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→ संच क्रमांक

प्रश्नपुस्तिका क्रमांक BOOKLET NO.

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प्रश्नपुरितका – II GENERAL SCIENCE AND NATURE CONSERVATION

एकूण प्रश्न : 100

एकूण गुण : 200

वेळ : 1 (एक) तास

(1) सदर प्रश्नपुस्तिकेत 100 अनिवार्य प्रश्न आहेत. उमेदवारांनी प्रश्नांची उत्तरे लिहिण्यास सुरुवात करण्यापूर्वी या प्रश्नपुस्तिकेत सर्व प्रश्न आहेत किंवा नाहीत याची खात्री करून घ्यावी. तसेच अन्य काही दोष आढळल्यास ही प्रश्नपुस्तिका समवेक्षकांकडून लगेच बदलून घ्यावी.

(2) आपला परीक्षा-क्रमांक ह्या चौकोनात न विसरता बॉल्पेनने लिहावा.

- (3) वर छापलेला प्रश्नपुस्तिका क्रमांक तुमच्या उत्तरपत्रिकेवर विशिष्ट जागी उत्तरपत्रिकेवरील सूचनेप्रमाणे न विसरता नमूद करावा.
- (4) या प्रश्नपुस्तिकेतील प्रत्येक प्रश्नाल 4 पर्यायी उत्तरे सुचिवली असून त्यांना 1, 2, 3 आणि 4 असे क्रमांक दिलेले आहेत. त्या चार उत्तरांपैकी सर्वात योग्य उत्तराचा क्रमांक उत्तरपत्रिकेवरील सूचनेप्रमाणे तुमच्या उत्तरपत्रिकेवर नमूद करावा. अशा प्रकारे उत्तरपत्रिकेवर उत्तरक्रमांक नमूद करताना तो संबंधित प्रश्नक्रमांकासमोर छायांकित करून दर्शविला जाईल याची काळजी घ्यावी. ह्याकरिता फक्त काळ्या शाईचे बॉल्येन वापरावे, पेन्सिल वा शाईचे पेन वापरू नये.
- (5) सर्व प्रश्नांना समान गुण आहेत. यास्तव सर्व प्रश्नांची उत्तरे द्यावीत. घाईमुळे चुका होणार नाहीत याची दक्षता घेऊनच शक्य तितक्या वेगाने प्रश्न सोडवावेत. क्रमाने प्रश्न सोडविणे श्रेयस्कर आहे पण एखादा प्रश्न कविण वाटल्यास त्यावर वेळ न घालविता पुढील प्रश्नांकडे वळावे. अशा प्रकारे शेवटच्या प्रश्नांपर्यंत पोहोचल्यानंतर वेळ शिल्लक राहिल्यास कठीण म्हणून वगळलेल्या प्रश्नांकडे परतणे सोईस्कर ठरेल.
- (6) उत्तरपत्रिकेत एकदा नमूद केलेले उत्तर खोडता येणार नाही. नमूद केलेले उत्तर खोडून नव्याने उत्तर दिल्यास ते तपासले जाणार नाही. एकापेक्षा जास्त उत्तरे नमूद केल्यास ते उत्तर चुकीचे धरले जाईल व त्या चुकीच्या उत्तराचे गुण वजा केले जातील.
- (7) प्रस्तुत परीक्षेच्या उत्तरपत्रिकांचे मूल्यांकन करताना उमेदवाराच्या उत्तरपत्रिकेतील योग्य उत्तरांनाच गुण दिले जातील. तसेच ''उमेदवाराने वस्तुनिष्ठ बहुपर्यायी स्वरूपाच्या प्रश्नांची दिलेल्या चार उत्तरांपैकी सर्वात योग्य उत्तरेच उत्तरपत्रिकेत नमूद करावीत. अन्यथा त्यांच्या उत्तरपत्रिकेत सोडविलेल्या प्रत्येक चुकीच्या उत्तरांसाठी 25% किंवा 1/4 गुण वजा/कमी करण्यात येतील.''

ताकीद ह्या प्रश्नपत्रिकेसाठी आयोगाने विहित केलेली वेळ संपेपर्यंत ही प्रश्नपुस्तिका आयोगाची मालमत्ता असून ती परीक्षाकक्षात उमेदवाराला परीक्षेसाठी वापरण्यास देण्यात येत आहे. ही वेळ संपेपर्यंत सदर प्रश्नपुस्तिकेची प्रत/प्रती, किंवा सदर प्रश्नपुस्तिकेतील काही आशय कोणत्याही स्वरूपात प्रत्यक्ष वा अप्रत्यक्षपणे कोणत्याही व्यक्तीस पुरविणे, तसेच प्रसिद्ध करणे हा गुन्हा असून अशी कृती करणाऱ्या व्यक्तीवर शासनाने जारी केलेल्या ''परीक्षांमध्ये होणाऱ्या गैरप्रकारांना प्रतिबंध करण्याबाबतचा अधिनियम—82" यातील तरतुदीनुसार तसेच प्रचलित कायद्याच्या तरतुदीनुसार कारवाई करण्यात येईल व दोषी व्यक्ती कमाल एक वर्षाच्या कारावासाच्या आणि/किंवा रुपये एक हजार रकमेच्या दंडाच्या शिक्षेस पात्र होईल

तसेच ह्या प्रश्नपत्रिकेसाठी विहित केलेली वेळ संपण्याआधी ही प्रश्नपुस्तिका अनिधकृतपणे बाळगणे हा सुद्धा गुन्हा असून तसे करणारी व्यक्ती आयोगाच्या कर्मचारीवृंदापैकी, तसेच परीक्षेच्या पर्यवेक्षकीयवृंदापैकी असली तरीही अशा व्यक्तीविरूद्ध उक्त अधिनियमानुसार कारवाई करण्यात येईल व दोषी व्यक्ती शिक्षेस पात्र होईल.

पुढील सूचना प्रश्नपुस्तिकेच्या अंतिम पृष्टावर पहा

पर्यवेक्षकांच्या सूचनेविना हे सील उघडू नये

•						cooff	icionte v. &	o are joined
.•	If two togeth	conductors of resistances $R_1 \& R_2$ ner in series, then the equivalent re	with r esistar	esist nce t	ance temperat emperature co	efficient	is	<u>_</u>
	(1)	$\alpha_1 + \alpha_2$	-					
	(2)	$\frac{\alpha_1 + \alpha_2}{2}$. •			
	(3) (4)	$\alpha_1 - \alpha_2$ None of the above			·			
2.		change in temperature of body is	50°C,	then	the change i	n tempera	ature on kel	vin scale will
	be : (1)	70 K (2) 20 K	•	(3)	50 K	(4)	323 K	
<u> </u>		ch of the following factors determi	ine ou	tput	from wind er	nergy con	verter ?	
•	(a)	the wind speed					•	
	(b)	the cross-section of wind swept b	oy rot	or	·			
	(c)	the intensity of sun light						
	(d)	the overall conversion efficiency	of the	e roto	or, transmissio	n system	and genera	tor
		ct the correct option:						-
	(1)	(a) only	(2)	(a)	, (b) and (d) o	nly		
	(3)	(c) only	(4)	(a)	, (b) and (c) o	nly 		
4.	 Ligl	ht transmitted by nichol prism is :			-	·		·
	(1)	unpolarized	(2)	pl	ane polarized			
	(3)	circularly polarized	(4)	ell	iptically pola	rized 	· .	
<u> </u>	Sele	ect the correct statements.			•	· .	•	÷
	(a)	Resistive force is directly propor	rtiona	l to t	he first power	of veloci	ity	
	(b)	Translational motion is the resu	ılt of a	forc	e			
	(c)	Each particle of a rigid body ha	s the	same	linear velocit	y in tran	slational mo	tion
	(d)		of the	e rigi	id body are no	ot the san	ne during ro	tational motion
	Sel	ect the correct option:		•		•		
	(1)		(2)	(a	a), (b) and (c)	only		•
	(3)		(4)) (a	a), (b), (c) and	(d)		· · · · · ·
							-	

Z	15			٠.		4				
6.	. If	f T and τ be the h nean life period i	alf life a	and mean 	life pe	eriods c	f radioactive n	uclide, tl	nen the ratio o	f half life
	(1	$\frac{T}{\tau} = 0.396$	(2)	$\frac{\mathrm{T}}{\mathrm{\tau}}=0.$	693	(3)	$\frac{T}{\tau} = 0.963$	(4)	$\frac{T}{\tau} = 0.936$	
7.	Tł	ie current flowin	g throu	gh an elec	tric bu	ılb rate	d 120 V, 60 W	is :		<u> </u>
	(1)) 2 A	(2)	7.2 A		(3)			1.5 A	
8.	Re sec	sistivity of 1 cm	long co	pper wire	is ρ ₁	and 100	00 cm long cop	per wire	is ρ_2 having	same cros
	(1)	$ \rho_1 = \rho_2 $	(2)	$ \rho_1 > \rho_2 $		(3)	$ \rho_1 < \rho_2 $	(4)	None of the	above
9.	Bu	tanone is a four o	carbon o	compound	l with	the fur	ectional group			
	(1)	Alcohol	-	· •	(2)		hyde	•		
	(3)	Carboxylic aci	d	•	• • •	Keto			· · · · · · · · · · · · · · · · · · ·	
10.	Ma	thematical expres	sion of	Faraday's	s first	law of	electrolysis is	<u> </u>		
	(1)	W=Q, W=Z>	«Ι×t,	W = ZQ	(2)	. W=0	$Q_{i}W=Z\times Q_{i}V$	// ∝ O	<u> </u>	
	(3)	$W \propto Q$, $W = Q$,	W = Z	×I×t	(4)	W = Z	$Z \times I \times t$, $W = Z$	×Q, W∘	¢Q	
11.	Asy	ou go from left t	o right	across a p	eriod	on the	periodic table t	here is d	ecrease in	
	(1)	First ionization	energy				ar charge		cerease m.	* * * * * * * * * * * * * * * * * * *
	(3)	Electronegativi	ty		(4)		lic character			•
12.	Blead	ching powder co	nsists o	f :			·	<u></u> .		
	(1)	Calcium Carbon	nate		(2)	Calciu	m Hypochlori	te		
	(3)	Calcium Sulfate	· •		(4)		esium Carbona			

Graphite

(4)

Fullerene

(3)

Ferrocene

(2)

13. Following is **not** allotrope of carbon.

Diamond

(1)

	nelting	otassium chloride	(2)	Magnesium chloride	
	` '	Calcium chloride	(4)	Lithium chloride	
5.	The co	rrect Electronic configuration of	Cu a	nd Cu ⁺¹ , respectively are	
		$3d^{10}$, $4s^0$; $3d^9$, $4s^0$	(2)	$3d^9$, $4s^1$; $3d^9$, $4s^0$	
	(3) 3	$3d^{10}$, $4s^1$; $3d^{10}$, $4s^0$	(4)	3d ⁸ , 4s ¹ ; 3d ¹⁰ , 4s ⁰	
6.	Plaste	r of Paris consist of the following	g :		
		Calcium Sulfate	(2)	Magnesium Sulfate	
		Calcium Carbonate	(4)	Magnesium Carbonate	
17.	Name	the following pest which dama	iges O	nion and Garlic.	÷
· · · · ·		Black moth (2) Bug		(3) Thrips (4) Saw fly	
	` ,				
L8.		h of the following aerobic bacter	ia hav	e ability to fix molecular nitrogen ?	
18.		h of the following aerobic bacter Derxia and Chromatium	ria hav (2)	Derxia and Beijerinckia	·
18.	Whic	•			
	Which (1) (3)	Derxia and Chromatium	(2)	Derxia and Beijerinckia	
	Which (1) (3)	Derxia and Chromatium Beijerinckia and Chlorobium	(2) (4)	Derxia and Beijerinckia	
	Which (1) (3) Pyret	Derxia and Chromatium Beijerinckia and Chlorobium thrine and Padom-A are	(2) (4)	Derxia and Beijerinckia Chromatium and Chlorobium	
19.	Which (1) (3) Pyret (1) (3)	Derxia and Chromatium Beijerinckia and Chlorobium thrine and Padom-A are Synthetic, Organic insecticides	(2) (4) ——————————————————————————————————	Derxia and Beijerinckia Chromatium and Chlorobium Inorganic insecticides None of the above	
19.	Which (1) (3) Pyret (1) (3)	Derxia and Chromatium Beijerinckia and Chlorobium thrine and Padom-A are Synthetic, Organic insecticides Natural, Organic insecticides	(2) (4) ——————————————————————————————————	Derxia and Beijerinckia Chromatium and Chlorobium Inorganic insecticides None of the above 'Botanical Review" in 1980 ?	
19.	Which (1) (3) Pyret (1) (3) Who	Derxia and Chromatium Beijerinckia and Chlorobium thrine and Padom-A are Synthetic, Organic insecticides Natural, Organic insecticides published system of classification	(2) (4) (2) (4) on in	Derxia and Beijerinckia Chromatium and Chlorobium Inorganic insecticides None of the above 'Botanical Review" in 1980 ? Arman Takhtajan	
19.	Which (1) (3) Pyret (1) (3) Who (1) (3)	Derxia and Chromatium Beijerinckia and Chlorobium thrine and Padom-A are Synthetic, Organic insecticides Natural, Organic insecticides published system of classification John Hutchinson Arthur Conquist	(2) (4) (2) (4) on in (2) (4)	Derxia and Beijerinckia Chromatium and Chlorobium Inorganic insecticides None of the above 'Botanical Review" in 1980 ? Arman Takhtajan	
19.	Which (1) (3) Pyret (1) (3) Who (1) (3)	Derxia and Chromatium Beijerinckia and Chlorobium thrine and Padom-A are Synthetic, Organic insecticides Natural, Organic insecticides published system of classification John Hutchinson Arthur Conquist	(2) (4) (2) (4) on in (2) (4)	Derxia and Beijerinckia Chromatium and Chlorobium Inorganic insecticides None of the above 'Botanical Review" in 1980? Arman Takhtajan Robert Thorne o 50 kg Nitrogen per hectare per year?	

22	2. N	Jame	taxon	omist	who p	ublished Sy	stema	Natu	rae :				
	(1	l) E	Bentha	m and	l Hook	ær j	(2)		ırl Linnaeus				
	(3 ——	3) E	Ingler	and F	rantle		(4)		thur Cronq				
23	. V	iracho	la isoc	rates i	s com	monly know	vn as				-	-	
	(1		emon			· ·	(2)	Po	——. megranate l	nittorf	1.,		
	(3) F:	ruit fly	7	•		(4)	Psy		outless.	iy		
24.	In	poiso	onous	snake	s whic	h glands are	e modi	fied t	o form pois	on gla	 nd ?		
	(1)) Se	ebaceo	us gla	nd		(2)		uminous gl	-	iid ;		٠.
	(3)) Sa	livary	gland	i		(4)		locrine glan				
25.	. Wi	hich o	of the	follow	ing an	imals has p	hyloge	netic	significance	e, as it	serve	es a link betv	veen rentile
	(1)		ngaro		(2)	Echidna		(3)	Sorex		(4)	Rabbit	· · · · · · · · · · · · · · · · · · ·
 26.	Wł	uich p	 hvlun	n is the	e large	st and most	- F110000	of.1	group of an				
	(1)	Ar	thropo	ods	(2)	Mollusca	succes	(3)	Annelida	ımaı k	ingdo (4)	om ? Coelentera	ta
27.	 Lep	tomo	nad fo	orm of	Leish	mania is for	and in	<u> </u>	·			·	
	(1)	ma		•	(2)	sand fly	. —	(3)	tse-tse fly	•	(4)	bed bug	
28.	Mat	tch th	e follo	owing.	,					 -		<u> </u>	
	(a)	Lav	v of ir	herita	nce	(i)	T.M.	Morg	gan				
	(b)	m-I	RNA d	liscove	ery	(ii)	G.J. M						
	(c)	DN	A dou	ıble st	rand	(iii)	-		Monod				
	(d)	Sex	linkaş	ge		(iv)			d Crick				
	Ans	wer (Option	ns:		` ,							
		(a)	(b)	(c)	(d)								• .
	(1)	(i)	(iii)	(ii)	(iv)	,				•			
	(2)	(ii)	(iii)	(iv)	(i)						ē		
	(3)	(iv)	(ii)	(i)	(iii)				. •				
	(4)	(iii)	(i)	(iv)	(ii)		<i>2</i> ************************************						
											•	•	

				•		7	•				Z
29.	Cons belov	sider the follow w :	ing sta	tements al	bout v	riruses	and se	elect the	e answe	er from the	order giv
	(a)	Viruses are obl	ligatory	parasites	•						
	(b)	Viruses are livi	ing orga	anisms							
	(c)	Viruses totally	depend	is upon the	e host	cells					•
	(d)	Viruses have t	heir ow	n enzyme	systen	าร					
	Whi	ch of the above	stateme	ents are tru	e abou	ıt viru	ses?		•		
	(1)	(a), (b) and (c)			(2)	(a) a	nd (b)				
	(3)	(a), (b), (c) and	l (d)		(4)	(a) a	nd (c)				•
30.	In cl	ass Pisces whicl	n fish is	fast swim	mer ar	nd viv	iparous	?			
	(1)	Chimaera	(2)	Rohu		(3)	Scolio	don	(4)	Silver Fis.	h
	The	soil acidity and	associa	tion of hvd	rogen	and al	uminiu	m with	soil coll	oids is mai	nly influence
31.				,	O						•
31.		wo types of neg	ative ch	narges. The	ese are	e:					
31.		wo types of neg Permanent an			ese are	:					
31.	by t		d pH d		ese are						
31.	by t	Permanent an	d pH d Active	lependent	·				٠.		
31.	by to (a) (b) (c)	Permanent an Residual and	d pH d Active	lependent	·				٧-		
31.	by to (a) (b) (c)	Permanent an Residual and Organic colloi	d pH d Active	lependent	·		Only	(c)	(4)	(a) and (c)
	by t (a) (b) (c) Ans (1)	Permanent an Residual and Organic colloi wer Options:	d pH d Active ds and (2)	lependent inorganic	·	ls	Only	(c)	(4)	(a) and (c)
	by t (a) (b) (c) Ans (1)	Permanent an Residual and Organic colloiswer Options: Only (a)	d pH d Active ds and (2) means	inorganic o	colloid	(3)				(a) and (c)
	by t (a) (b) (c) Ans (1)	Permanent an Residual and Organic colloi wer Options: Only (a) dden Hunger"	d pH d Active ds and (2) means	inorganic of Only (b)	colloid	(3) the nu	trient is	deficie	nt		
	by t (a) (b) (c) Ans (1) "Hi (1)	Permanent an Residual and Organic colloi wer Options: Only (a) dden Hunger" Deficiency syn	d pH d Active ds and (2) means mptoms	inorganic of Only (b) s are seen was may occur	colloid - when t ur wit	(3) he nu	trient is ppearar	deficie	nt leficienc		
	by t (a) (b) (c) Ans (1) "Hi (1) (2)	Permanent an Residual and Organic colloi wer Options: Only (a) dden Hunger" Deficiency syn Severe yield r	d pH d Active ds and (2) means mptoms eductions s not de	inorganic of Only (b) s are seen with may occurrent but	colloid when t ur wit	ds (3) the nut hout a	trient is ppearar seems t	deficience of detection de	nt leficienc eficient		
32.	by t (a) (b) (c) Ans (1) "Hi (1) (2) (3) (4)	Permanent an Residual and Organic colloi wer Options: Only (a) dden Hunger" Deficiency syn Severe yield r The nutrient i	d pH d Active ds and (2) means mptoms eductions s not dency syn	inorganic of Only (b) s are seen wan may occupations are	when tur with apparent	ds (3) the nut hout a	trient is ppearar seems t	deficience of detection de	nt leficienc eficient		
32.	by t (a) (b) (c) Ans (1) "Hi (1) (2) (3) (4)	Permanent an Residual and Organic colloi wer Options: Only (a) dden Hunger" Deficiency syn Severe yield r The nutrient i Visual deficien	d pH d Active ds and (2) means mptoms eductions not de ncy syn method	inorganic of	when tur with apparent	ds (3) the nut hout a	trient is ppearar seems t	deficience of detection de	nt leficienc eficient		
32.	by t (a) (b) (c) Ans (1) "Hi (1) (2) (3) (4)	Permanent an Residual and Organic colloiswer Options: Only (a) dden Hunger" Deficiency synthesic Severe yield in The nutrient in Visual deficients and plogging is a market severe plogging is a mark	d pH d Active ds and (2) means mptoms eductions s not de ncy syn method valuation	inorganic ofon	when tur with apparent	ds (3) the nut hout a	trient is ppearar seems t	deficience of detection de	nt leficienc eficient		
32.	by t (a) (b) (c) Ans (1) "Hi (1) (2) (3) (4) Cro (1)	Permanent an Residual and Organic collois wer Options: Only (a) dden Hunger" Deficiency synthese Severe yield rutrient in Visual deficient plogging is a manager of the Soil fertility every severe with the system of the system	d pH d Active ds and (2) means mptoms eductions not de ncy syn method valuation	of	when the appart	ds (3) the nut an arently ressed	trient is ppearar seems t by othe	deficie nce of d to be de er eleme	nt leficienc eficient ents	y symptom	

34.	upper norizons and get depo	which humus sited into lowe	and sesquioxides become er horizons, while silica	me mobile, leach out from the remains accumulated in upper
	norizon.			
	(1) Calcification	(2)	Laterization	
	(3) Podzolization	(4)	Salinization	
35.	Highly salt resistant crop:			
	(1) Barley	(2)	Beans	
	(3) Wheat	(4)	None of these	
36.	Which basic information is ne	ecessary to star	rt the Watershed Mana	gement Programma ?
	(a) Data on rainfall		The state of the s	gement i logianulle ;
	(b) Statistics of population a	and livestock		
	(c) Existing water sources li		etc.	
	(d) Topography			
	Answer Options :			
	(1) (a) only	(2)	(a) and (c) only	
	(3) (a), (c) and (d) only	(4)	(a), (b), (c) and (d)	
37.	Which of the following are the	e objectives of	all watershed manager	nent programmes ?
	(1) To increase infiltration o	f rainwater in	to the soil	
	(2) To control damage by ru	ınoff		
	(3) To manage and utilize re	unoff for usefu	ıl purposes	
	(4) All of the above			
38.	A terrace has a constant or var a safe velocity is	riable grade al	ong its length and used	to convey the excess water at
	(1) Level terrace	(2)	Graded terrace	
	(3) Bench terrace	(4)	None of the above	
39.	Contour bunding is suitable for	or those areas,	which receive the ann	ual rainfall upto
	(1) 800 mm (2) 10	000 mm	(3) 600 mm	(4) None of the above
40.	Which was the first river Valle relative activities on a statutor	J 1	Project in India to take	e up soil conservation and the
	(1) Damodar Valley Corpor	•	Krishna Valley Corpo	ration
•	(3) Ganga Valley Corporation	on (4)	None of the above	

11.	Fresh	water ecosystem may be :				•
	(1)	Lotic	(2)	Lentic		
	(3)	(1) and (2) both	(4)	None of the above	÷	·
12.	 In ar	n ecosystem, the flow of energy	is	·		
	(1)	Undirectional	(2)	Bidirectional		
	(3)	Multidirectional	(4)	Cyclic		
 43.	Ном	much percentage of P ₂ O ₅ is pre	sent in	single super phosphate ?		
	. (1)	16% (2) 48%		(3) 46% (4)	27%	
44.	Amo	ong the following which stateme	ent(s) is	/are correct ?		
	(a)	Concentrated organic manures		*	nt nutrients	
•	(b)	Concentrated organic manures		· · · · · · · · · · · · · · · · · · ·		igin
,	(c)	The common concentrated org				
	• •	ct the correct option :	•			
	(1)	Only (a) (2) Only (b))	(3) (a) and (b) (4) (b) and (c)	
<u></u>	Whi	ch of the following pest produce	es dead	hearts and white heads?		
	(1)	Leaf folder	(2)	Yellow Rice stem borer		
	(3)	Rice case worm	(4)	Rice hispa		
46.	Ant	hrax disease of farm animals is o	caused 1	by:		
	(1)	Bacteria	(2)	Viruses		
	(3)	Protozoan parasites	(4)	None of these		٠
47.	The	concentration of insecticide requ	uired to	kill 50% test population ex	periment of insec	t is called
	(1)	RL50 (2) LD50		(3) I50 (4	l) KD50	
<u>ـــــ</u>	ग क्राम	साठी जागा / SPACE FOR ROUGH WO	DK		 	P.T.O

48.	An	nong the following, wh	ich statement is o	correct ?		
	(a)	DDT was first discov			•	
	(b)	Insecticidal property				
	An	swer Options :	•	. ,		
	(1)	Only (a)	(2)	Only (b)		
	(3)	Both (a) and (b)	(4)	None of these		•
49.		is a complete p	parasitic weed ha	ving twining, golde	en vellow wiry ster	ms.
	(1)	Loranthus (2)	Parthenium	(3) Cuscuta	(4) Striga	and Marijana
50.	idio	contains calcium	oxalate crystals	are packaged in rap	phides, arranged in	bundles called
	(1)	Dumb cane (Dieffenbe	achia) (2)	Glory lily		
	(3)	Areca palm	(4)	Alfa-alfa		
51.	into	is a treatment less toxic or non-toxic	process that use substances.	s micro-organism t	to degrade hazard	ous substances
	(1)	Nitrification	(2)	Salinization		
	(3)	Bioremediation	(4)	All of the above		
52.	Whi	ch of the following is a	secondary pollu	tant?		
	(1)	Carbon monoxide	(2)	Smog		
	(3)	Carbon dioxide	(4)	Sulphur dioxide		
53.	Íron relea	pyrites (FeS ₂) can have ases	devastating impa	act on the aquatic en	vironment because	their oxidation
	(1)	Sulphuric acid	(2)	Hydrochloric acid		
	(3)	Nitric acid	(4)	None of the above		
54.		river valley are	the cradle of inc	lustrialization in Ch	notanagpur plateau	region.
	(1)	Bearma and Sonar	(2)	Krishna and Koyn		-
	(3)	Ganga and Hubli	(4)	Damodar and Sub	ernrekha	

55.	The tern		ness of	t ozon 	e in a col	umn of a	ur tro	m the ground to the top of atmosphere is measured in
	(1)	Paso	al un	it			(2)	Dobson unit
	(3)	Ang	strom	unit			(4)	Decibel unit
56.	Wh	at is th	ne full	form	of IPCC	?		
	(1)	Inte	rgove	rnmer	ital Pane	l on Clin	nate C	Change
	(2)	Inte	rnatio	nal Pa	anel on C	Climate C	hang	e
	(3)	Inte	rgove	rnmer	ital Proto	col on C	limat	e Change
	(4)	Inte	rnatio	nal Pa	anel on C	Climate C	Conse	rvation
	Mat	ch the	pairs	:		·		
		Wil	d aniı	mals			Scie	ntific name
	(a)	Chi	nkara			(i)	Tetra	acerus quadricornis
	(b)	Blac	k Buc	k		(ii)	Gaze	ella bennettii
	(c)	Cho	wsing	gha		(iii)	Bose	laphus tragocamelus
	(d)	Blue	Bull			(iv)	Anti	lope cervicapra
	Ans	wer (Option	ıs :				
		(a)	(b)	(c)	(d)			
	(1)	(ii)	(iv)	(i)	(iii)			
	(2)	(ii)	(iv)	(iii)	(i)			
	(3)	(iii)	(i)	(ii)	(iv)			
	(4)	(iii)	(iv)	(ii)	(i)			
58.	The	pregn	ancy	diagn	osis in El	ephants (can be	e made on the basis of following :
	(a)				f estroge			
	(b)	Pros	taglar	ıdin le	vel incre	ased at 3	to 8	weeks
	(c)							ring 4-6 months
	(d)				y after 15			
	Ans	wer O	ption	ıs:		_		
	(1)	(a) &	: (b)				(2)	(c) only
	(3)	(d) o	nly				(4)	(a), (b), (c) & (d)

9.	(1)	•	and 8				(2)	n it is given at temperature between 89°F and 92°F
			and 1				(4)	109°F and 112°F
	(3)	99 F	anu .	102 F			(+)	109 1 and 112 1
0.	Mate	ch the	follov	wing:				
		Bree	d				Orig	gin (state)
	(a)	Kha	riar			(i)	Utta	r Pradesh
	(b)	Khe	rigarh	ı		(ii)	Karı	nataka
	(c)	Kris	hna v	alley		(iii)	Tam	il Nadu
	(d)	Kan	gayan	n		(iv)	Odi	sha
	Ans	wer C	ption	ıs :				
		(a)	(b)	(c)	(d)			
	(1)	(iv)	(ii)	(i)	(iii)			
	(2)	(iv)	(i)	(ii)	(iii)			
	(3)	(iii)	(iv)	(i)	(ii)			
	(4)	(iv)	(ii)	(iii)	(i)			
51.	The	wood	of _	-	tree	species i	s used	d in pencil industry.
	(1)	Adir	ia cari	difolia			(2)	Abies pindrow
	(3)	Toor	ıa cilid	ata			(4)	Juniperus virginiana
<u>.</u> 52.	Dru	gs are	obta	ined f	rom the		of	the plants.
	(1)	Roo	ts				(2)	Bark
	(3)	Lea	ves				(4)	All of the above parts
63.		ich es	sentia	l oil is	having a	a maxim	um ex	port ?
	(1)		per m				(2)	Japanese mint
	(3)	Ber	- ga mi	nt			(4)	Spear mint
 64.	 Jute	e fibre	is sep	erateo	in pool	s of stag	nant v	water from the stem by a process of :
vz.	•						(2)	Calendering
V I .	(1)	Cru	ishing	;			· /	<u> </u>

65.	Sal	ai gum is the pro	oduct of _	·					
	(1)	Boswellia serra	ata	(2) Bau	hinia retusa			
	(3)	Anogeissus lat	ifolia	(4) Ster	culia urens			
66.	Th	e important specie	es of a fre	sh water sw	amp for	est is :	-		
	(1)	Avicennia sp.	(2) E	arringtonia s	<i>p</i> . (3)	Brugeriera sp.	(4)	Myristica sp.	
67.	He	ight growth in for	rest plant	s takes place	rapidly	during night or	in sha	de because :	
	(a)	growing axis is					٠	•	
	(b)	more nutrition	is availal	ole during ni	ght or i	n shade		•	
	Wh	ich of the above i	is correct	?	•	•			
	(1)	Only (a)		(2)) Onl	y (b)			
	(3)	Both (a) and (b))	(4)) Nei	her (a) nor (b)			
68.	Sho	rea robusta is four	 nd in	fore	ests.		<u> </u>	· · · · · · · · · · · · · · · · · · ·	
	(1)	Tarai		iwalik	(3)	Khasi hill	(4)	All the above	
 69.	Miy	awaki forest is g	rown by	planting sev	eral sp	ecies of plants in	verv	close spacing. The	—— maior
	(1)	raction that helps Mutualism	s lorni un	is forest rapi arasitism	aly is _	Comensalism		•	1 111/01
				•			(-)	Competition	
70.	The Ind	effect of aspect is ia because of	more pro	onounced in		<u>.</u>		nills situated in Sou	thern
70.	The Ind	effect of aspect is ia because of Pole	· `	onounced in		<u>.</u>			thern
· -	(1)		(2) EI	onounced in effect.	Himala	an hill ranges th	an in l	nills situated in Sou	thern
· -	(1)	Pole yadri Tiger Reserv	(2) El	onounced in effect. levation	Himala	an hill ranges th	an in l	nills situated in Sou	thern
· -	(1) Sah	Pole	(2) El	onounced in effect. levation	Himala	an hill ranges th	an in l	nills situated in Sou	thern
· -	(1) Sahy (a)	Pole yadri Tiger Reserv Radhanagari w	(2) Elve compri ildlife san	effect. levation ises of :	Himala	an hill ranges th	an in l	nills situated in Sou	thern
· -	(1) Sahy (a) (b) (c)	Pole yadri Tiger Reserv Radhanagari w Chandoli Natio Koyna wildlife	(2) Elve compri ildlife san mal park sanctuary	effect. levation ises of:	Himalay (3)	an hill ranges th	an in l	nills situated in Sou	thern
70.	(1) Sahy (a) (b) (c)	Pole yadri Tiger Reserv Radhanagari w Chandoli Natio	(2) Elve compri ildlife san mal park sanctuary	effect. levation ises of:	Himala (3)	an hill ranges th	an in l	nills situated in Sou	thern

Microclimate modification

Allswei Option

(1) Only (b)

(a)

(b)

(2) Only (a) and (b)

(3) Only (a) and (c)

Competition

(4) All the above

78.	Agroforestry system where component stay together for some part of life. (1) Coincident (2) Concomitant (3) Intermittent (4) Interpolated										
	(1)	Conicident	(2)	Conconntant		Hittilitteit	(+)				
79.	How	many ex-offic	io meml	pers do the JFMO	C/EDC	C have ?					
	(1)	1	(2)	2	(3)	3	(4)	4			
80.	Con	sider following	stateme	ent :	•	,					
	(a)	Agroforestry	system i	s a specific loca	l exan	ple of an Agrof	orestry	practice			
	(b)	Agroforestry	practice	is a specific loc	al exai	mple of an Agro	forestr	y system			
	In tl	nis context, whi	ch of th	e following opti	on is c	orrect ?					
	(1)	Both true	(2)	Only (a) true	(3)	Only (b) true	(4)	None true			
81.		_				a wildlife sanct dlife (protection	-	But this can be done or 1972.			
•	(1)	State Board for	or Wildl	ife							
	(2)	National Boar	rd for W	'ildlife							
	(3) National Tiger Conservation Authority										
	(4)	Wildlife Crim	ie Contr	ol Bureau							
82.				vas amended in changed the de			rd 'baı	mboo' from clause(7) o			
	(1)	Timber	(2)	Tree	(3)	Shrub	(4)	Palm			
83.	Who is the Ex-officio Director of the Wildlife Crime Control Bureau ?										
	(1)	Director of W	'ildlife F	reservation							
	(2)	Inspector Ger	neral of	Police				•			
	(3)	Inspector Ger	neral of 1	Forests							
	(4)	Director Gene	eral of F	orests							
				<u> </u>							

84.	Sna	Snake venom is required for manufacture of life-saving Antivenom. In this regard, which of the following statements are correct as nor wildlife (marked in). Act. 1073.3										
	following statements are correct as per wildlife (protection) Act, 1972? (a) Only government agency can collect snake venom.											
	(a) (b)		~	•								
	(c)	Anyone inte Chief Minist				venon	n can app	ly for li	icence.			
	` '			the ncenc	e.							
	Answer Options : (1) All (a), (b) and (c)				(2)	O-1-	- (I-)		•			
	(1)				(2)	Only						
	(3)	Only (b) and	i (c)		(4)	Only	(a) and ((c)				
85.	The Act	first attempt fo	or asserti	ng state m	onopoly	right	t over fore	st was	made	through a	n Indian I	Forest
·	(1)	1857	(2)	1865		(3)	1878		(4)	1827		
86.	The	The Centre for International Forestry Research (CIFOR) is located at :										
	(1)	Bogor, Indor	nesia	. •	(2)	Yok	ohama, Ja	pan		•		
	(3)	New Delhi, l	India		(4)	Rom	e, Italy	-		÷		
	.			<u> </u>								-
87.		rnational Unio				ure (I	UCN) has	the pr	iority a	areas of:		
	(a)	Work-biodiv	•	d climate	change							
	(b)	Sustainable e	Ų,									
	(c)	Human well	•	. •	conomy	•	•					
	(d)	To defeat hu	_	poverty								
		wer Options :			(5)		• • • • •					
	(1)	(a), (b) and (•		(2)		b) and (c)					
	(3)	(b), (c) and (d	a)		(4)	All (a), (b), (c)	and (d	.)			
88.	The First World Climate Conference was held at Geneva, Switzerland on :											
•	(1)	12 - 23 Feb. 1	1979		(2)	14 A	ug 4 Se	pt. 200	9		*	•
	(3)	29 Oct 7 N	ov. 1990		(4)	1-10	Jan. 1982					
	3.5.4									*		
89.		ch the pair :			F 1 1.	'/T	TA7CTT\	<i>(</i> :)	Talaa			
	(a)	Institute of W					vv51)	(i)	Jaba.	-		
	(b)	Tropical Fore			•	1)		(ii)	Rand	\		
	(c)	Arid Forest F			•	٠.		(iii)	_	aluru		
	(d)	Institute of Fo	orest Pro	auctivity	(IFP)			(iv)	Jodh	pur		
	Ans	wer options :	. (1)									
		(a) (b) (c				,		•				
	(1)	(iii) (iv) (i)		•								
	(2)	. , , , ,	ii) (iv)					•				
	(3)	(iii) (i) (ir					•					•
	(4)	(i) (iii) (ii	i) (iv)	-							:	
									 .			

90.	Which one of the following is not the autonomous organization of Ministry of Environment and
	Forest, New Delhi?

- (1) Govind Ballabh Pant Institute of Himalayan Environment and Development, Almora.
- (2) Indian Institute of Forest Management, Bhopal.
- (3) Wildlife Institute of India, Dehradun.
- (4) Indira Gandhi National Forest Academy, Dehradun.

91. Match the pa	airs :
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Remote Sensing satellite

Country of Origin

- (a) Resource sat
- (i) India

(b) SPOT

(ii) France

(c) Radarsat

(iii) Canada

(d) IKONOS

(iv) U.S.A.

Answer options:

- (a) (b)
- (c) (d)
- (1) (i) (ii) (iv) (iii)
- (2) (iv) (iii) (ii) (i)
- (3) (iv) (ii) (iii) (i)
- (4) (i) (ii) (iii) (iv)
- **92.** The preferable topographical map for higher Resolution Satellite image interpretation has a scale of :
 - (1) 1:50,000 to 1:11,50,000
- (2) 1:50,000 to 1:2,00,000
- (3) 1:50,000 to 1:2,50,000
- (4) 1:50,000 to 1:3,00,000
- 93. Which of the following statements are correct?
 - (a) Concept of Biodiversity hotspots was given by E.O. Wilson.
 - (b) Biodiversity hotspots have high endemism of plant species.
 - (c) All Biodiversity hotspots are located in tropical region.

Answer Options:

(1) All (a), (b), (c)

(2) Only (a)

(3) Only (b)

(4) Only (c)

94.	Anthropogenic threats leading to extinction of species and consequent loss of biodiversity is/are:												
	(a)	Hab	itat Ic	ss an	d frag	mentat	ion						
	(b)	Intro	oducti	on of	non-r	native s	peci	es					
	(c)	Dist	urban	ce an	d poll	ution							•
	(d) Over exploitation of natural resources												
•	Answer Options:												
	(1)	(a),	(b) an	d (c)			(2)		(b),	(c) and (d)			
	(3) (a), (b), (c) and (d)							(4)	(c) a	nd (d) only			
95.		The diversity is the measure of rate of extent of change in species along a gradient from one habitat to another.											g a gradient
	(1)	Alp	ha		(2)	Beta			(3)	Gamma	(4)	Theta	
96.	Whi	ch of	the fo	llowir	ıg we	re imp	leme	nted o	during	the decade 20	011-20 ?		
	(a)	Unit	ed Na	tions	Decad	de on E	Biodi	versity	y				
	(b)	•											
	Answer Options :												
	(1)	Only (a)						(2)	Only	7 (b)			
	(3)	Both	(a) a	nd (b)				(4)	Neit	her (a) nor (b)			
97.	Primitive varieties which have evolved over centuries through both natural and artificial selection and cultivated by farmers, are referred as												
	(1)	Mod	lern cı	ultivo	rs			(2)	Lan	draces			
	(3)	3) Wild species						(4)	Olea	ممثلمتسمية ماءات			
	(3)	* * * * * * * * * * * * * * * * * * * *	i speci	ies				(4)	Obs	olete varieties			
98.		ch the						(4)	Obs	olete varieties			<u> </u>
98.		ch the		wing :			(i)		yajati				
98.	Mat	ch the Indi	follo	wing : s peo	ple		(i) (ii)	Van			<u>,</u>	<u>.</u>	
98.	Mat	ch the Indi	follo	wing : s people	ple e			Van Van	yajati				
98.	Mat (a) (b)	ch the Indi Prin Inha	follow genou	wing : s people people of fo	ple e		(ii)	Van Van	yajati vasi mjati				
98.	Mate (a) (b) (c) (d)	ch the Indi Prin Inha	follow genou nitive p bitant	wing : s people c of fo	ple e		(ii) (iii)	Van Van Adi	yajati vasi mjati				
98.	Mate (a) (b) (c) (d)	ch the Indi Prim Inha Cast	follow genou nitive p bitant	wing : s people c of fo	ple e		(ii) (iii)	Van Van Adi	yajati vasi mjati				
98.	Mate (a) (b) (c) (d)	ch the Indi Prim Inha Cast	follow genou nitive p bitant e of fo	wing : s people people of fo prest	ple e rest		(ii) (iii)	Van Van Adi	yajati vasi mjati				
98.	Mat (a) (b) (c) (d) Ans	ch the Indi Prim Inha Cast wer o	follow genou nitive p bitant e of for ptions (b)	wing: s people of fo orest s: (c)	ple e rest (d)		(ii) (iii)	Van Van Adi	yajati vasi mjati				
98.	Mat (a) (b) (c) (d) Ans (1)	Indi Prim Inha Cast wer o (a)	follow genou nitive p bitant e of for ptions (b)	wing: s people of fo orest s: (c) (iii)	ple e rest (d) (iv)		(ii) (iii)	Van Van Adi	yajati vasi mjati				

ΩΩ	T Tatawa aia		1	111-	
77.	Heterosis	can	be rixea	tnrougn	:

- (a) Vegetative propagation
- (b) Apomixis
- (c) Male sterility
- (d) Balanced lethal system

Answer Options:

(1) (a) and (b) only

- (2) .(a) and (c) only
- (3) (a), (c) and (d) only
- (4) (a), (b) and (d) only

100. Match the following pairs:

(a) Father of plant tissue culture

- (i) Guha and Maheshwari
- (b) Development of plant tissue culture media
- (ii) Gottlieb Haberlandt
- (c) Production of first haploid embryos from pollen grains
- (iii) Muier et al

(d) First plant from single cell

(iv) Murashige and Skoog

Answer options:

- (a) (b) (c) (d)
- (1) (i) (ii) (iii) (iv)
- (2) (ii) (iii) (iv) (i)
- (3) (ii) (iv) (i) (iii)
- (4) (iv) (iii) (ii) (i)

सूचना - (पृष्ठ 1 बह्रन पुढे....)

- (8) प्रश्नपुरितकेमध्ये विहित केलेल्या विशिष्ट जागीच कच्चे काम (रफ वर्क) करावे. प्रश्नपुरितकेव्यतिरिक्त उत्तरपत्रिकेवर वा इतर कागदावर कच्चे काम केल्यास ते कॉपी करण्याच्या उद्देशाने केले आहे, असे मानले जाईल व त्यानुसार उमेदवारावर शासनाने जारी केलेल्या ''परीक्षांमध्ये होणाऱ्या गैरप्रकारांना प्रतिबंध करण्याबाबतचे अधिनियम-82'' यातील तरतुदीनुसार कारवाई करण्यात येईल व दोषी व्यक्ती कमाल एक वर्षाच्या कारावासाच्या आणि/िकंवा रुपये एक हजार रकमेच्या दंडाच्या शिक्षेस पात्र होईल.
- (9) सदर प्रश्नपत्रिकेसाठी आयोगाने विहित केलेली वेळ संपल्यानंतर उमेदवाराला ही प्रश्नपुस्तिका स्वतःबरोबर परीक्षाकक्षाबाहेर घेऊन जाण्यास परवानगी आहे. मात्र परीक्षा कक्षाबाहेर जाण्यापूर्वी उमेदवाराने आपल्या उत्तरपत्रिकेचा भाग—1 समवेक्षकाकडे न विसरता पस्त करणे आवश्यक

-		नमु	ना प्रश्न		٠		· .
Pick out the	e correct word to fill in the blank	:	· ·			4	
Q.No. 201.	I congratulate you you	٠					
	(1) for	(2)	at		-		
	(3) on	(4)	about	•			
	ह्या प्रश्नाचे योग्य उत्तर ''(3) on'' प्रश्न क्र. 201 समोरील उत्तर-क्रमांक						खालीलप्रमाण
प. 本. 201.	$\bigcirc \bigcirc $		•	•		. •	

अशा पद्धतीने प्रस्तुत प्रश्नपुस्तिकेतील प्रत्येक प्रश्नाचा तुमचा उत्तर-क्रमांक हा तुम्हाला स्वतंत्ररीत्या पुरविलेल्या उत्तरपत्रिकेवरील त्या त्या प्रश्नक्रमांकासमोरील संबंधित वर्तुळ पूर्णपणे छायांकित करून दाखवावा. ह्याकरिता फक्त काळ्या शाईचे बॉल्पेन वापरावे, पेन्सिल वा शाईचे पेन वापरू नये.

कच्चा कामासाठी जागा / SPACE FOR ROUGH WORK

