

Date - 31/10/20

प्रश्न
संख्यामुख्य परीक्षा उत्तर पुस्तिका
(Mains Answer Sheet)संस्कृत विभागात्
कौटिल्य एकेडेमी
संस्कृत विभागात्

<input type="checkbox"/>	<input type="checkbox"/>	<u>Kyoto Protocol</u> - An international treaty
<input type="checkbox"/>	<input type="checkbox"/>	to reduce greenhouse gas
<input type="checkbox"/>	<input type="checkbox"/>	emissions
<input type="checkbox"/>	<input type="checkbox"/>	Adopted in Kyoto, Japan in 1997 (since 2005)
<input type="checkbox"/>	<input type="checkbox"/>	It's an extension to UNFCCC, 1992
<input type="checkbox"/>	<input type="checkbox"/>	<u>Carbon Footprint</u> - It is the total
<input type="checkbox"/>	<input type="checkbox"/>	amount of Greenhouse Gases
<input type="checkbox"/>	<input type="checkbox"/>	produced directly or indirectly by human
<input type="checkbox"/>	<input type="checkbox"/>	activities.
<input type="checkbox"/>	<input type="checkbox"/>	<u>Electromagnetism</u> - A process where a magnetic
<input type="checkbox"/>	<input type="checkbox"/>	field is created by introducing
<input type="checkbox"/>	<input type="checkbox"/>	the current in the conductor. Eg. Speakers in
<input type="checkbox"/>	<input type="checkbox"/>	TV's.
<input type="checkbox"/>	<input type="checkbox"/>	<u>Compound Interest</u> - Interest which is being
<input type="checkbox"/>	<input type="checkbox"/>	added to principal amount (loan)
<input type="checkbox"/>	<input type="checkbox"/>	or on interest
<input type="checkbox"/>	<input type="checkbox"/>	It can be calculated as $A = P \left(1 + \frac{r}{n}\right)^{nt}$
<input type="checkbox"/>	<input type="checkbox"/>	where, P = initial principal
<input type="checkbox"/>	<input type="checkbox"/>	r = Interest rate,
<input type="checkbox"/>	<input type="checkbox"/>	n = no. of times interest applied
<input type="checkbox"/>	<input type="checkbox"/>	t = time.
<input type="checkbox"/>	<input type="checkbox"/>	A = final amount.

<input type="checkbox"/>	<input type="checkbox"/>	G.	Homi Jahangir Bhabha - Founder of Indian Nuclear Research Programme
<input type="checkbox"/>	<input type="checkbox"/>	.	Indian Scientist born in Mumbai
<input type="checkbox"/>	<input type="checkbox"/>	.	First chairperson of Nuclear (Research) Energy Commission.
<input type="checkbox"/>	<input type="checkbox"/>	.	Bhabha Atomic Energy Centre named on his name.
<input type="checkbox"/>	<input type="checkbox"/>	J.	Globalisation - Process involving increasing openness growing economic interdependence, economic integration in global world. It seeks for borderless world or world as global village.
<input type="checkbox"/>	<input type="checkbox"/>	L.	Direct Benefit Transfer - Under DBT, subsidies or ₹ money is transferred to people directly through their bank accounts.
<input type="checkbox"/>	<input type="checkbox"/>	-	Now, a part of Indian government's programmes. It's objective is to increase transparency and direct transfer in accounts of beneficiary.
<input type="checkbox"/>	<input type="checkbox"/>	m.	PDS - Public Distribution System is an Indian Food Security System to manage distribution of food grains at affordable prices under Ministry of - Consumer Affairs, Food & Public Distribution

Q.	8.	Tissue is a cellular organizational level between cells and a complete organ.
		Organ are formed by multiple grouping of tissues. Animal tissues are
		Epithelium tissue . Muscular tissue . Nervous tissue . Connective tissue .
	-	Epithelium tissue :- It's covering or protecting tissues of animal body and keep body systems separate. It further divided into simple and compound epithelium tissue.
	-	Connective tissue - most abundant and linking and supports other tissues/organs of body e.g. ligaments, cartilage bone, blood.
	-	Muscular tissue - It's made of many long cylindrical fibres. They contract, relax and returns back to their form. They are skeletal, cardiac and smooth.
	-	Nervous tissue - controls the body's response to changing conditions. It have brain, nerves, spinal cord.
		Tissues have some origin, that carry out specific functions.

2.	C.	CV Raman born in Tamil Nadu, India was a great scientist who started his career as a Physics Professor in Calcutta University.
		Nobel Prize for Physics
		↓
		In 1930, for Raman effect (change in frequency of scattered light when beam passes through gas or liquid).
		Contributions
		↳ He was the founder of Raman Research Institute.
		↳ He founded the Indian Academy of Sciences.
		Feb 28, on the day of discovery of Raman effect, is celebrated as National Science Day.
		The theme of 2020 Science Day is "Women in Science" to appreciate contribution of Women in field of Science; He also won Bharat Ratna in 1954. He is the first Asian and first non-white to receive noble prize in science.

Q. D. Cyber crime - India is one of the country having highest cyber threats. A threat or crime in independent network of information technology, computer systems etc is cyber crime.

Types of Cybercrime

→ Harassment & stalking - Harassing a individual over internet platforms or stalking wither profile for unconscient advantage.

→ Hacking - accessing information through password or unethical means is hacking. It's most common form of cybercrime.

→ Cyberbullying - act of defaming, harassing, intimidating through electronic means as social media.

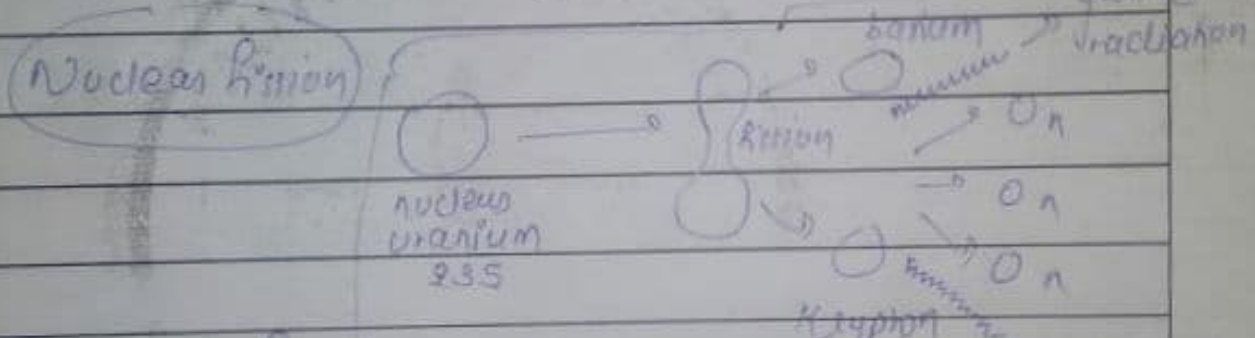
→ Cyberterrorism - to cause harm or extortion to a person, group, Government through internet.

→ Identity theft - theft of personal information or stealing financial assets (through online transaction).

IT Act 2008 defines various cybercrimes and their as offense.

2. F. Nuclear Energy a source of power is the resultant of Nuclear fission & Nuclear fusion through change in nucleus of atoms.

• process whereby atomic nucleus breaks into two or more fragments emitting two or more neutrons.



• release of energy in form of gamma radiation & kinetic energy of emitted particles.

Nuclear fusion

• It occurs when two nuclei (lighter weight) fuses combines and forms a heavier element

→ The lost matter changes into energy.

• large amount of clean energy with zero carbon emission could be produced with fusion reactions.

these energy are used in ships, in submarines, even in rockets.

प्रश्न संख्या

H.

Solid Waste

-

It refers to all non-liquid wastes excluding Human and Animal Excreta. It can be

biodegradable or non-biodegradable. Such waste are a breeding sites for insects, pests

mosquitoes etc. along with polluting water sources.

Types of solid waste

→

Household waste - waste from home (day to day) plastic bottles, cans, tissues etc.

→ Organic waste - food material, carcasses of animals.

→

Hazardous waste - solid waste which is harmful eg. medical waste, batteries, etc.

→ Combustible solid waste - waste which can be burnt or in ashes eg. paper, wood etc.

→

Non-combustible waste - metal, cans, tires which do not form ash.

Solid waste have increased with consumption of packed food.

2.	I	Regional imbalances is the difference of economic development and uneven economic achievements of different regions especially in rural and urban areas
		(Indicators) →
		• per capital income
		• Percentage of urban population
		• people engaged in agriculture or industries (%)
		• BPL population.
		• Literacy level.
		(causes) →
		• absence of industrial reforms.
		• No proper land or agriculture measures
		• Difficult terrains, geographical areas e.g. hives dense forest, flood prone areas.
		• Violence, law and order problem in backward regions.
		• Lack of planning to ensure development
		Various Development Programmes / steps have been taken by Government such as expansion of village and small industries, PM Kisanj Kshetee Kalyan Yojana, Backward Region Grant Fund etc.
		to enhance development in these areas.

प्रश्न संख्या

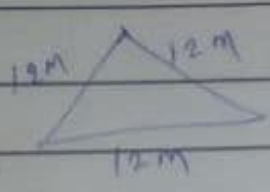
मुख्य परीक्षा उत्तर पत्रिका
(Mains Answer Sheet)

2.	J.	12th five year plan started from April 1 2012 to March 31, 2017 with focus on faster, sustainable or more inclusive growth (under leadership of Manmohan Singh)
		<ul style="list-style-type: none"> Economic growth - every state to attain higher growth rate than rate achieved in 11th plan.
		<ul style="list-style-type: none"> Education - to end gender gap and social gap in school enrollments.
		<ul style="list-style-type: none"> Positive aspects of 12th FYP schooling to increase to 7 years.
		<ul style="list-style-type: none"> Health - to reduce MMR to 1 and IMR to 25. to reduce undernutrition in age group of 0-3.
		<ul style="list-style-type: none"> Infrastructure - connecting villages with all weather condition. electricity to villages.
		<ul style="list-style-type: none"> Services - subsidies through national based direct cash transfer scheme.
		The growth rate target of 12 th FYP was 8% and planning commission was dissolved after this

2	K	Smart Cities
		↓
		an initiative by Ministry of Housing and Urban Affairs to improve quality of life of people with objective of clean and sustainable environment with smart solutions
		A city where there's improvement of social, economic, physical infrastructure.
		→ • Solar Projects - installation of solar plants thus, clean & sustainable energy
		Smart cities a solution to
		→ • Enabling cloud-based disaster recovery centre.
		→ • Smart waste management (in agriculture as manures)
		→ • Road connectivities to Big cities.
		→ • Greenfield development.
		→ • Distance Schools, Hospitals within minimal distances.
		Medical services, tele-medicines, GPS tracking, etc of sustainable development to inspire other cities as well.

प्रश्न संख्या

मुख्य परीक्षा उत्तर पुस्तिका
(Mains Answer Sheet)

9.	L.	
		Given
		Perimeter of an Equilateral Triangle - 12m
		Area - ?
		
		then by formulae
		Perimeter of an equilateral triangle = 3x sides
		12 = 3x sides
		$\boxed{\text{sides} = 4\text{m}}$
		then
		Area of an equilateral triangle = $\frac{\sqrt{3}}{4} a^2$
		= $\frac{\sqrt{3}}{4} (4)^2$
		= $\frac{\sqrt{3}}{4} 4 \times 4$
		$\boxed{\text{Area} = 4\sqrt{3}}$

3. A The Government of India initiated series of economic reforms to overcome the economic crisis of 90's which is called New Economic Policy of 1991.

Components

Liberalisation

Privatisation

Globalisation

• means freedom from controls imposed by governments

• involving privatisation in operations of state owned enterprise.

• increasing economic interdependence openness in world economy

Some other features—

↳ De-reservation of public sector.

↳ Disinvestment

↳ Delicensing

↳ Liberalisation of Foreign Investment

↳ License, Permit and Quota Raj

↳ Entry of MNC's

<input type="checkbox"/>	<input type="checkbox"/>	Success of New Industrial Policy, 1991 —
<input type="checkbox"/>	<input type="checkbox"/>	-
<input type="checkbox"/>	<input type="checkbox"/>	Shift from <u>monopoly</u> market to <u>competitive</u> market.
<input type="checkbox"/>	<input type="checkbox"/>	-
<input type="checkbox"/>	<input type="checkbox"/>	Increase in Foreign Reserves Exchange reserves of country (entry of MNC's)
<input type="checkbox"/>	<input type="checkbox"/>	-
<input type="checkbox"/>	<input type="checkbox"/>	is great stimulant to <u>industrial production</u> (IT sectors)
<input type="checkbox"/>	<input type="checkbox"/>	-
<input type="checkbox"/>	<input type="checkbox"/>	Emergence of <u>India</u> as <u>Economic Power</u> . also boost confidence of global investors in <u>Indian</u> economy.
<input type="checkbox"/>	<input type="checkbox"/>	-
<input type="checkbox"/>	<input type="checkbox"/>	Flow of <u>Private Foreign Investment</u> along with <u>innovative</u> techniques in production.
<input type="checkbox"/>	<input type="checkbox"/>	-
<input type="checkbox"/>	<input type="checkbox"/>	Significant <u>increase</u> in <u>Government Revenue</u> .
<input type="checkbox"/>	<input type="checkbox"/>	-
<input type="checkbox"/>	<input type="checkbox"/>	Variety of goods & services within reach of <u>consumers</u> (consumer satisfaction)
<input type="checkbox"/>	<input type="checkbox"/>	-
<input type="checkbox"/>	<input type="checkbox"/>	span from mere success or yearn mere one negative / failures of.

प्रश्न
 संख्या

मुख्य परीक्षा उत्तर पुस्तिका
 (Mains Answer Sheet)

<input type="checkbox"/>	<input type="checkbox"/>	these policies -
<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	<input type="checkbox"/>	Neglect of agriculture, due to widening gap of urban & rural economies.
<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	<input type="checkbox"/>	Displacement of labour, restructuring and modernisation of industries led to displacement
<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	<input type="checkbox"/>	A episodic growth process, which led growth of particular sectors only not all sectors.
<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	<input type="checkbox"/>	- Expansion of MNC's in Indian market, leading to economic colonialism.
<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	<input type="checkbox"/>	- Cultural erosion in Indian society due to economic prosperity & need of economic independence.
<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	<input type="checkbox"/>	Indian Economy had become a vibrant economy indicating GDP growth and specially the IT sector had got a global recognition.
<input type="checkbox"/>	<input type="checkbox"/>	

3.	B.	National Income is the sum total of factor incomes earned by normal resident of a country during a year.	
		It means sum total of → [compensation of employees + Rent + Interest + Profit] by a normal residents (within domestic territory or outside it)	
		Factor Income	Normal Resident
		↓	↓
		includes compensation + Rent + Profit.	ordinarily resides in country &
		Factor Income/Payments & Factor Transfer Income/Payments).	whose economic interest is in that country only.
		National income is measured through various methods as —	
	-	Product method.	
	-	Value added method.	

प्रश्न संख्या

मुख्य परीक्षा उत्तर पुस्तिका
(Mains Answer Sheet)

संस्कृत विभाग
कौटिल्य एकेडमी
वाराणसी का प्रमुख केंद्र

<input type="checkbox"/>	<input type="checkbox"/>	<u>Limitation in calculation</u>
<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	<input type="checkbox"/>	Value of sale and purchase of <u>second hand goods</u> are not included in estimation of National Income.
<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	<input type="checkbox"/>	Value of <u>intermediate goods</u> is not included in estimation. (as it is reflected in final goods)
<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	<input type="checkbox"/>	• <u>Imputed Rent</u> of occupied house is included in estimation whether it self occupied or rented.
<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	<input type="checkbox"/>	• Value added in Government sector = compensation of employee. as this sector have no out and interest.
<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	<input type="checkbox"/>	• <u>Commission</u> earned on account of purchase/sale is included. as commission is i.e. reward for service can be considered.
<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	<input type="checkbox"/>	

प्रश्न
 संख्या

मुख्य परीक्षा उत्तर पुस्तिका
 (Mains Answer Sheet)

<input type="checkbox"/>	<input type="checkbox"/>	<u>Problems</u> of estimation of national income —
<input type="checkbox"/>	<input type="checkbox"/>	1) Problems of Double counting — an individual sells his good as final goods and treat it as sale but his may be a raw material to other.
<input type="checkbox"/>	<input type="checkbox"/>	2) Problem of <u>imputed values</u> — Certain goods/services which do not appear or cannot be taken to market so their price needs to be defined ex — street lighting service of a person.
<input type="checkbox"/>	<input type="checkbox"/>	3) <u>Adjustment of inventory</u> — to avoid understating or overstating, to keep a record of stocks and at the same time change in prices takes place.
<input type="checkbox"/>	<input type="checkbox"/>	Value added method and final output method are methods through which these problems can be overcome.

प्रश्न संख्या

मुख्य परीक्षा उत्तर पुस्तिका (Mains Answer Sheet)

कौटिल्य एकेडमी

3.	C	Nanotechnology is the use and developments of technique to study physical phenomena and develop new materials from 1 to 100 nanometer size. As Nano + technology.
		means <u>दुर्लभ</u>
		<u>Applications</u> →
		→ in medical & healthcare applications - in form of <u>nanomedicine</u> for disease prevention.
		→ in <u>electronics / IT</u> → advancement in computing & electronics for portable systems.
		→ in <u>energy</u> → improving efficiency of fuels, from raw petroleum and enabling reduced <u>fuel consumption</u> .
		<u>Transportation</u> → efficient vehicle, aircraft, spacecrafts, ships etc.

प्रश्न
संख्या

मुख्य परीक्षा उत्तर पुस्तिका
(Mains Answer Sheet)

<input type="checkbox"/>	<input type="checkbox"/>	<u>Nanotechnology in India</u>
<input type="checkbox"/>	<input type="checkbox"/>	↓
<input type="checkbox"/>	<input type="checkbox"/>	• Commencement of Nanotechnology Development Programme by Department of IT of Government of India.
<input type="checkbox"/>	<input type="checkbox"/>	• Initiation of setting up of 'Nano-electronics centres' at IISc Bangalore and IIT Bombay.
<input type="checkbox"/>	<input type="checkbox"/>	• Presently, nanotechnology in India is mainly government led initiative.
<input type="checkbox"/>	<input type="checkbox"/>	• <u>Nano mission</u> → started in 2007 by Government of India.
<input type="checkbox"/>	<input type="checkbox"/>	- aims to make India a world-class centre for nanotechnology.
<input type="checkbox"/>	<input type="checkbox"/>	- training creation of high skilled manpower.
<input type="checkbox"/>	<input type="checkbox"/>	- establishing linkage between industries and research centres.
<input type="checkbox"/>	<input type="checkbox"/>	- collaborations with foreign countries.

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<u>Nano India 2019</u> -
<input type="checkbox"/>	<input type="checkbox"/>	a National conference by scientific experts to discuss ways of nanotechnology for development.
<input type="checkbox"/>	<input type="checkbox"/>	fewer participation by students in this field.
<input type="checkbox"/>	<input type="checkbox"/>	challenge - Minimal contribution of private sectors.
<input type="checkbox"/>	<input type="checkbox"/>	India spends only a fraction on this except countries like USA, China.
<input type="checkbox"/>	<input type="checkbox"/>	Lack of Quality of research. very less about 1% publication of research papers from India.
<input type="checkbox"/>	<input type="checkbox"/>	less patents filed by India.
<input type="checkbox"/>	<input type="checkbox"/>	there's a lot of potential in our country through which efficiency of sectors like agriculture, industries, health can be enhanced through nanotechnology.