब्दों में दीजिए) 10 अंक
- How do household savings contribute to the growth of the Indian economy? Do you think that the recent fall in household savings rate marks a rise in indebtedness and distress among Indian households?

(Answer in 150 words) 10 marks

Household savings are that part of earned income that is saved by individual households in formal banking institutions for purpose of earning interest.

⇒ Contribution of savings in Growth of Indian Economy

- 1) Capital formation - In a circular economy the money saved in banks is simultaneously lent out to the business for investment purpose, which ↑ capital formation.
- 2) Credit creation - since as the monetary base on which banks create credit - part of Mo in banking - primary money.
- 3) savings lent out for infrastructural as well as socio-economic purpose to government agencies - source for borrowing of government which helps in crowding in of private investment.

⇒ Recent fall in Household savings impacts
indebtedness and distress

- 1) Recent fall in budget 2024 deficits low
purchasing power of households
 - low employment in formal sector and
(LFPR - 3.24.)
 - increase in food inflation 3.11%,
which reduces savings and increases
day-to-day expenditures
- 2) Market instability - low return on savings
encouraged households to shift their
savings in other market instrument.
Eg: mutual funds
- 3) growth of stock market encouraging
individuals to invest in daily stocks
which has proven to be a better source
of income.
- 4) growth of real estate also shifted
savings pattern.

Household savings should be encouraged
as they serve as an important source
for making India SD economy by 2027.

2. भारत के एफडीआई (FDI) क्षेत्र में उल्लेखनीय गिरावट देखी जा रही है। वे कौन से कारक हैं जो विदेशी निवेशकों के बीच भारत में निवेश करने के प्रति आशंका उत्पन्न कर रहे? सरकार द्वारा इस गिरावट की प्रवृत्ति को उलटने/रोकने के लिए कुछ सुधरात्मक उपाय सुझाइए।

(उत्तर 150 शब्दों में दीजिए) 10 अंक

India's FDI sector is seeing a significant downward trend. What factors are causing apprehensions among the foreign investors to invest in India? Suggest some corrective measures that must be taken by the Government to reverse the falling trend.

(Answer in 150 words) 10 marks

Budget 2023-24 showcases a
mere \$70 bn ~~in~~ receives as FDI and
majority of this (60%) is in service
sector which is a decline from previous
year (100 bn).

⇒ Factors leading to downward trend of FDI

- 1) decrease in market confidence - due to
price rate volatility, because of
inflationary tendencies due to war,
and increase cost of production etc.
- 2) decrease return on Investment - owing to
less dividend share due to increase
in borrowings.
- 3) Lack of transparency - Indian companies
have less openness about market information
which reduces investor confidence -
~~the~~ increase in scams Eg: Hindenberg issue

4) shift to new markets - developing countries in south east are rising economies which are attracting more investments.

5) government policy - no automatic route of FDI allowed from neighbouring countries like Nepal and Bangladesh has reduced investment.

⇒ Corrective Measures to increase FDI

1) simplify government policies allow easy FDI flow through direct channel
Eg: FDI inflow ↑ to 74% in insurance sector.

2) improving account disclosure mechanism - ensuring transparency

3) operationalizing NHZ → National Infrastructure Management Zone to increase FDI

4) take full advantage of GIFT city, GIFT-AT, to build confidence and promote EOOB.

5) fiscal policy measures to reduce fiscal deficit (4.9%) and improve credibility in investment.

India's goal of becoming 7th economy by 2030, needs increase FDI flow.

3. कृषि सब्सिडी भारत में फसल विविधता, फसल प्रतिरूप और कृषि संधारणीयता को किस प्रकार प्रभावित करती है?

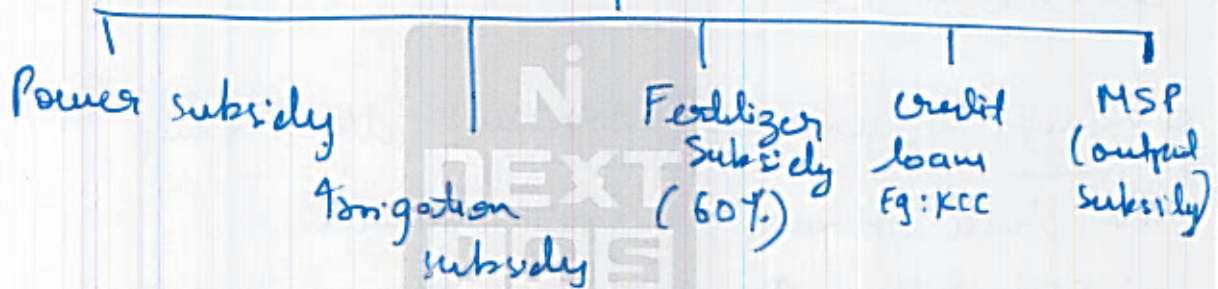
(उत्तर 150 शब्दों में दीजिए) 10 अंक

How do farm subsidies impact crop diversity, cropping patterns and agricultural sustainability in India?

(Answer in 150 words) 10 marks

Farm subsidies are 2-2.5% of GDP which ~~has~~ includes ~~sub~~ both input and output subsidies.

Types of subsidies



⇒ Impact of subsidies

I Crop diversity:-

- 1) encouraging monoculture of rice and wheat as PDS and MSP share is highest in them (33%)
- 2) irrigation subsidy impacts growth and productivity as farmers shift to drought resistant crops like Jowar, Bajra due to less subsidy

- 3) soil fertility reduced to increasing area wage as area price fixed by government - disturbing seed ratio to (28:4:1) from 4:2:1

II Cropping Pattern

- 1) discouraging overexploitation of available resources due to availability of better price. Eg: Sugarcane is grown in MH, a drought resistant area due to high FRP.
- 2) frailty cultivation using water entire wage rather than direct seeding rice
- 3) less encouragement to organic farming as low subsidy given

III Agricultural Sustainability:-

- 1) impacting soil fertility, water use efficiency and reducing land use efficiency (3% from 14%) due to high use of subsidies.
- 2) unsustainable cropping mix of Rice and Wheat in PJ, UP - reducing efficiency of land.
Proper subsidy mix needs to be ensured to encourage sustainable farming practices by shifting to DBT and input pricing

4. "परिशुद्ध कृषि" के सिद्धांतों पर चर्चा करते हुए, परिशुद्ध कृषि में "इंटरनेट ऑफ थिंग्स" के उपयोग को विस्तार से समझाइये।
(उत्तर 150 शब्दों में दीजिए) 10 अंक
- While discussing the principles of "precision agriculture", elaborate on the uses of "Internet of Things" in precision agriculture. (Answer in 150 words) 10 marks

Precision Agriculture refers to utilization of optimum inputs in right quantity, at right time and right place to ensure optimum level of growth.

⇒ Principles of Precision Agriculture:-

- 1) land use management - ensuring correct amount of tilling done to not overexploit it.
- 2) water use efficiency - with help of micro irrigation like drips, sprinklers etc.
- 3) low level of wastage - practicing zero wastage farming by ensuring integrated farming, fertilizer management, ZBNF etc.
- 4) optimisation - right amount of seeds, right time and right place usage to ensure maximum growth.
- 5) use of geo-spatial technology, land assessment through ~~soil heat~~ soil health cards etc.

⇒ Uses of IOT in Precision agriculture

IOT refers to a model of connected objects through sensors, that can be operated according to need by use of internet.

- 1) predictability - water need can be predicted before hand to ensure at what time sprinklers have to open
Eg: Sensagri App.
- 2) land use management to coordinate backward and forward linkages from seed sowing to harvesting to grain etc
Eg: AI sowing app of Microsoft
- 3) weather prediction - to enable take preventive measures in case of flood and drought -
- 4) using drones to monitor weeds and spraying adequate fertilizer.

Proper cybersecurity measures needed to be taken to ensure efficient use of IOT to ensure precision agriculture.

5. लघु मॉड्यूलर नाभिकीय रिएक्टर (SMR) क्या हैं? लघु मॉड्यूलर नाभिकीय रिएक्टरों को पारंपरिक नाभिकीय ऊर्जा संयंत्रों का सुरक्षित विकल्प क्यों माना जाता है? (उत्तर 150 शब्दों में दीजिए) 10 अंक
- What are Small Modular Nuclear Reactors (SMRs)? Why are SMRs considered a safer alternative to conventional Nuclear Power Plants? (Answer in 150 words) 10 marks

India has built its own 'Bharat Small reactor' - nuclear fission reactor capable of generating 300 Mwe of energy.

⇒ ~~What is~~ Small Modular reactor:-

- 1) a compact size of nuclear fission reactor which has all components - coolant, reactor, moderator for energy production
- 2) it has been built on various locations across India including UP and coastal area
- 3) purpose is to augment nuclear electricity supply (currently-24)

⇒ SMR's safer than conventional reactor:-

- 1) Since small in size, SMR reactor can be controlled much efficiently compared to heavy water and fast breeder reactor.

- 2) enable India to gain net energy gain, which will be beneficial in reaching NDC target of 50% through non-fossil energy.
- 3) requires less land acquisition and can be built comparatively faster.
- 4) radioactive waste generated is in small quantity which can be better processed.
- 5) will reduce diversion of nuclear resources for harmful activities like atom bombs and hydrogen bombs.
- 6) ITER regulation will be simplified, ensuring citizen safety

Challenges → finance availability
 → technology and innovation
 → risk of accidents is lower
 ↓ radiation issue

Efficient utilization of nuclear power is essential which will enable India to achieve its COP 28 target of x3 nuclear energy by 2038.

6. विश्व भर में जूनोटिक रोगों की घटनाओं में अकस्मात वृद्धि में किन कारकों का योगदान है? जूनोटिक रोगजनकों के कारण होने वाली महामारियों के हालिया उदाहरणों पर प्रकाश डालिए। (उत्तर 150 शब्दों में दीजिए) 10 अंक

What factors have contributed to the sudden rise in the incidences of zoonotic diseases across the globe? Highlight the recent examples of pandemics caused by zoonotic pathogens.

(Answer in 150 words) 10 marks

Zoonotic diseases refer to ~~trans~~
transmission of disease from animals
to humans and vice versa.

⇒ Factors contributing to rise in
zoonotic diseases

- 1) Loss of animal habitat - destruction of forest areas for commercial purpose inviting animals in human settlements Eg: Bird Flu
- 2) Climate change impacts - aggravating animal diseases transmission Eg: H1N1 virus
- 3) human - animal conflict on rise - especially around peri-urban area. Eg: increasing case of monkey pen in Africa and USA.

4) increase in disease pathogen
spread - naive animals and human
resistant to pathogen
Eg: Nipah virus cases increase in
India.

5) Anti-Microbial Resistance has led
to these diseases increasing their
visibility Eg: Kyasanur forest
disease in KN.

⇒ Measures

1) WHO has initiated ATATCH goal to
reduce disease impact due to
climate change

2) vaccination drives of wild animal,
especially pigs

3) restoring animal habitat to prevent
animal-human conflict

nearly, 60% of diseases to come
are going to be zoonotic, which
demand immediate protection and work

7. भारत में बड़े सामाजिक-धार्मिक समारोहों और समागमों में भीड़ नियंत्रण की प्रमुख चुनौतियों पर चर्चा कीजिए। एनडीएमए के "सामूहिक समारोहों के आयोजन स्थलों के लिए भीड़ प्रबंधन योजना की तैयारी हेतु सुझावात्मक रूपरेखा" के आलोक में, भगदड़ की घटनाओं को रोकने के उपाय सुझाइए। (उत्तर 150 शब्दों में दीजिए) 10 अंक

Discuss the major challenges of crowd control in large socio-religious gatherings and congregations in India. In the light of NDMA's "Suggestive Framework for Preparation of Crowd Management Plan for Events Venues of Mass Gathering", suggest measures to prevent stampede incidents. (Answer in 150 words) 10 marks

A crowd becomes a stampede when due to some false information or hazard, crowds behave in a herd like mentality creating rampant destruction to life & property.

⇒ Challenges of crowd control in socio-religious gathering

- 1) large footfall - above carrying capacity of venue. Eg: UP Mela.
- 2) temporary settlement - made up of thin walls are prone to easy destruction
- 3) herd like mentality - creating ripple effect without knowing real cause
- 4) family - women and children - vulnerable to exploitation

- 5) lack of security personnel in religious gathering
- 6) speakers and microphones are usually limited which make it difficult to spread awareness

⇒ Measures - NDRA guidelines:-

- 1) properly delineated entry and exit routes - Crowd to be made aware of.
- 2) staying away from thin walls and moving to open spaces.
- 3) for entrances in place to avoid any mishap
- 4) interaction to crowd to cool up like a boned with hands around chest to prevent getting hurt.
- 5) priority of evacuation to be given to elderly, women and children.
- 6) effective broadcasting.
A united and sensible crowd needs to be aware about crowd management practice.

8. 'संयुक्त राष्ट्र हाई सी ट्रीटी 2015 के पेरिस समझौते की महत्ता और सार्थकता के बराबर है।' इसके संदर्भ में, समुद्री जैव विविधता के संरक्षण और निष्पक्ष व न्यायसंगत संसाधन-साझाकरण के लिए संयुक्त राष्ट्र हाई सी ट्रीटी के महत्व पर चर्चा कीजिए।

(उत्तर 150 शब्दों में दीजिए) 10 अंक

'The UN High Seas Treaty is comparable to the 2015 Paris Agreement's importance and significance'. In the context of this, discuss the importance of the UN High Seas Treaty for the conservation of marine biodiversity and fair and equitable resource-sharing.

(Answer in 150 words) 10 marks

UN High sea treaty is a global treaty for international water territorial guidelines to ensure effective utilization of Ocean resource.

⇒ Importance of UN High Sea Treaty

I) Conservation of Marine biodiversity :-

- 1) Treaty has guidelines for reducing and eliminating plastic pollution (>60% pollution in open water)
- 2) coordinate with Marpol Convention treaty to address issues of oil spillage in open water and its effective remediation.

3) to ensure ballast water is not released indiscriminately in open sea.

4) ~~coastal protect~~

II Fair & Equitable Resource Sharing

- 1) High seas are under no country's jurisdiction and resources explored in them depends upon which country explored it first. Eg: Arctic resources
- 2) provide a platform for country's governance and autonomy in resource sharing.
- 3) regulation and guidelines on how much resources can be explored,
- 4) control of piracy and black marketing in resource exploration and distribution.

High Seas are an open source and it is every country's responsibility to make effective use of its resources.

9. जनरेटिव एआई (Generative AI) के अवैध प्रयोग से उत्पन्न नए साइबर खतरे क्या हैं? हाल ही में हस्ताक्षरित बैलेंचले घोषणा के आलोक में, भारत एआई द्वारा उत्पन्न खतरों के विरुद्ध अपनी साइबर सुरक्षा ढाँचा को किस प्रकार मजबूत कर सकता है?

(उत्तर 150 शब्दों में दीजिए) 10 अंक

What are the new cyber threats posed by the illicit use of Generative AI? In the light of recently signed Bletchley Declaration, how can India beef up its cybersecurity structure against threats raised by AI?

(Answer in 150 words) 10 marks

Generative AI refers to a new language model which uses not only huge amount of data but also self understanding of pattern to operate efficiently. Eg: Chat GPT.

⇒ Cyber Threats posed :-

- 1) identity theft - stealing and photoshopping has become easier
Eg: Air India data leak of passenger information
- 2) financial frauds - by hacking accounts and phone information
- 3) cyber warfare - attacking critical infrastructure Eg: Iran Stuxnet
- 4) disrupting political stability - by

rigging of election Eg: US Cambridge
analyzer

6) stealing of information and
interrupting privacy Eg: Kudankulam
threat

⇒ Blechnley declaration - India improving
its cyber security

1) And ra has instructed its cyber security
policy to ensure safe use

2) involving private partners through
association like GPR

3) strengthening cyber Swachta Kendra &
Cyber Surakshit Bharat

4) training cyber warriors

5) CERT-in & IUC strengthened control

6) developing Kerala's cyber dome in
each state.

Use of 'Autonomous principles' to
ensure effective AI usage.

10. पड़ोसी देशों में बढ़ते राजनीतिक संकट के कारण भारत की सीमा सुरक्षा गंभीर दबाव में है। विस्तार से समझाइये।

(उत्तर 150 शब्दों में दीजिए) 10 अंक

India's border security is under severe pressure due to the rising political crisis in neighbouring countries. Elaborate.

(Answer in 150 words) 10 marks

India has a border area of 15000 km and is surrounded by 7 neighbours, which continuously pose ~~new~~ security threats to India.

⇒ Issue of Political crisis in ~~neighbouring~~ Neighbouring countries on India.

- 1) Spilling down effect -
overthrow of government
in Myanmar and Bangladesh
by Military elements can
have spilling effect in India's peaceful
democracy



- 2) Issue of refugees - rising number of
 Rohingyas and other immigrant groups
disturbing local population
- 3) fear of radicalisation - can spread
misinformation among locals

4) exploitation of resources - increasing strain of limited resources reduce availability for Indians which leads to frustration and then extremism
 Eg: 2nd world war area.

5) issue of smuggling and drug trafficking proximity to Golden triangle through myanmar.

6) issue of freemovement regime of Myanmar and Inner line permit - increasing movement of people across borders.

7) issue of FICN - leading to market instability and low development.

Measures → build soft bilateral agreements
 → use of India's street power
 → provide effective registry of refugees.
 → initiate chochi in border areas on regular basis.

India just has to balance its neighbourhood to be effectively able to balance multipolar

11.

"कौशल के बिना व्यक्ति संपत्ति नहीं बल्कि राष्ट्र के विकास पर एक दायित्व है"। प्रासंगिक कौशलों का समावेश भारत के जनसांख्यिकीय लाभान्श में किस प्रकार योगदान देता है? युवाओं में कौशल अंतर को कम करने के लिए सरकार द्वारा हाल ही में कौन सी पहल की गई हैं?

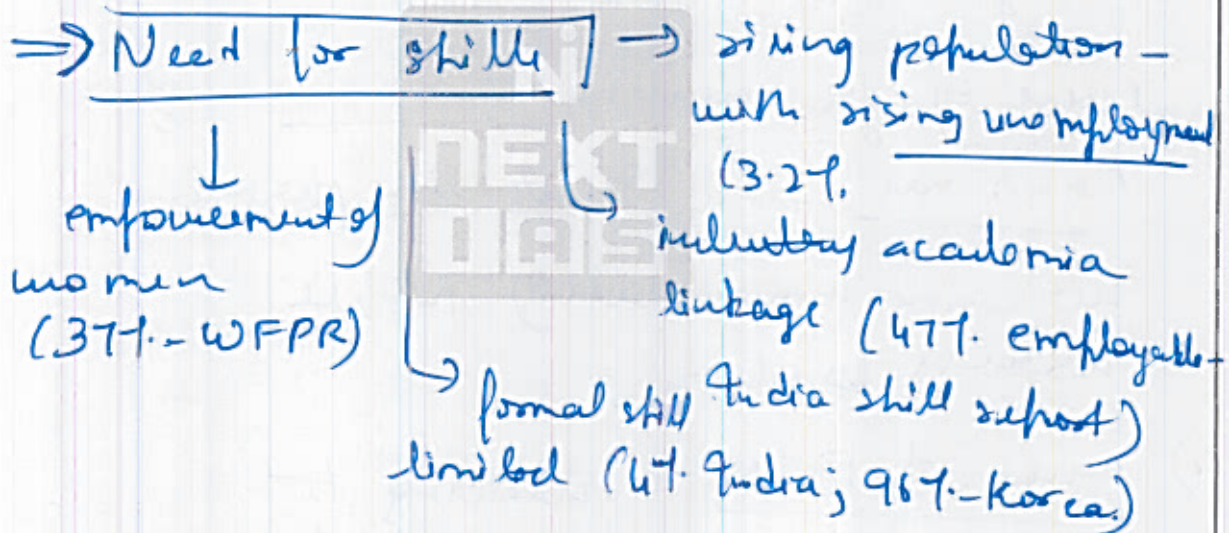
(उत्तर 250 शब्दों में दीजिए) 15 अंक

"A person without skill is not an asset but a liability on the nation's growth". How infusion of relevant skills contribute to the demographic dividend of India? What recent initiatives have been undertaken by the Government to reduce the skill gap among young Indians?

(Answer in 250 words) 15 marks

Capacity enhancement of Anandhya

Sen contribute to skill making power of humans to make them productive asset.



⇒ Infusion of relevant skills contributing to demographic dividend

- 1) bridge industry-academia linkage - with help of vocational and practical education, give better opportunity to become employable Eg: NEP, 2020

- 2) optimum and efficient utilisation of resources - reduce wastage of effort & effective mobilisation of informal workers
- 3) encourage self employment -
~~area~~ which will create new jobs for other labour force.
- 41% women are self employed which $\uparrow$ employment rate by 1.77%.
- 4) effective decision making power -
make women and marginalised sections financially independent and become bread makers and earners.
- 5) effective capital formation - increase capital formation rate and improve GDP by 7% as held by IMF
- 6) increase research and development -
every 1% spent on R&D give a return of 0.29 on GDP.
- 7) improve social condition by increasing standard of living & purchasing power.

⇒ Initiatives taken by government to reduce skill gap among youth

- 1) Budget 2024 has provided youth with opportunity of employment linked initiative - ₹15000 for 1st time employees to incentivise them.
- 2) PM Kaushal Vikas and National Skill India Program - to encourage skill development in multiple fields.
- 3) PM PAKSH - for skill improvement of marginalized, SC, ST
- 4) Seekho aur Kamao - initiative for school & college going children
- 5) encouragement of Atal Tinkering Lab and Atal innovation mission - to encourage R&D and innovation.

Skill gap reduction is urgent need of hour to improve and make India a Viksit Bharat @ 2047.

12.

भारतीय विमानन क्षेत्र में देश में परिवहन का प्राथमिक साधन बनने की अपार संभावनाएँ हैं। भारत के विमानन क्षेत्र में संवृद्धि को बढ़ावा देने वाले कारक क्या हैं? इस क्षेत्र के समक्ष आने वाली चुनौतियों पर प्रकाश डालिए और इसमें सुधार के उपाय सुझाइए।
(उत्तर 250 शब्दों में दीजिए) 15 अंक

The Indian aviation sector has immense potential to become the primary mode of transportation in the country. What are the factors propelling growth in India's aviation sector? Highlight the challenges that the sector faces and suggest measures for improvement.

(Answer in 250 words) 15 marks

Indian aviation sector is the 3rd largest which has increasing potential of improving connectivity and economy of India.

⇒ Factors propelling India's Aviation sector

1) PPP model and privatization of airways - has increased performance and efficiency of railways

Eg: Air India

2) increasing support from government to ensure ease of doing business
Eg: Prigi Yatra App

3) encouragement to small and middle income earners to travel
through air by rationalizing price structures. Eg: UDAN scheme

- 4) encouraging and improving
travel experience with hassle
free movement of public and goods
Eg: GMR efforts in building
to airport ambience
- 5) encouraging economy and productivity
through new innovative schemes
like Kavach Udaan.
- 6) reducing travel time constraints

⇒ Challenges in Aviation sector

- 1) increase price of ATF (Aviation
Turbine fuel) @ 15%.
- 2) issue of oversupply of pilots which
makes it difficult for travellers
Eg: recent bangalore flight case
- 3) inefficient runway at some
airports especially in hilly areas
- threat to passengers' life.
- 4) ineffective checks and audits on

fuel usage in name of economy

Eg: Air India case

5) issue of weather changes - Fog
cancelled many flights in Delhi,
increasing problem for travellers

⇒ Measures for Improvement :-

- 1) rationalizing fuel prices by reducing it to enable better travel by low-income earners.
- 2) ensuring efficient working hours and proper rest schedule for pilots.
- 3) performance auditing of flights to ensure airlines are not resorting to fraudulent practices in name of economy.
- 4) effective coordination of DGCA & AAI in improving flight experience.
- 5) building new airports to increase connectivity especially in rural areas.

Indian aviation sector can make India
'Fly' to its goal of developed economy.

13. किसान उत्पादक संगठन (एफ.पी.ओ.) कृषि-नवाचार के इंजन हैं। इस संदर्भ में, कृषि में विखंडन और आधुनिकीकरण के अभाव की समस्या के समाधान में एफ.पी.ओ. के भूमिका की चर्चा कीजिए। कृषि में एफ.पी.ओ. की भागीदारी को बढ़ावा देने के लिए सरकार द्वारा की गई पहलों पर प्रकाश डालिए। (उत्तर 250 शब्दों में दीजिए) 15 अंक
- Farmer Producers' Organizations (FPOs) are engines of agri-innovation. In this context, discuss the role of FPOs in addressing the issue of fragmentation and lack of modernization in agriculture. Highlight the initiatives the Government took to promote the participation of FPOs in agriculture. (Answer in 250 words) 15 marks

Farmer Producer Organisation (FPO)

is a rising sunrise sector in economy with a contribution of 1.8% to GVA.

⇒ Role of FPO:-

I Addressing issue of Fragmentation:-

- 1) production consolidation - ~~over~~ 80% majority of farmers are small & marginal with < 2ha land area.
- 2) providing collective bargaining - to bring efficient price availability of product.
- 3) backward and forward linkages - input and output being beneficial for customers as well as farmers.
- 4) encouraging land consolidation by hold a mega food park - Eg PM Sampada.

- 5) Increasing credit flow - cooperative build credit availability which encourage farmers to come together - 197. credit from formal sources.

II Improving Modernization:-

- 1) providing employment to 12.2% which increases productive capacity
- 2) boost to research and development - 21 ~~71~~ investment export as return of 713-14 - enabling better efficiency.
- 3) encouraging exports (25.6%) and import of technology.
- 4) 24/41 mega food parks have become operational - cluster based approach attracts more acceptability and increasing economy.
- 5) availability of credit and loan for utilization of new technology in forward operation like grading, packaging etc.

6) better market access and coverage -
improving and encouraging FPO
7) improve nutrition security by modern packaging
⇒ Government initiatives and grading.

1) PM Sampada yojna - creation of
Mega food parks by encouraging
land consolidation and amimation
of all tube at one place

2) Operation green - for providing credit
to farmers to encourage collective

3) At Performance linked incentive and
interest subvention - for rationalizing
cost of FPO's

4) Early availability of loan through
NABARD - RDF fund - for infrastructure
creation.

FPO should be encouraged
further to reduce post harvest loss
(40%) & improve food security

14.

भारतीय अर्थव्यवस्था के सबसे मजबूत विकास इंजनों में से एक होने के बावजूद, कुछ अपस्ट्रीम और डाउनस्ट्रीम मुद्दे हैं जो भारत में खाद्य प्रसंस्करण उद्योगों के विकास को प्रभावित कर रहे हैं। चर्चा कीजिए। भारत में खाद्य प्रसंस्करण उद्योगों के समग्र विकास को मजबूत करने के उपाय सुझाइए। (उत्तर 250 शब्दों में दीजिए) 15 अंक

Despite being one of the strongest growth engines of the Indian economy, there are certain upstream and downstream issues ailing the growth of food processing industries in India. Discuss. Suggest measures to strengthen the overall growth of food processing industries in India. (Answer in 250 words) 15 marks

Food Processing Industries have potential of improving agricultural sector of India as it ~~for~~ contributes around 1-7% to GVA.

FPO - Strongest growth engine → enables collective farming
→ increase bargaining power and improve standard of living

Mega food park operations → employment (12-24%)
24/41 → enormous contribution (25-67%)

⇒ 4 issues in Food Processing sector

I Upstream challenges

1) Post harvest loss of around 40%. (Rajmeh Committee) — due to lack of storage and to outdated infrastructure & small land holding.

- 2) Crop diversity is not there as
majorly rice-wheat produced to
MSP and PDS
 - 3) increase toxicity of crops due to
pesticide and fertilizer usage.
 - 4) high cost of inputs reduce viability
of improving agriculture productivity
 - 5) issue of pests - destroying crop
 - 6) weather uncertainty and lack of technology
augment
- ## II Downstream challenges

- 1) Price volatility in market - due to
increase competition.
- 2) issue of wharves phenomena - reducing
producing one year and increasing
other year due to market dyscrasy.
- 3) issue of open auction - only in < 1/3
market (Narshuandhan Patel committee)
- 4) poor grading facility
- only 10% markets (Shanta Kumar
Committee)

5) market awareness - inefficient due to lack of digital literacy.

6) issue of cartelization - different buyers and sellers in market.

⇒ Measures to strengthen Food Processing
sector

1) operationalized mega food parks -
PM Samprada Yojna

2) provide adequate market information -
to improve bargaining power

3) increase R & D in FPO, to encourage
better adoption of technology in
market process and agriculture
production

4) increase financial capacity and
land acquisition - Operation
Green & PLIS.

5) simplify registration procedure of
FPO

FPO serving as supplier in distressing
low capability of improving global
exports and domestic food consumers.

15. कृषि विज्ञान व सांख्यिकी के क्षेत्र में क्रमशः डॉ. एम.एस. स्वामीनाथन और डॉ. सी.आर. राव के योगदान से भारत को क्या लाभ हुआ? (उत्तर 250 शब्दों में दीजिए) 15 अंक

How was India benefitted from the contributions of Dr M.S. Swaminathan and Dr C.R. Rao in the fields of agricultural science and statistics respectively?

(Answer in 250 words) 15 marks

Indian economy and agriculture has been boosted due to efforts of various scientist, economist and statistician like Dr. M.S. Swaminathan and C.R. Rao.

⇒ Contribution of Dr M.S. Swaminathan in Agriculture science

- 1) Instrumental in formation of ICAR - Indian council for agricultural research
- 2) encouraging adoption of green revolution (HYV seeds) and high yield green revolution
- 3) developed new varieties of crops - ~~Pusa~~ Pusa ~~Banana~~ Banana and Aneupalli Mango

- 4) encouraged predictive breeding of crops to improve productivity
- 5) provided for calculative method of MSP - 50% of C2 formula and 150% of MSP
- 6) encourage utilization of fertilizers to improve land and water use efficiency.
- 7) encourage new innovations in field of agriculture - Eg: 4M crop
- 8) practice of land use measurement and soil check quality

⇒ Contribution of C.R. Rao in Statistics

- 1) simplifying collection procedure of information from stakeholders

- 2) predictive analysis of statistics & management of records
- 3) ensuring direct record to avoid any biases by adopting ~~the~~ transparent procedure of information recording..
- 4) use of online collection to enable storage of information

The above personalities have enabled India to grow to rising heights today.

16. कृत्रिम बुद्धिमत्ता (AI) समग्र बौद्धिक संपदा प्रतिमान को किस प्रकार चुनौती दे रही है? नवप्रवर्तन को बढ़ावा देने और कृतियों एवं आविष्कारों को प्रोत्साहित करने के लिए कृत्रिम बुद्धिमत्ता को बौद्धिक संपदा के साथ कैसे संतुलित किया जा सकता है?

(उत्तर 250 शब्दों में दीजिए) 15 अंक

How is Artificial Intelligence (AI) challenging the overall intellectual property paradigm?

How can AI be balanced with intellectual property to foster innovation and incentivize creations and inventions?

(Answer in 250 words) 15 marks

Artificial intelligence is growing at an increasing rate capable of adding 1 tr \$ to economy.

Intellectual Property rights mean benefit sharing of innovation of personal for future usage after IPR period ends.

⇒ AI challenging IPR :-

- 1) AI is designed to utilize available information on internet to produce results - in this process it breaches IPR by using ~~other~~ information of other ~~pages~~ and providing same without giving and acknowledgement to real producer of information.

Eg: Times of India case.

- Similarly AI ~~is~~ improves its search mechanism by collecting information from all available websites without seeking prior information.
- Since there are no formal laws on AI using other's information, IPR issues have increased as it makes the original content to appear as its own generation.

⇒ Measures to balance AI with IPR

I To foster innovation:-

- 1) A proper policy mechanism delimiting IPR and AI subject matter to ensure there is no frangement of area.
- 2) allowing single window access for AI and IPR to use information available in return of royalty rights

- 3) IPR innovation can improve ~~if~~ with AI application as it better helps in understanding trend with help of large language models.
- 4) fostering integrity pact between IPR companies and AI companies to follow ethical mode of information transmission as Right to information is a fundamental right.

II To incentivize creation and investment

- 1) Generative AI can give better result when they have better correct information availability to avoid and false information spread.
- 2) will improve and encourage IPR if proper recognition is given to them by acknowledging their results through AI.

IPR and AI needs to be balanced effectively in era of 4th Industrial revolution

17. भारत की जैव विविधता को परिरक्षित और संरक्षित रखने में "पश्चिमी घाट" के महत्व पर प्रकाश डालते हुए, इस नाजुक और पारिस्थितिक रूप से संवेदनशील क्षेत्र के सामने आने वाले खतरों पर चर्चा कीजिए। पश्चिमी घाट पारिस्थितिकी तंत्र की सुरक्षा के लिए भारत सरकार द्वारा किए गए उपायों को विस्तार से समझाइये। (उत्तर 250 शब्दों में दीजिए) 15 अंक
- Highlighting the significance of "Western Ghats" in preserving and conserving the biodiversity of India, discuss the threats faced by this fragile and ecologically sensitive Region. Elaborate on the measures taken by the Government of India to protect the Western Ghats ecosystem.

(Answer in 250 words) 15 marks

Western Ghats are one of the major biodiversity hotspots in India which provides habitat to many threatened flora, fauna and other biota.

⇒ Significance of Conserving Western Ghats

1) environmental significance - home to many threatened and endangered species like Malabar civet, great giant squirrel etc.

2) economic significance - source of many rivers such as Godavari and Narmada, important inland water routes.

3) high density of population - many developed cities like Mumbai, Kerala etc. including tribal population like Makhi Pikkhi, etc.

4) source of renewable energy from hydro electricity, ocean wave electricity, (TN) wind farm, and nuclear reactors (Kalpakkam) etc.

⇒ Threats faced by Western Ghats

1) Weather phenomena - increasing the South West rainfall along slopes of Western Ghats responsible for landslides Eg: Kerala landslides due to cloud burst

2) increasing footfall due to tourism and religion (Trimbakeshwar) area (carrying capacity) - led to rockfalls

3) pollution especially plastic and water pollution from industries located on coast near Mumbai and Gujarat

4) loss of biodiversity due to encroachment of lands for soil urbanisation and construction of industries

⇒ Measures taken by Government to protect Western Ghats

- 1) Rangarajan Committee on Western Ghats ~~has~~ ^{have} recommended reducing construction activities in fragile areas.
- 2) dam construction reduced after Koyana induced earthquake
- 3) natural parks and wildlife conservation ~~to~~ ⁱⁿ areas which prevents any construction in core areas under EPA act, ~~1986~~ and WPA act
- 4) creation of coastal regulation zones to prevent encroachment of land
- 5) encouraging traditional and organic farming to ensure sustainable practices Eg: Kuttanad rice field in backwaters of Kerala.

Western Ghats are important for preserving India's biodiversity and economy.

18. जलवायु परिवर्तन पर संयुक्त राष्ट्र फ्रेमवर्क कन्वेंशन (UNFCCC) के पक्षकारों के सम्मेलन (COP) के 28वें सत्र के प्रमुख निष्कर्षों का वर्णन कीजिए। COP-28 के दौरान भारत द्वारा शुरू की गई ग्रीन क्रेडिट पहल की क्या विशेषताएँ हैं? (उत्तर 250 शब्दों में दीजिए) 15 अंक

Describe the major outcomes of the 28th session of the Conference of the Parties (COP) to the United Nations Framework Convention on Climate Change (UNFCCC). What are the features of the Green Credit Initiative launched by India on the sidelines of COP-28?

(Answer in 250 words) 15 marks

UNFCCC 28th COP summit was held in Dubai in 2023, which have contributed new initiatives for upholding Paris climate targets

⇒ Major outcomes of COP 28

- 1) Global stocktake was concluded 1st time which was initiated in COP15 Paris to provide a repository of achievement of target by various countries
- 2) operationalization of Loss and Damage Fund from Glasgow COP
- 3) new initiatives to reduce emission
 - Global cooling pledge part (reduce emission 64%)

- toppling renewable energy pact
~~by 2020~~
- increasing global common
framework fund
- ~~the~~ CHAMIONS by countries to
include youth in saving environment
- Buildings Breakthrough initiative
by France and Germany.

4) India initiatives

- Green Credit under EPA act
- toppling nuclear energy initiative by 2047
- NMCQ initiated linear steel alliance
for connecting global steel users

5) Algeria fund by UAE for improving funding capacity to protect environment initiative

⇒ Features of Green Credit

- 1) Green Credit is an exchange

trading mechanism which will allow exchange of 1 credit = 1 ton CO₂ emission & reduction.

2) It will be operationalized by MOEFCC under EPA act and implemented Indian Council for Forest Research Institute (ICFRI)

3) Green credit can be initiated by even individuals which can range from planting trees to other sustainable projects like
 → Chardham
 → Zojila tunnel and Atal Tunnel
 → GT wind farm
 → TN rainwater harvesting

4) It will help India achieve its NDC target and Paris agreement goal.

COP28 established India as an important strategic player getting it close to home Visiting Gurn.

19. शेल कंपनियों ने भारत में धन-शोधन (मनी लॉन्ड्रिंग) के खतरे में किस तरह योगदान दिया है? क्या धन-शोधन रोकथाम अधिनियम, 2005 में हाल ही में किए गए संशोधनों से ऐसी शेल कंपनियों के साथ ग्राहकों की लेन-देन संबंधी प्रकृति की समस्या का समाधान करने में सहायता मिलेगी? (उत्तर 250 शब्दों में दीजिए) 15 अंक

How shell companies has contributed to the menace of money laundering in India? Do you think recent amendments to the Prevention of Money Laundering Act, 2005 will help address the problem of the transactional nature of clients with such shell companies?

(Answer in 250 words) 15 marks

Shell companies refer to those registered companies which are utilized for conducting money laundering and haram transactions.

→ Shell companies - menace of Money laundering

- 1) Shell companies act as a back door for washing black money into white money.
- 2) utilized in round tripping of money which later enters country as white money in form of FDI.
- 3) These companies are usually located in tax haven countries.

like Cayman island which have
zero taxer policy - leading to loss
of taxer to one home country

4) they lead to price volatility and
exchange rate instability in
economy in which they are
trapped in.

5) encouraged organized crime as
enable funding of their activities
through black money and
contribute in terrorism and FCIN
frauds

6) leads to white collar crimes which
reduces trust of other market players.

⇒ Recent amendment of FEMA - helping
in addressing transactional matters

1) effective check on tax evasion
by ED has served as a
deterrent against tax evading

- 2) practice of DTAA with other countries like Mauritius etc have reduced scope for tax planning and hence erosion of Profit Shifting.
- 3) collaboration with FATF in international arena has reduced black marketing to a considerable extent.
- 4) auditing and record maintenance of companies have reduced their transactional nature.

Challenges

- still loopholes in law are exploited by companies
- increase detention period to create more deterrence
- ↳ better coordination between intelligence departments (MAC, IB and DRI)

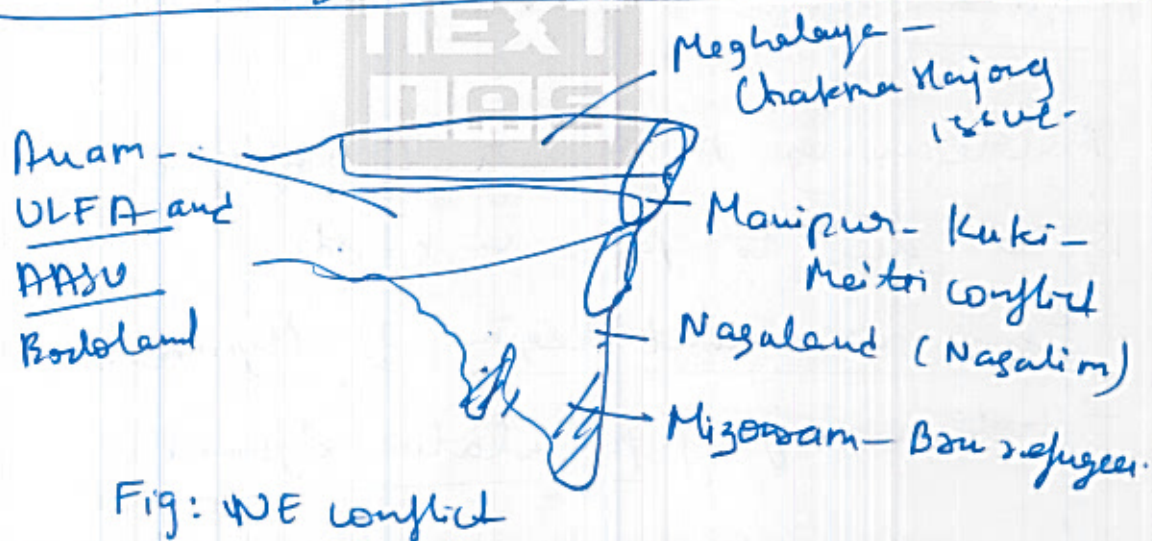
Nearly 40% of black money still exists in economy which needs to be addressed to ensure stability

20. चर्चा कीजिए कि अपराध-उग्रवाद गठजोड़ ने पूर्वोत्तर भारत में जातीय संघर्षों और उग्रवाद की वृद्धि में किस प्रकार योगदान दिया है। इस चुनौती से निपटने के लिए कौन से संस्थागत उपाय किए जा सकते हैं?

(उत्तर 250 शब्दों में दीजिए) 15 अंक

Discuss how the crime-insurgency nexus has contributed to the rise in ethnic conflicts and insurgencies in North-East India. What institutional measures can be undertaken to address this challenge? (Answer in 250 words) 15 marks

North East India occupies 8% of India's geographical area and is one of the most disturbed area due to increasing insurgency and porous border issue with neighbouring countries.



⇒ Crime Insurgency nexus contributed to rise in ethnic conflict :-

- 1) increasing sub regional conflict -
 - demand for bodoland in Assam
 - issue of NRC

- 2) increasing separatist tendencies
due to spreading propaganda
and false information
Eg: Nagaland issue
- 3) intra and inter ethnic conflict -
Kuki-Meitei clashes in Manipur
due to demand for reservation and
political power
- 4) increasing migrants & refugee
Issue due to porous border
- Free movement Regime of Myanmar
- changing population dynamics
- 5) Drug smuggling due to proximity
to Golden Triangle
- 6) arms and weapon smuggling
across border = increasing
instability

⇒ Institutional measures

1) Shyam Prasad Mukherjee's formula

- developing individual, village and cluster level

2) ATSPAA to work as friends of
North east - sensitivity training
of armed officials

3) improve participatory governance

- regular gram Sabha elections

4) improving employment opportunities

- through skill training
PM Kisan Vidyalaya Yojana

5) constructing infrastructure
and development to improve
economic activities

6) encourage tourism Eg: Sacred
Reserves.

NE India serves as an important
link to to maintain India's relations
with its other neighbouring countries.

Space for Rough Work

NEXT IAS

Space for Rough Work

NEXT IAS

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2. Do not write anything other than the actual answers to the questions anywhere inside your QCA Booklet.
3. Do not tear off any pages from your QCA Booklet, if you find any page missing do not fail to notify the supervisor/invigilator.
4. Do not leave behind your QCA Booklet on your table unattended, it should be handed over to the invigilator after conclusion of the exam.

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2. Write your registration number and other particulars, in the space provided on the cover of QCA Booklet.
3. Write legibly and neatly. Do not write in bad/illegible handwritings.
4. For rough notes or calculation, the last two blank pages of this booklet should be used. The rough notes should be crossed through afterwards.
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महत्वपूर्ण निर्देश

अभ्यर्थियों को निम्नलिखित निर्देशों को ध्यानपूर्वक पढ़ना चाहिए। किसी भी निर्देश का उल्लंघन करने पर दण्डित किया जा सकता है।

क्या न करें-

1. इस प्रश्न-सह-उत्तर पुस्तिका के भीतर कहीं भी अपना नाम या पंजीकरण संख्या न लिखें।
2. अपनी QCA पुस्तिका में कहीं भी प्रश्नों के वास्तविक उत्तरों के अलावा कुछ भी न लिखें।
3. अपनी QCA पुस्तिका से कोई भी पृष्ठ न फाड़ें, यदि आपको कोई पृष्ठ गायब लगे, तो पर्यवेक्षक/निरीक्षक को सूचित करना न भूलें।
4. अपनी QCA पुस्तिका को अपनी टेबल पर न छोड़ें, परीक्षा समाप्त होने के पश्चात इसे निरीक्षक को सौंप देना चाहिए।

क्या करें-

1. कवर पृष्ठ पर दिए गए निर्देशों को ध्यान पूर्वक पढ़ें और उनका सख्ती से पालन करें।
2. QCA पुस्तिका के कवर पृष्ठ पर दिए गए स्थान पर अपना पंजीकरण नंबर और अन्य विवरण लिखें।
3. स्पष्ट और पठनीय तरीके से लिखें। खराब/अपठनीय लिखावट में न लिखें।
4. रफ नोट्स या गणना के लिए, इस पुस्तिका के अंतिम दो खाली पृष्ठों का उपयोग किया जाना चाहिए। रफ नोट्स को बाद में क्रॉस कर देना चाहिए।
5. यदि आप किसी कार्य को रद्द करना चाहते हैं, तो उस पर अपना पेन चलाएं या उस पर "रद्द" लिखें, अन्यथा उसका मूल्यांकन किया जा सकता है।
6. परीक्षा हॉल छोड़ने से पहले अपनी QCA पुस्तिका व्यक्तिगत रूप से निरीक्षक को सौंप दें।

ऑनलाइन सुविधा का लाभ उठाने वाले अभ्यर्थियों के लिए विशेष अनुरोध

1. QCA पुस्तिका को ठीक से स्कैन करें। हम चाहेंगे कि आप स्कैनिंग के लिए कैमस्कैनर ऐप (CAM SCANNER) का प्रयोग करें। (यह कोई प्रमोशन नहीं है)।
2. कृपया QCA पुस्तिका को पर्याप्त रोशनी में स्कैन करें। कम रोशनी में स्कैन की गई पुस्तिकाएं, उनके मूल्यांकन की गुणवत्ता को बाधित कर सकती हैं।
3. स्कैन के दौरान छाया वाले किसी भी पृष्ठ/पीडीएफ को फिर से स्कैन किया जाना चाहिए। कृपया सुनिश्चित करें कि आपके द्वारा अपलोड की गई पीडीएफ यथा संभव स्पष्ट हो ।
4. QCA पुस्तिका का उपयोग नहीं करने वाले उम्मीदवारों को अपना विवरण पहले पृष्ठ पर देना चाहिए और मैक्रो टिप्पणियों के लिए अगला पृष्ठ खाली छोड़ दें। यह समझना चाहिए कि उत्तर स्कैन की गई पीडीएफ में पृष्ठ नंबर 3 से शुरू होना चाहिए।
5. QCA पुस्तिका का उपयोग नहीं करने वाले उम्मीदवारों को प्रश्नपत्र के अनुसार उत्तर के अनुक्रम का पालन करना चाहिए।
6. कृपया स्कैन किए गए संस्करण में उत्तर के अनुक्रम और कुल पृष्ठों की संख्या की जाँच करें। सुनिश्चित करें कि यह उसी के भौतिक संस्करण के अनुरूप है।

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