

Name: Biswa Subject: Cr J

Time: _____ Maximum Marks: 100

TO BE FILLED BY EVALUATOR		
Question No:	Marks allotted	Comments
Q: 1		
Q: 2		
Q: 3		
Q: 4		
Q: 5		
Q: 6		
Q: 7		
Q: 8		
Q: 9		
Q: 10		
Q: 11		
Q: 12		
Q: 13		
Q: 14		
Q: 15		
Q: 16		
Q: 17		
Q: 18		
Q: 19		
Q: 20		

41/100

→ Need to write specific to the question's demand

→ write first in general then need to add examples (general approach is many)

overall



good

Total Marks (Obtained):
Feedback/Comment/Suggestion:

Q2 Explain the salient features of India's Nuclear Policy. (10m)

India started its Nuclear tests in 1974, under Indira Gandhi and declared that it would use its nuclear weapons for peaceful purposes. ("Operation Smiling Buddha")

It was opposed to the stand of 5 super powers who had Nuclear Technology by the time 1964 and tried to impose over the world. → NPT. (Non-proliferation Treaty)

190 countries signed this. India in 1995 opposed NPT and did not sign CTBT (Comprehensive Test Ban Treaty) in 2000. However India said it will adopt NFO (No first use) in 1998. Again India did Pokhran II tests and proved to be a Nuclear power in South East Asia.

Crossed Policy

Recently Rajnath Singh said we will rethink about NFO policy considering PAK's cross border terrorism

India uses Nuclear power as for Peace and defence purposes

It is a deterrence tool to keep Pakistan and China away from misusing our sovereignty

India has also Active deals with USA

- 123 Agreement in 2008.

and India actively Bids for NSG

(Nuclear Services Group) though China and Pakistan oppose it

Since DEFENSE is a dynamic term.

Nuclear Weapons are required for.

Active Deterrence and Dissuasive Deterrence.

So India's Nuclear Policy is based on.

1. Rational Use, Use of Nuclear Technology as a source of energy and to counter the disturbing Neighbours.

Q6 Discuss the present challenges to India's external security and Government Policies related to external security.

Atal Bihari Vajpayee said "You can change your friends but not neighbours". This means to ensure that we have sustained external security we need to deal with our neighbours strategically.

Crossed external security issues

(i) CHINA & Pakistan Closeness. We had a history of disputes with BOTH.

1947-48 Indo China War, 1965 India Pakistan War, (1998, 1948, 1971) India Pakistan War.

2020 → Standoffs between India and China near Pangong Lake Area.

(ii) China Pak Economic corridor - goes through Pakistan Occupied Kashmir.

(iii) OBOR Initiative / BRI - Belt and Road Initiative

(iv) China's string of pearls Initiative

→ Hambantota, Chittagong, Gwadar Port, Malé Port. Developed and "string of pearls" is a threat to India.

(v) Pakistan's border infiltration in J&K, Rajasthan

(vi) Drug trade and Issue of Illegal Immigrants at Indo Bangladesh Border and Indo Myanmar Border

→ Proximity to Golden Triangle Drug
trade

Governments Initiative or Policies
Related to External Security

(i) QUAD → Quadrilateral Security Dialogue

India - Australia - Japan - USA

(ii) Nuclear weapons → for Active and
Dissuasive Deterrence

(iii) to counter string of
Pearls → India's Gameplan with
Necklace of Diamonds

(iv) URI Attacks → and Retaliation
by bombing Jaish-e-Mohammad's
targets in POK.

(v) Banning Chinese Apps

(vi) Strategic Alliance with USA / Russia,

(vii) Act East Policy

(viii) tribal development at Indo-Bangladesh
and Indo-Myanmar Borders

(ix) Pakistan removed from
Most Favored Nation (MFN).

(x) Defence exercises

Malabar exercise

Discuss India-Pakistan Relations over the Decades.

India has a policy of Neighbourhood first with Bangladesh and Both Countries share a cordial Relation ship.

1) India's 50% of revenue from Medical Tourism come from Bangladesh and 35% of patients are from Bangladesh

(iii) 100th Constitutional Amendment solved long standing land border issues.

(iv) Bangladesh is part of ACP East policy

\$1 // // Import from Bangladesh

(V) 1650 km $\rightarrow$ higher longest border with Bangladesh

(vii) Land, sea and river route connectivity from Tripura to Bangladesh.

Use Affirmative in Answer

Date _____
Page _____

Why Bangladesh is strategic for US
(i) power balance with China & Pakistan
Bangladesh is not in good relationship with Pakistan

(ii) BIMSTEC common membership.

Look East / Act East Policy

(iii) Bangladesh - Defence strategic partnership. Even they participated in the Republic Day parades.

Challenges

→ One Belt One Road Initiative

String of Pearls → China is building /
Port a renovating at Chittagong port
in Bangladesh → Cheque Book Diplomacy
so Bangladesh getting close to China

→ Border Infiltration. 18 out of 100 acceptable houses

→ CAA, NRC, Rohingya Issue
And Illegal Immigrants

→ Teesta River Dispute
Way Ahead

→ Water sharing

→ Balancing trade

→ Strengthening Border Infiltration laws.

Q3 Discuss the various steps taken by Odisha government for the development of Science and Technology in the state. ~~Q3~~
(10 marks)

the science and Technology development becomes inevitable these days for the overall development of the state.

First initiative is the Popularization of Science and Technology

Odisha Bigyan Academy → Popularization of S&T by organizing Exhibitions, fairs, work shops and seminars.

Odisha state council on Science and Technology → is constituted as the highest policy making body in the state.

It also arranges for

→ Financial support

→ Establishment of District financial centers, museums.

→ Development of Planetarium and museums

→ Support Scientific Institutions, like Department of Mathematics and Applications

→ Science Magazine in Odia language Bigyan Diganta (Baito script)

the science Horizon

Department of Science and Technology
also works on Global Information
systems (GIS), Remote Sensing etc.
Odisha Space Application Centre works as
a Node Agency for the same.

Q4 Indians living abroad play a
very important Role in various aspects
and contribute to our country in many
ways.
"Indian Diaspora" is defined as the group of
people who can trace their origin to India
and or who are Indians staying abroad
permanently or temporarily.
their importance

General importance &

↳ In American Senate there are many
Indians that certainly influences
Indo-American Policies.
* Kamal Haas of Indian Origin
who is Vice President

↳ Lot of fund comes to India in
terms of Remittance.

↳ Donation and Charity by
Non Resident Indians for
Causes of India as they have
strong emotional attachment

In IIT Kharagpur, Vinod Gupta School of Management was established by Mr Vinod Gupta.

"Diaspora Diplomacy" is an important feature of International Relations and Diaspora acts as a bridge builder between Home State and Adopted State.

Hence India also promoting "pravasi kaushal vikas yojana" for skill development of the immigrant Indians so that they become more employable outside (specially middle East countries).

Indian Government has launched a Scholarship program for Diaspora Children.

and 100 Scholarships given for PIO and NRI children per annum.

Govt has set minimum deferral wages (MRW) for the "ECF" countries.

Other initiatives are E migrate system and model portal.

Q2 Malware is defined as a malicious software that creates the unauthorized access to Network for the purpose of theft, Sabotage and espionage.

There are multiple types of Malwares.

Ransomware → Disables the targets access to its data till a ransom is paid.

Fileless Malware → It doesn't install anything but changes the basic things in file.

Spyware → collects information about user activities about their knowledge.

Adware → Understands the users shopping behaviour and floats ads accordingly → Ad bombardment on the internet.

Trojan → Looks as if it is a desirable software, once comes to the system makes changes in the system and works to the disadvantage of the legitimate user.

Virus → A piece of program that steals important user data.

Roots and Botnets Auto triggering of spamming

1(a) 5G Technology and its Applications

5G technology is a high speed ~~cellular~~ technology that increases the download and upload speed of the cellular network.

It is the latest upgrade in LTE technology, long term evolution.

4G speed 1 Gbps

5G speed 20 Gbps

Uses (i) IIOT (Industrial of things) application to simplify city traffic.

(ii) Smart cars

(iii) 5G can be a critical enabler of fourth industrial revolution.

(iv) Mobile banking & Healthcare

(v) Augmented Reality and virtual reality

So 5G has wide range of applications due to its high latency and high speed connectivity.

1(b) COVID-19 and its treatment

COVID-19 virus is a SARS family virus and is a ~~flu~~ ^{highly} contagious ~~virus~~ ^{may be}.

~~It is~~ ^{It is} fatal to those who have preexisting disease of Diabetes, Cancer, NBR etc.

COVID-19 spreads through AIR and touch and its prevention is always better than CURE.

Vaccines in use →
Sputnik
Astrazeneca vaccine
Covaxine
Corrshield.

there are
preventive
measures

The patient needs to ~~take~~ ^{the} ample
of water, less of carbohydrate and healthy
diet to get cured from the viral ~~disease~~ ^{infection}.

It is detected by RT-PCR ^{ask about} test ^{preventive}
And if the person is already affected ^{measures}
then Antigen Test is done to detect
the virus. The persons with lower
immunity get affected by this
easily.

1(c) Fullerenes and its potential Applications

Fullerene is an allotrope of carbon takes the shape of an ellipsoid, hollow sphere or tube and is in the structure of a thin sheet of carbon in the form of a cage.

Uses → (i) Fullerene can be used as an antioxidant and it acts against the HIV/AIDS virus.

(ii) Carriers of genes and drug delivery system.

(iii) Fullerene C₆₀ - Nano

Uses
(iv) Fullerenes have catalytic properties too.

(v) they are used in battery and electronic devices since they can donate and receive electrons.

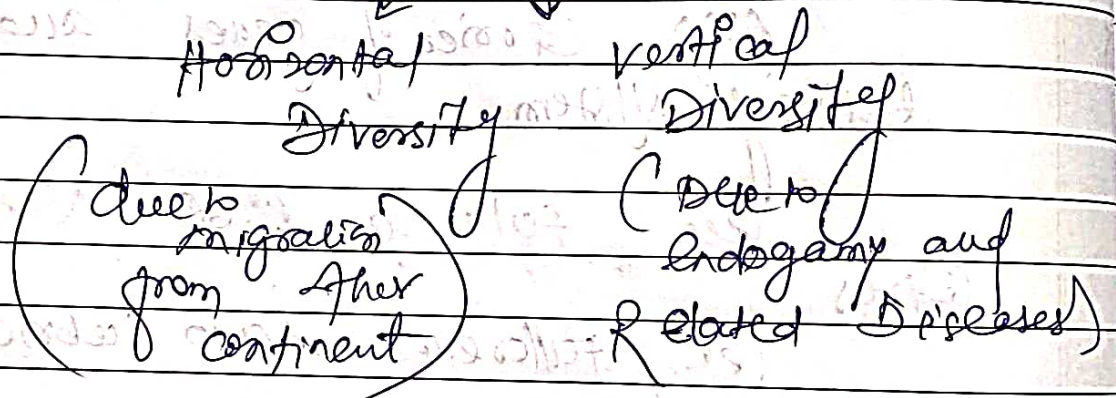
1(d) Genome India Project

Genome India Project is a project of taking 10,000 diverse genes across the country to make a grid of reference genome.

Genome India Project is inspired by Human Genome project →

Genome India project has
an issue as there is

Human Genome Project has an issue that it's not the representative of human population as mostly the genes taken are from URBAN POPULATION in India there are two types of Diversity



So Genome India Project Unlike HGP will take every gene & across class, race and URBAN segments.

UTILITY

- ↳ Precision Health Care
- ↳ Sustainable Agriculture
- ↳ Study diff types of Cancers
- ↳ International Cooperation

1(g) Differentiate between PSLV and GSLV

1(h) India and UNSC

India is a big ~~contender~~ of UNSC permanent member seat.

~~Recently (Jan 2021) India is elected as the ~~Chair~~ Non Permanent member of UNSC for 2 years till (Jan 2023)~~

~~Points favouring India's membership as permanent member in UNSC~~

(1) India has 2nd largest standing Army

(2) 60,000 Indian soldiers died as UN soldiers in the UN Action force activities

(iii) India has worked against terrorism and has always raised its voice. Masood Azhar Declared as ~~Q. 10~~ Global Terrorist by India's efforts.

(iv) 2.2 trillion dollar economy.

(v) Balance power with China and Asian Subcontinent is required.

(vi) Support from NAM countries and more Democratic representation in UNSC is desired.

Challenges

→ (i) China blocks the way by being veto power

(ii) India's policy of Non Alignment is a permanent ally. A NATO membership would have done the job earlier.