SEAL

p)6



वेळ : 1 ( एक ) तास

→ संच कमांक

परीक्षा मिनांक- 30 जुन 2018 2018

न्दाळणी परीक्षा-20 B

प्रश्नपुस्तिका क्रमांक BOOKLET NO.

200581

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प्रश्नपुस्तिका

चाळणी परीक्षा

एकूण प्रश्न : 100

एक्ण गुण: 200

सूचना

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

(2) आपला परीक्षा-क्रमांक ह्या चौकोनांत न विसरता बॉलपेनने लिहावा.

- परीक्षा-क्रमांक ↑

  केंद्राची संकेताक्षरे शेवटचा अंक
- ्वर छापलेला प्रश्नपुस्तिका क्रमांक तुमच्या उत्तरपत्रिकेवर विशिष्ट जागी उत्तरपत्रिकेवरील सूचनेप्रमाणे **न विसरता नमूद करावा.**
- ्या प्रश्नपुस्तिकेतील प्रत्येक प्रश्नाला ४ पर्यायी उत्तरे सुचिवली असून त्यांना १, २, ३ आणि ४ 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 बॉलपेन वापरावे, पेन्सिल वा शाईचे पेन वापरू नये.
- (5) सर्व प्रश्नांना समान गुण आहेत. यास्तव सर्व प्रश्नांची उत्तरे द्याबीत. घाईमुळे चुका होणार नाहीत याची दक्षता घेऊनच शक्य तितक्या वेगाने प्रश्न सोडवाबेत. क्रमाने प्रश्न सोडविणे श्रेयस्कर आहे पण **एखादा प्रश्न कठीण वाटल्यास त्यावर वेळ न घालविता पुढील प्रश्नांकडे वळावे.** अशा प्रकारे शेवटच्या प्रश्नापर्यंत पोहोचल्यानंतर वेळ शिल्लक राहिल्यास कठीण म्हणून वगळलेल्या प्रश्नांकडे परतणे सोईस्कर ठरेल.
- ं उत्तरपत्रिकेत एकदा नमूद केलेले उत्तर खोडता येणार नाही. नमूद केलेले उत्तर खोडून नव्याने उत्तर दिल्यास ते तपासले जाणार नाही.
- (७) 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 चार चुकीच्या उत्तरांसाठी एका प्रश्नाचे गुण वजा 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 प्रश्नपुरितकेतील काही आशय कोणत्याही स्वरूपात प्रत्यक्ष वा अप्रत्यक्षपणे कोणत्याही व्यक्तीस प्रविणे, 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 होईल्ट

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 व्यक्तीविरुद्ध उक्त अधिनियमानुसार कारवाई करण्यात येईल व दोषी व्यक्ती शिक्षेस पात्र होईल्ट

पुढील सूचना प्रश्नपुस्तिकेच्या अंतिम पृष्ठावर पहा

कच्या कामासाठी जागा /SPACE FOR ROUGH WORK

1.	A family uses 8 kW of power. Direct solar energy is incident on the horizontal surface at an average rate of 200 W per sq. meter. If 40% of it can be converted to useful electric power, how large an area is needed to supply 8 kW?												
	(1)	100 m <sup>2</sup>	(2)	200 m <sup>2</sup>	•••	-	50 m <sup>2</sup>	(4)	400 m <sup>2</sup>				
2.		en you are stur ants containin	0 -	ed ant, it c	auses i	itching	g and irritation.	This is	due to sting by				
	(1)	ammonium l	nydroxid	le	(2)	hyd	rochloric acid						
	(3)	sodium hydr	oxide		(4)	forn	nic acid						
3.	The	energy our pla	net Eart	h, receives	from t	the su	n per year is :						
	(1)	$7 \times 10^{17}$ Mwa	att		(2)	17×	10 <sup>7</sup> kwatt						
	(3)	7×10 <sup>17</sup> kwa	tt		(4)	17×	10 <sup>7</sup> Mwatt						
4.		ne superconduc vhich proportic		stance, the	numb	er of s	uper electrons o	depends	on temperature				
	(1)	Direct propo	rtion		(2)	Inve	erse proportion						
	(3)	Not in propo	rtion		(4)	Nor	ne of the above						
5.	Tot	test a hypothesi	s one fir	st needs :	<u> </u>								
	(1)	To make a co	nclusion	ı	(2)	То г	nake a reaction						
	(3)	To make a pr	rediction	ı	(4)	To r	nake an experi	ment					
6.		electric bulb ras		-		— W. И	Then it is opera	ted on 1	10 V, the power				
	(1)	50 W	(2)	100 W		(3)	25 W	(4)	75 W				
7.		Nobel Laureate			_	iod ge	ne, which contro	ols the b	iological rhythm				
	(1)	Fruit Flies	(2)	Plant		(3)	Leaves	(4)	None of these				
 8.	Wh	ich one word o	f the fol	lowing is c	orelate	ed wit	h 'Ayushman I	Bharat Y					
	(1)	Nutrition	(2)	Housing		(3)	Employment	(4)	Insurance				
		गामनी ज्या /८।			T 14701								

	Match the following:												
	(a)	Stock	holm	Conf	erenc	e (1972)	(I)	Climat	te change				
	(b)	Earth	Sum	mit (2	2002)		$(\Pi)$	Ozone	layer deple	tion			
	(c)	Paris	Agre	emen	t (201	5)	(III)	Huma	n Environm	ent			
	(d)	Viens	na Co	nfere	nce (1	1985)	(IV)	Sustai	nable develo	pment			
	Ans	wer O	ptions	s :									
		(a)	(b)	(c)	(d)								
	(1)	(III)	(IV)	(1)	(II)								
	(2)	(II)	(I)	(IV)	(III)								
	(3)	<b>(</b> 1)	(II)	(III)	(IV)								
	(4)	(IV)	(III)	(II)	(1)								
10.	Pick	Pick out the odd person from the following :											
	(1)	C.V.	Rama	n			(2)	J.J. The	omson				
	(3)	Steph	ien H	awkii	ng		(4)	Albert	Einstein				
11.	(a)		's targ	get to	eradi	cate tube	erculosis	from th	e country is		. 0		
11.	(a) (b) (c)	India A tar It wil	's targ get ha I have he sta	get to is bee e func	eradi n set ling o	cate tube to end tu	erculosis iberculos 12,000 c	from the sis globatories over correct	ne country is ally by 2030. er next three	by 2025	. 0		
11.	(a) (b) (c) Whi (1)	India A tar It wil ch of the only hwa M	's targget have he sta (a)	get to us bee e func temer Sarit	eradi n set ling c nts giv (2) Sagar	cate tube to end to of over ₹ ven abov (a), (b) r' literary	erculosis uberculos 12,000 c e is/are	from the sis global rore over correct (3)	ne country is ally by 2030. er next three? (a), (b), (c)	by 2025 years. (4)			
	(a) (b) (c) Whi (1)  'Visi	India A tar It wil ch of the only hwa Metya Ac	's target have he sta (a) ithak	get to us bee e func temen Sarit y Aw	eradi n set ling c nts giv (2) Sagar	cate tube to end to of over ₹ ven abov (a), (b) r' literary	erculosis uberculos 12,000 c e is/are	from the sis global glo	ne country is ally by 2030. er next three? (a), (b), (c)	by 2025 years. (4)	(b), (c)		
	(a) (b) (c) Whi (1)	India A tar It wil ch of the only hwa M	's target have he sta (a)  ithak radem	get to us bee e func temer Sarit y Aw	eradi n set ling c nts giv (2) Sagar	cate tube to end to of over ₹ ven abov (a), (b) r' literary	erculosis uberculos 12,000 c e is/are	from the sis global glo	ne country is ally by 2030. er next three? (a), (b), (c) en by sh Kuntal	by 2025 years. (4)	(b), (c)		
	(a) (b) (c) Whi (1)  Visi Sahi (1) (3)	India A tar It wil ch of th only hwa M tya Ac Jagac Gaye	's target had lest he star (a)  Tithak radem lish L	get to us bee e func temer Sarit y Aw achch	eradi n set ling c nts giv (2) Sagar vard 2	to end to to end to of over ₹ ven abov (a), (b) r' literary 2017.	erculosis uberculos 12,000 c e is/are criticisi (2) (4)	from the sis global rore over correct (3) (3) (4) Rames Shiv M	ne country is ally by 2030. er next three? (a), (b), (c) en by sh Kuntal	by 2025 years. (4)	(b), (c)		
12.	(a) (b) (c) Whi (1)  Visi Sahi (1) (3)	India A tar It wil ch of the only hwa M tya Ac Jagac Gaye	's target had lest he star (a)  Tithak radem lish L	get to us bee e func temer Sarit y Aw achch	eradi n set ling c nts giv (2) Sagar vard 2	to end to to end to of over ₹ ven abov (a), (b) r' literary 2017.	erculosis aberculos 12,000 c e is/are criticis (2) (4)	from the sis global rore over correct (3) (3) (4) Rames Shiv M	ne country is ally by 2030. er next three? (a), (b), (c) en by sh Kuntal Mehta - 2018':	by 2025 years. (4)	(b), (c)		
12.	(a) (b) (c) Whi (1)  Visi Sahi (1) (3)  Iden (1)	India A tar It will ch of the only hwa M tya Ac Jagad Gaye atify the Best	's target had leave the star (a)  ithak radem (lish Leave tri Sare misse	get to us bee e func temer Sarit y Aw achch raf match	eradi n set ling c nts giv (2) Sagar vard 2	to end to to end to of over ₹ ven abov (a), (b) r' literary 2017.	erculosis aberculos 12,000 c e is/are criticis (2) (4) Gary	from the sis global rore over correct (3) (2) (3) Rames Shiv Mands	ne country is ally by 2030. er next three? (a), (b), (c) en by sh Kuntal Mehta - 2018': an	by 2025 years. (4)	(b), (c)		
12.	(a) (b) (c) Whi (1)  'Visi Sahi (1) (3)	India A tar It will ch of the only hwa Matya Act Jagac Gaye attify the Best	's target had leave the star (a)  ithak radem lish Leader Sar Actor	get to us bee e func temer Sarit y Aw achch raf match	eradi n set ling c nts giv (2) Sagar vard 2 nani	to end to to end to of over ₹ ven abov (a), (b) r' literary 2017. air about	erculosis aberculos aberculos 12,000 c e is/are criticis (2) (4) Gary Guil	from the sis global rore over correct (3) (4) (5) (6) (6) (7) (7) (7) (7) (7) (7) (7) (7) (7) (7	ne country is ally by 2030. er next three? (a), (b), (c) en by sh Kuntal Mehta - 2018': an	by 2025 years. (4)	(b), (c)		
12.	(a) (b) (c) Whi (1)  Visi Sahi (1) (3)  Iden (1) (2)	India A tar It will ch of the only hwa M tya Ac Jagac Gaye stify the Best Best	's target have he sta (a) ithak radem lish Latri Sare miss	get to as bee e func temer  Sarit y Aw achcl raf  match	eradi n set ling c nts giv (2) Sagar vard 2 nani	cate tube to end to of over ₹ ven abov (a), (b) r' literary 2017. air about	erculosis aberculos 12,000 c e is/are criticis (2) (4) Gary Guil Fran	from the sis global rore over correct (3) (4) (5) (6) (6) (7) (7) (7) (7) (7) (7) (7) (7) (7) (7	ne country is ally by 2030. er next three? (a), (b), (c) en by sh Kuntal Mehta - 2018': an lel Toro Dormand	by 2025 years. (4)	(b), (c)		
12.	(a) (b) (c) Whi (1)  Visi Sahi (1) (3)  Iden (1) (2) (3) (4)	India A tar It will ch of the only hwa Matya Acc Jagac Gaye stify the Best of Best of	's target had leave the state (a)  ithak adem lish Leave miss Actor Direct supposesupp	get to as bee e func temer  Sarit y Aw achcl raf  match tor orting	eradi n set ling o nts giv (2) Sagar vard 2 nani ned pa	cate tube to end to of over ₹ ven abov (a), (b) r' literary 2017. air about	erculosis aberculos aberculos 12,000 c e is/are criticis (2) (4) Coscar Gary Guil Fran	from the sis global rore over correct (3) (2) (3) (4) (4) (4) (5) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4	ne country is ally by 2030. er next three? (a), (b), (c) en by sh Kuntal Mehta - 2018': an lel Toro Dormand	by 2025 years. (4)	(b), (c)		

- 15. The Government of India has approved a proposal to amend the Representation of People's Act to enable non-resident Indians to cast their vote. Which of the following statement/s is/are correct with regard to voting by NRI?
  - (a) Currently an NRI has to be registered as a voter in his constituency and has to come to India to cast his vote.
  - (b) If the act is amended to include proxy voting an NRI can appoint only a person already enrolled in the same constituency in which the overseas elector is enrolled as proxy.
  - (c) The proxy so appointed can vote for the NRI for all elections till the proxy is revoked by the NRI.
  - (d) The proxy appointed would be proxy only for a single election.

**Answer Options:** 

(1) All the above

(2) (a), (b), (d)

(3) (b) and (d)

(4) (d) only

- **16.** Recently Andhra Pradesh claiming for special category status state. Which among the following features is/are considered for granting the special category status to a state?
  - (a) Hilly and difficult terrain
  - (b) Low population density
  - (c) Presence of sizeable tribal population
  - (d) Stategic location along international borders
  - (e) Economic and infrastructural backwardness
  - (f) Non viable nature of state finances

**Answer Options:** 

(1) only (a)

(2) (a), (c), (d)

(3) (a), (c), (d), (e)

(4) all of the above

- 17. What is 'Gagan Shakti 2018'?
  - (1) Powerfull air to air ballistic missiles display.
  - (2) Biggest ever combat exercise by Indian Air Force.
  - (3) Joint military exercise by Indian and Chinese Armies and Air Forces.
  - (4) Space research competition to be held by ISRO in 2018.

18.

'Pradhan Mantri Adarsh Gram Yojana' is being implemented by Government of India

	101 .	•											
	(1)	achieving no ch	ild m	arriages, chi	ld lat	our a	nd liquor free v	illage.					
	(2)	achieving 100%	sanit	ation and ac	cess	to pot	table water and	toilets.					
	(3)	integrated dev population mor	_		edule	caste	es (SCs) major	ity villa	ages having SC				
	(4) integrated development of Schedule Castes and schedule tribes majority villages.												
 19.	Whi	ich one of the foll	 owinş	statements	abou	 ıt 'Sha	ıkti Sthala Solar	Park' i	s NOT correct ?				
	(1)	It is to be world	s lar	gest Solar Pa	ark.								
	(2)	It has a capacity	of 20	000 MW and	1 spre	ad ov	er across 13000	acres a	nd five villages.				
	(3)	It has been exec	uted	within a rec	ord ti	me of	two years with	n zero la	and acquisition.				
	(4)	It is located in 1	Nandi	urbar distric	t of N	/lahar	astra.		_				
<b>2</b> 0.	Whi	ich one of the foll	owin;	statements	are c	orrect							
	(a)	Capital of Jorda	_	<del>.</del>									
	(b)	De facto Capita			ty of	Rama	llah.						
	(c)	India has not re			_								
	(d)	as the capital of Israel.											
	Ans	Answer Options:											
	(1)	(a), (b), (c), (d)	(2)	(a), (b), (d)	)	(3)	(a), (c), (d)	(4)	(a), (b)				
21.	-	per Economic Sur 7-18.	vey o	of India 201	<b>7-18</b> ,	Forex	reserve is		US \$ billion in				
	(1)	300	(2)	409.4		(3)	500	<b>(4)</b>	200				
 22.		per RBI Annual F BC) given to Pric						justed 1	Net Bank Credit				
 22.								justed 1	Net Bank Credit 45%				
	(AN (1) Gov	BC) given to Pric	ority S (2)	ector by Pul 39.3%	blic S	(3)	Banks in 2016. 44.2%	(4)	45%				
	(AN (1) Gov	(BC) given to Price 29.4% ernment formed	ority S (2) a Surv	ector by Pul 39.3% ————————————————————————————————————	blic S	ector ] (3) ——— r 'Rui	Banks in 2016. 44.2%	(4) ly' in 19	45%				
	(AN (1) Gov Cha	BC) given to Price 29.4% ernment formed a irmanship of :	ority S (2) a Surv	ector by Pul 39.3% ————————————————————————————————————	tee fo	ector [ (3)  r 'Rui Vail	Banks in 2016. 44.2% —	(4) ly' in 19	45 %  951-52 under the				
	(AN (1) Gov Cha (a) (c)	BC) given to Price 29.4% rernment formed a irmanship of : Dr. Dhananjayr	(2) a Surv	ector by Pul 39.3% ————————————————————————————————————	tee fo	(3) r 'Rui Vail	Banks in 2016. 44.2%  ral Credit Supp	(4) ly' in 19	45 %  951-52 under the				
22.	(AN (1) Gov Cha (a) (c)	Price (BC) given to Price (29.4%)  The remains a series of the control of the con	(2) a Surv	ector by Pul 39.3% ————————————————————————————————————	tee fo	(3)  r 'Rur  Vail  Sahl  ct ?	Banks in 2016. 44.2%  ral Credit Supp	(4) ly' in 19	45 %  951-52 under the				

24.	As per Economic Survey of India, inflation i.e. (CPI = Consumer Price Index) average declined to in 2017-18.												
	(1)	3.3%	(2)	4%		(3)	3.8%	(4)	5.2%				
25.		per Annual Repo IDC, during th India's t	e perio	od 2016-17									
	(1)	20%	(2)	30%		(3)	48.32%	(4)	52.46%				
<del>-</del> 26.	"Cre	edit Authorizatio	n Sche	eme" comp	nenced	by Re	eserve Bank i	n :					
	(a)	Year - 1932			(b)	Year	- 1991						
	(c)	Year - 1935			(d)	Year	- 1965						
	Whi	ich of the option	is corr	ect ?									
	(1)	(d) only			(2)	(b) a	ınd (c) only						
	(3)	(d), (c) and (b)			(4)	(a), (	(b) and (d)						
 27.	By v Year	which Articles o	f the (	Constitutio	n Fina	nce C	ommission is	formed	after every Five				
	(a)	Article 288			(b)	Arti	cle 280						
	(c)	Article 161			(d)	Arti	cle 16						
	Which of the above option given is correct?												
	(1)	(a), (b) and (c)			(2)	(a),	(b) and (d)						
	(3)	(a), (d), (b)			(4)	(b) c	only						
28.	Eco	nomic Survey of	India	2017-18 pi	redicts		growth	rate of C	GDP in <b>2</b> 018-19.				
	(1)	8 to 10%	(2)	9 to 10%		(3)	7 to 7.5%	(4)	6 to 6.5%				
 29.	Whi	ich of the followi	ng stra	ategy was	adopte	 d in 31	<sup>rd</sup> Five Year F	 lan ?					
	(a)	Imbalance Gro	wth		(b)	Con	clusive Balan	ce					
	(c)	Balanced Grov	vth		(d)	Bala	nced Econom	uc Growt	h				
	Whi	ich of the stateme	ent giv	en above i	is/are d	orrect	t ?						
	(1)	(b) and (c) only	y		(2)	(c) o	only						
	(3)	(a), (b) and (c)	only		(4)	(d),	(c), (b)						
		<del>-</del>											

30. "Cash Credit Loans" means :

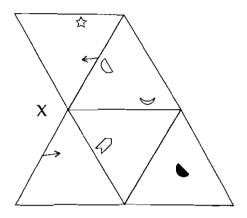
(a) Specific amount can be taken for stipulated period.								
	(b)	Company shares,	promissory n	otes, ar	e accepted as loa	ın securities	).	
	(c)	Loan issued to cu	stomer on cas	sh.				
	(d)	Cash transfered t	o customer ac	count.				
	Whi	ich of the statement	is above give	n corre	ct ?			
	(1)	(a) and (b) only		(2)	(a) only			
	(3)	(a), (b) and (c)		(4)	(a), (c) and (d)			
31.	num num	re are two examinants of students in the of students in the lents in the lents in room A?	each room is	same.	f 40 students are	e sent from	B to A, then the	
	(1)	80	(2) 200		<b>(3) 1</b> 00	(4)	120	
	(a) (b)	Some golds are your Some yellows are swer Options:  Both (a) and (b) follows.	golds.	(2) (4)	None follows. Only (a) follow	<i>r</i> s.		
33.	Whi	ich set of paper pie	ces can be arr	anged t	o get a rectangle	?	,	
	(1)			(2)				
	(3)			(4)				

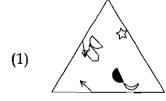
34. Select the option for blanks (i) and (ii) respectively in the way that best completes the text.

Some argue that profiting from terrible suffering by publishing photographic books about natural disasters is shameless \_\_(i)\_\_\_, but perhaps the practice has the \_\_(ii)\_\_\_ effect of helping us to appreciate the humanity of people living far away.

- (1) presumptuous, sedulous.
- (2) profiteering, salutary.
- (3) idolatrous, spacious.
- (4) presumptuous, salutary.

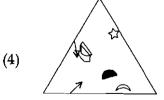
35. Study accompanying transparent sheet of paper X and select the fold that is made by using it.





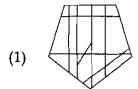






#### 36. Select the option in which figure T is embedded?

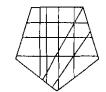




(2)



(3)





- 37. Read the statements carefully and answer the question.
  - Ramesh goes on Monday for Music class.
  - He goes on Wednesday to Mathematics class. (b)
  - (c) He goes to History class, which is immediate next day of Mathematics class.
  - (d) On Friday, there will be no Literature class.
  - On Tuesday, he goes to Sports class. (e)

If everyday he goes to only one class, and Sunday is free for him. Then on which day he is free, other than Sunday?

- (1)Monday
- (2)Thursday
- Saturday
- **(4)** Friday

#### 38. Study statements given below and select most appropriate description of these.

- Women are calling out their abusers, gathering strength from each other and this has cataclysmic effect - studio bosses, editors, senators, chefs, men once thought to be masters of the universe, have been toppled.
- Time magazine declared 2017 the year of "silence-breakers". (b)
- (c) Sexual harassment is not only about sex, it is about inequality at work, about erasing women's worth, her mind, her competencies and reducing her to a body.

## **Answer Options:**

- (a) and (c) are both true reasons and because of these declaration (b) is valid. (1)
- (a) is the only true reasons for true assertion (b) and because of the reason the assertion (2)is true.
- (b) is the only true reason for only true assertion (a) and because of the reason the (3)assertion is true.
- (4)Though all the three statements (a), (b) and (c) are true but they cannot be categorized as assertions and reasons.

39.	Select the <b>correct</b> option for replacing the question mark if relation between 1 <sup>st</sup> and 2 <sup>nd</sup> term is identical to that of between 3 <sup>rd</sup> and 4 <sup>th</sup> .											
		ATJG : NPYEX										
	(1)	XEUJXW	(2)	WCRFSQ		(3)	YEFUVJ	(4)	XWYVXK			
40.		j is twice of Te twice the age							the age of Tejas st persons.			
	(1)	Ramesh and	Tejas		(2)	Ram	esh and Gan	esh				
	(3)	Ramesh and	Akhilesl	n	(4)	Non	e of the abov	e				
41.	B go	ot 20% marks l	ess than	A. What per	cent :	mark	s did A get n	nore than	В?			
	(1)	12%	(2)	80%		(3)	25%	(4)	20%			
42.		ct the number the team mus 1565		se of not mor			nen ?	men and (4)	11 women such 2256			
43.	heat be f easi need	nz, the substan t. Electricity m ree and in a fl ly flows throug	ces that a leans a flouid state ghometals all and e	are good condow of electrone. Since there	ductons. F are nduc	ors of or car free of tion o	electricity ar rrying electric electrons in la of heat throug	e also goo c charge, e arge prope h the subs	ded by Widman od conductors of electrons need to ortion electricity tance, molecules itly in its crystal			
			-conduct	or of elect <mark>ri</mark> ci	ty. I	t is n	oted by scier		lakh atoms of it FR that it shows			
	Sele	ct most impor	tant info	rmation that	these	two	paragraphs {	give.				
	(1)	Information	in the 1 <sup>st</sup>	paragraph is	cons	istent	with informa	ation in th	e 2 <sup>nd</sup> paragraph.			
	(2)	Information	in the 1 <sup>st</sup>	paragraph is r	not re	lated	to the inform	ation of th	e 2 <sup>nd</sup> paragraph.			

Both the paragraphs inform that all metals are good conductors of heat and electricity.

Though electricity flows easily through metals due to free electrons bismuth is anomaly

(3)

(4)

to this rule.

**44.** Four friends A, B, C and D are having 58 story books in all. One of them has 13 books, another one has 14 books, third one has 15 books and fourth one has 16 books not necessarily in order of their names. If number of books owned by B is less than C then select the statement that is not necessarily true.

### Answer Options:

- (1) A and B together have at least 27 books.
- (2) B and D together have at least 27 books.
- (3) C and D together have at least 28 books.
- (4) A and C together have at least 28 books.
- **45.** Shama visited the ice cream parlour that offered discount on four ice cream flavours: saffron, litchi, chiku and almond. Shama wants to have a cone with two scoops of different flavours. Parlour owner gave her the list of following rule that she should use while deciding a pair of flavours.
  - You can have saffron only if you have litchi.
  - You can have either litchi or almond, but not both.
  - If you didn't have chiku then you would have almond.
  - You would not have almond if and only if you had saffron.
  - You would have either saffron or chiku.

Select the pair/s that she can choose.

- (a) Saffron and chiku.
- (b) Litchi and almond.
- (c) Saffron and litchi.
- (d) Litchi and chiku.

#### Answer Options:

(1) Only (a) and (b)

(2) Only (b) and (c)

(3) Only (c) and (d)

- (4) Only (d) and (a)
- 46. Prediction is problematic in earth sciences. Most geological events are complex and hard to repeat exactly. Unlike experimental science, such as physics and chemistry, the issues scientists deal with cannot be tested under controlled laboratory conditions. All science is an observational science. It is not possible to go back in time. It is necessary to look at the present through the past, by studying great earthquakes of the past, to learn from them. Select the conclusion that is **not** correct on the basis of above information.
  - (1) Physical and chemical events are comparatively simple and therefore can be repeated.
  - (2) Scientist can predict causes in case of sciences other than geology as it is possible for them to test predictions in controlled laboratory conditions.
  - (3) Events like earthquakes are difficult to study as these cannot be repeated in controlled conditions.
  - (4) It is not possible to observe earthquake like events by going back in time and therefore they cannot be studied.

<b>47</b> .	Ani saw 16 webs on one bush. There were 5 more flies than as many webs and some
	spiders on these webs. If total numbers of legs counted on all these webs are 182 then
	select the option that indicates total number of insects present there.

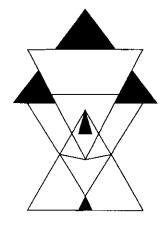
- (1) 30
- (2) 22
- (3) 26
- (4) 28

48. Between 6.50 a.m. to 10.50 a.m., how many times, minute hand will cross hour hand?

- (1) 4
- (2) 5
- (3) 3
- (4) 2
- **49.** It is paradoxical that despite having low income percentage of people having vitamin D deficiency is negligible than that of people having high income.

Select most appropriate explanation with respect to the above paradox.

- (1) People with low income can afford kind of food that is rich in particular vitamin.
- (2) People with high income don't get enough time for eating food as they are busy.
- (3) People with low income have to work hard and this helps them to remain fit.
- (4) Main culprit related to vitamin deficiency is the life style of the persons.
- 50. How many overlapping triangles are visible in the following image?



- (1) 13
- (2) 14
- (3) 15
- (4) 16

(a)	Sect	ion					-	• •			
(a)					Provision						
(~)	81			(i)	Carriage (	of lugg	gage ii	in private service vehicles.			
(b)	82			(ii)	Carriage (	of anin	nals ii	in goods vehicles.			
(c)	83			(iii)	Carriage	of pers	onal	luggage in stage carriages.			
(d)	84			(iv)			rtain	goods in stage or contract carr	iage		
Ans	wer C	ption	ıs:								
	( <b>a</b> )	(b)	(c)	<b>(d)</b>							
(1)	(i)	(ii)	(iii)	(iv)							
(2)	(ii)	(iii)	(iv)	(i)							
(3)	(iv)	(iii)	(ii)	(i)							
(4)	(iii)	(ii)	(i)	(iv)							
Whe	ether u	ısing v	vehicle	e in u	nsafe condi	ition is	an of	ffence under Motor Vehicles Act, 19	988 7		
(1)	No.			(2)	Not sure		(3)	Certainly not (4) Yes			
Whi	ich one	e of th	ne foll	owing	statement	s is/ar	e <b>cor</b> ı	rect ?			
(a)	Nati	onal I	Highw	ay Aı	uthority car	n do si	urvey	y, develop and Manage Highways.			
(b)	Nati	onal I	Highw	ay Ai	athority car	n estat	olish I	Hotels and Motels near the highwa	ys.		
(c)	Nati	onal H	lighw	ay Au	thority may	y inves	t its Fı	und in securities of Central Governn	nent		
Ans	wer C	ptior	ıs :								
(1)	Only	/ (a) a	nd (c)	are c	orrect	(2)	All	(a), (b), (c) are correct			
(3)	Only	/ (a) is	s corre	ect		(4)	Onl	ly (a) and (b) are correct			
Whi	ch one	e of th	ne foll	owing	statement	s is/ar	e con	rrect ?			
(a)				an be	connected	l with	the u	use of vehicle, its enough to impose	e No		
(b)	The	Term	"Thir	d Pari	y" also cov	vers the	e Pilli	ion riders of a Motor Vehicle.			
(c)			-	-	ne Claim T	ribuna	l unde	ler section 140 of the Motor Vehicle	Act		
Ans	wer C	ptior	ıs :								
(1)	All (	(a), (b)	and	(c) are	correct	(2)	Onl	ly (b) and (c) are correct			
(3)	Only	/ (a) a	ind (c)	are c	orrect	(4)	Onl	ly (a) is correct			
	(d) Ans (1) (2) (3) (4) Who (1) Whi (a) (b) (c) Ans (b) (c) Ans (b) (c) (1) (1)	(d) 84  Answer C  (a)  (1) (i)  (2) (ii)  (3) (iv)  (4) (iii)  Whether u  (1) No  Which one  (a) Nati  (b) Nati  (c) Nati  Answer C  (1) Only  (3) Only  Which one  (a) If the Faul  (b) The  (c) An of 1988  Answer C  (1) All (6)	(d) 84  Answer Option  (a) (b)  (1) (i) (ii) (2) (ii) (iii) (3) (iv) (iii) (4) (iii) (ii)  Whether using v (1) No  Which one of the (a) National Head (b) National Head (c) National Head (a) Only (a) is  Which one of the (a) If the accident Liab (b) The Term (c) An order (1988 is an Answer Option (1) All (a), (b)	(d) 84  Answer Options:  (a) (b) (c)  (1) (i) (ii) (iii) (iii)  (2) (ii) (iii) (iii) (iv)  (3) (iv) (iii) (ii) (i)  (4) (iii) (ii) (i)  Whether using vehicle (1) No.  Which one of the folle (a) National Highw (b) National Highw (c) National Highw (c) National Highw Answer Options:  (1) Only (a) and (c) (3) Only (a) is correct  Which one of the folle (a) If the accident of Fault Liability.  (b) The Term "Thir (c) An order passed 1988 is an awar  Answer Options:  (1) All (a), (b) and	Answer Options:  (a) (b) (c) (d)  (1) (i) (ii) (iii) (iv)  (2) (ii) (iii) (ii) (iv) (i)  (3) (iv) (iii) (ii) (i) (iv)  (4) (iii) (ii) (i) (i) (iv)  Whether using vehicle in unce (1) No (2)  Which one of the following (a) National Highway Auce (b) National Highway Auce (c) National Highway Auce (c) National Highway Auce (d) National Highway Auce (e) National Highway Auce (f) Only (a) and (c) are considered (f) Only (a) is correct  Which one of the following (a) If the accident can be a Fault Liability.  (b) The Term "Third Part (c) An order passed by the 1988 is an award.  Answer Options:  (1) All (a), (b) and (c) are (c) are (c).	(d) 84 (iv) Carriage prohibite  Answer Options:  (a) (b) (c) (d)  (1) (i) (ii) (iii) (iv) (iv)  (2) (ii) (iii) (iv) (i) (i)  (3) (iv) (iii) (ii) (i) (iv)  Whether using vehicle in unsafe conduction (1) No (2) Not sure  Which one of the following statement (a) National Highway Authority can (b) National Highway Authority can (c) National Highway Authority may Answer Options:  (1) Only (a) and (c) are correct  (3) Only (a) is correct  Which one of the following statement (a) If the accident can be connected Fault Liability.  (b) The Term "Third Party" also conducted for the following statement (a) If the accident can be connected for the following statement (a) If the accident can be connected for the following statement (a) If the accident can be connected for the following statement (a) If the accident can be connected for the following statement (a) If the accident can be connected for the following statement (b) The Term "Third Party" also conducted for the following statement (b) The Term "Third Party" also conducted for the following statement (c) An order passed by the Claim Tays8 is an award.  Answer Options:  (1) All (a), (b) and (c) are correct	(d) 84 (iv) Carriage of cerprohibited.  Answer Options:  (a) (b) (c) (d) (1) (i) (ii) (iii) (iv) (2) (ii) (iii) (ii) (i) (i) (3) (iv) (iii) (ii) (i) (iv)  Whether using vehicle in unsafe condition is (1) No (2) Not sure  Which one of the following statements is/ar (a) National Highway Authority can do st (b) National Highway Authority can estable (c) National Highway Authority may invest Answer Options: (1) Only (a) and (c) are correct (2) (3) Only (a) is correct (4)  Which one of the following statements is/ar (a) If the accident can be connected with Fault Liability. (b) The Term "Third Party" also covers the (c) An order passed by the Claim Tribuna 1988 is an award.  Answer Options: (1) All (a), (b) and (c) are correct (2)	(d) 84 (iv) Carriage of certain prohibited.  Answer Options:  (a) (b) (c) (d)  (1) (i) (ii) (iii) (iv)  (2) (ii) (iii) (ii) (i)  (3) (iv) (iii) (i) (i)  (4) (iii) (ii) (i) (iv)  Whether using vehicle in unsafe condition is an off (1) No. (2) Not sure (3)  Which one of the following statements is/are condition is an off (a) National Highway Authority can do survey (b) National Highway Authority can establish (c) National Highway Authority may invest its Foundation is an off (a) National Highway Authority can establish (b) National Highway Authority can establish (c) National Highway Authority may invest its Foundation is an off (a) National Highway Authority can establish (b) National Highway Authority can establish (c) National Highway Authority may invest its Foundation in the National Highway Authority may invest its Foundation in the National Highway Authority may invest its Foundation in the National Highway Authority may invest its Foundation in the National Highway Authority may invest its Foundation in the National Highway Authority may invest its Foundation in the National Highway Authority may invest its Foundation in the National Highway Authority may invest its Foundation in the National Highway Authority may invest its Foundation in the National Highway Authority may invest its Foundation in the National Highway Authority may invest its Foundation in the National Highway Authority may invest its Foundation in the National Highway Authority may invest its Foundation in the National Highway Authority and survey (b) National Highway Authority may invest its Foundation in the National Highway Authority in the National Highway Authority can do survey (b) National Highway Authority can do survey (b) National Highway Authority can establish (c) National Highway Authority can establish	(d) 84 (iv) Carriage of certain goods in stage or contract carr prohibited.  Answer Options:  (a) (b) (c) (d) (1) (i) (ii) (iii) (iii) (iv) (2) (ii) (iii) (iv) (i) (ii) (3) (iv) (iii) (ii) (i) (iv)  Whether using vehicle in unsafe condition is an offence under Motor Vehicles Act, 19 (1) No. (2) Not sure (3) Certainly not (4) Yes  Which one of the following statements is/are correct?  (a) National Highway Authority can do survey, develop and Manage Highways. (b) National Highway Authority can establish Hotels and Motels near the highway (c) National Highway Authority may invest its Fund in securities of Central Governmanswer Options: (1) Only (a) and (c) are correct (2) All (a), (b), (c) are correct  Which one of the following statements is/are correct?  (a) If the accident can be connected with the use of vehicle, its enough to impose Fault Liability. (b) The Term "Third Party" also covers the Pillion riders of a Motor Vehicle. (c) An order passed by the Claim Tribunal under section 140 of the Motor Vehicle 1988 is an award.  Answer Options: (1) All (a), (b) and (c) are correct (2) Only (b) and (c) are correct		

Find	oddr	nan o	ut reg	ardin	g Motor Vel	nicles	Act,	1988.		
<b>(1)</b>	Layi	ng do	wn ol	stand	dards for the	e com	ponei	nts and parts of	motor	vehicles.
(2)	Stan	dards	for a	nti-po	llution cont	rol de	vices.	•		
(3)	Con	structi	on of	Road	and its star	ndard	s.			
(4)	Con	stituti	on of	Road	Safety Cou	ncils.				
				ral M	otor Vehicl	le Rul	les, 1	989 deals with	'Drivi	ng Schools and
(1)	Rule	22		(2)	Rule 23		(3)	Rule 24	(4)	Rule 25
'Fac	tory′ i	s defi	ned u	nder 1	which clause	e of se	 ection	2 of Factories	Act, 194	8 ?
(1)	-			(2)	Clause k		(3)	Clause 1	(4)	Clause m
		ction (	of the	Moto	or Vehicle A	Act, 1	988, 1	made a provisio	on for g	grant of driving
(1)	Sect	ion 6		(2)	Section 9		(3)	Section 10	(4)	Section 12
			wing 1	egard	ling class lai	els u	nder ]	Rule 137 of the	Central	Motor Vehicles
	Тур	es of	class	label		Back	grou	nd colour of cl	ass labe	el
(a)	Exp	losive				(i)	Red			
(b)	Infla	ammal	ble ga	ses		(ii)	Ora	nge		
(c)	Pois	on (to	xic) g	ases		(iii)	Yell	ow		
(d)	Org	anic p	eroxi	les		(iv)	Whi	ite		
Ans	wer (	Optior	is:							
	(a)	(b)	(c)	(d)						
(1)	(i)	(ii)	(iii)	(iv)						
(2)	(ii)	(iii)	(iv)	(i)						
(3)	(ii)	(i)	(iv)	(iii)						
(4)	(i)	(iii)	(ii)	(iv)						
					ay specify th	ne life	of <b>m</b> c	otor vehicle by n	otificati	on in the official
		1· o o	otu							
(1)	Pub	lic Saf	cty							
			-	d obj	ectives of th	e Mo	tor Ve	ehicles Act, 198	8	
(1)	Con	venier	nce an	•	ectives of th			ehicles Act, 198	8	
	(1) (2) (3) (4)  Whitestal (1)  'Fac (1)  Whitestal (1)  Mater (1)  Mater (1)  (a) (b) (c) (d)  Ans  (1) (2) (3) (4)	(1) Layi (2) Stan (3) Con (4) Con  Which Restablishm (1) Rule  'Factory' i (1) Clau  Which section ? (1) Sect  Match the Rules, 198  Typ (a) Exp. (b) Inflat (c) Pois (d) Org.  Answer (a) (1) (i) (2) (ii) (3) (ii) (4) (i)	(1) Laying do (2) Standards (3) Constructive (4) Constitution Which Rule of establishment'? (1) Rule 22  'Factory' is define (1) Clause j  Which section of licence? (1) Section 6  Match the follow Rules, 1989.  Types of (a) Explosive (b) Inflammal (c) Poison (to (d) Organic p Answer Option (a) (b) (1) (i) (ii) (2) (ii) (iii) (3) (ii) (i) (4) (i) (iii)	(1) Laying down of (2) Standards for as (3) Construction of (4) Constitution of Which Rule of Centestablishment'? (1) Rule 22  'Factory' is defined us (1) Clause j  Which section of the licence? (1) Section 6  Match the following reflection of the licence? (1) Section 6  Match the following reflection of the licence? (2) Section 6  Match the following reflection of the licence? (3) Explosive (4) Inflammable gas (5) Poison (toxic) gas (6) Organic peroxical contents of the licence? (1) (2) (3) (4) (4) (5) (6) (6) (7) (6) (7) (6) (7) (7) (7) (7) (7) (7) (7) (7) (7) (7	(1) Laying down of stand (2) Standards for anti-po (3) Construction of Road (4) Constitution of Road (4) Constitution of Road Which Rule of Central Mestablishment'? (1) Rule 22 (2)  'Factory' is defined under (1) Clause j (2)  Which section of the Motelicence? (1) Section 6 (2)  Match the following regard Rules, 1989.  Types of class label (a) Explosive (b) Inflammable gases (c) Poison (toxic) gases (d) Organic peroxides  Answer Options:  (a) (b) (c) (d) (1) (i) (ii) (iii) (iv) (2) (ii) (iii) (iv) (i) (3) (ii) (i) (iv) (iii) (4) (i) (iii) (iv) (iii)	(1) Laying down of standards for the (2) Standards for anti-pollution conte (3) Construction of Road and its stan (4) Constitution of Road Safety County Which Rule of Central Motor Vehicle establishment'? (1) Rule 22 (2) Rule 23  'Factory' is defined under which clause (1) Clause j (2) Clause k  Which section of the Motor Vehicle Alicence? (1) Section 6 (2) Section 9  Match the following regarding class late Rules, 1989.  Types of class label (a) Explosive (b) Inflammable gases (c) Poison (toxic) gases (d) Organic peroxides  Answer Options:  (a) (b) (c) (d) (1) (i) (ii) (iii) (iv) (2) (ii) (iii) (iv) (i) (3) (ii) (i) (iv) (iii) (4) (i) (iii) (iv) (iii) (4) (i) (iii) (iv) (iii)	(1) Laying down of standards for the com (2) Standards for anti-pollution control de (3) Construction of Road and its standard (4) Constitution of Road Safety Councils.  Which Rule of Central Motor Vehicle Rule establishment'? (1) Rule 22 (2) Rule 23  'Factory' is defined under which clause of se (1) Clause j (2) Clause k  Which section of the Motor Vehicle Act, 1st licence? (1) Section 6 (2) Section 9  Match the following regarding class labels us Rules, 1989.  Types of class label Back (a) Explosive (i) (b) Inflammable gases (ii) (c) Poison (toxic) gases (iii) (d) Organic peroxides (iv)  Answer Options:  (a) (b) (c) (d) (1) (i) (ii) (iii) (iv) (2) (ii) (iii) (iv) (i) (3) (ii) (i) (iv) (iii) (4) (i) (iii) (iii) (iv)	(1) Laying down of standards for the component (2) Standards for anti-pollution control devices (3) Construction of Road and its standards. (4) Constitution of Road Safety Councils.  Which Rule of Central Motor Vehicle Rules, 1 establishment'? (1) Rule 22 (2) Rule 23 (3)  'Factory' is defined under which clause of section (1) Clause j (2) Clause k (3)  Which section of the Motor Vehicle Act, 1988, r licence? (1) Section 6 (2) Section 9 (3)  Match the following regarding class labels under Rules, 1989.  Types of class label Backgrou (a) Explosive (i) Red (b) Inflammable gases (ii) Ora (c) Poison (toxic) gases (iii) Yell (d) Organic peroxides (iv) Whith Answer Options:  (a) (b) (c) (d) (1) (i) (ii) (iii) (iv) (i) (3) (ii) (ii) (iv) (iii) (4) (i) (iii) (iii) (iv)	(2) Standards for anti-pollution control devices. (3) Construction of Road and its standards. (4) Constitution of Road Safety Councils.  Which Rule of Central Motor Vehicle Rules, 1989 deals with establishment'? (1) Rule 22 (2) Rule 23 (3) Rule 24  'Factory' is defined under which clause of section 2 of Factories (1) Clause j (2) Clause k (3) Clause l  Which section of the Motor Vehicle Act, 1988, made a provision licence? (1) Section 6 (2) Section 9 (3) Section 10  Match the following regarding class labels under Rule 137 of the Rules, 1989.  Types of class label (a) Explosive (i) Red (b) Inflammable gases (ii) Orange (c) Poison (toxic) gases (iii) Yellow (d) Organic peroxides (iv) White  Answer Options:  (a) (b) (c) (d) (1) (i) (ii) (iii) (iv) (2) (ii) (iii) (iv) (iii) (3) (ii) (i) (iv) (iii) (4) (i) (iii) (iii) (iv)	(1) Laying down of standards for the components and parts of motor (2) Standards for anti-pollution control devices. (3) Construction of Road and its standards. (4) Constitution of Road Safety Councils.  Which Rule of Central Motor Vehicle Rules, 1989 deals with 'Driving establishment'? (1) Rule 22 (2) Rule 23 (3) Rule 24 (4)  'Factory' is defined under which clause of section 2 of Factories Act, 1944 (1) Clause j (2) Clause k (3) Clause l (4)  Which section of the Motor Vehicle Act, 1988, made a provision for glicence? (1) Section 6 (2) Section 9 (3) Section 10 (4)  Match the following regarding class labels under Rule 137 of the Central Rules, 1989.  Types of class label Background colour of class label (a) Explosive (i) Red (b) Inflammable gases (ii) Orange (c) Poison (toxic) gases (iii) Yellow (d) Organic peroxides (iv) White  Answer Options:  (a) (b) (c) (d) (1) (i) (ii) (iii) (iv) (2) (ii) (iii) (iv) (iii)

61.	Match the following regarding Annexures to the Central Motor Vehicles Rules, 1989												
		Ann	exure	2				Titl	e				
	(a)	IV			(i)	Limit value driven vehi		exha	ust gas capacit	y appli	cable for diesel		
	(b)	IV -	Н		(ii)	Liquefied P	etrol	eum (	Gas (LPG)				
	(c)	IV -	L		(iii)	Specification of reference fuel for CNG							
	(d)	IV -	N		(iv)	Specification	n of	comn	nercial gasoline	fuel			
	` '	wer C	ption	ıs :	` '	•			O				
		(a)	(b)	(c)	(d)								
	(1)	(i)	(iii)	(ii)	(iv)								
	(2)	(ii)	(i)	(iv)	(iii)								
	(3)	(i)	(ii)	(iii)	(iv)								
	(4)	(iv)	(i)	(iii)	(ii)								
62.						drugs does n	ot cr	imina	alise the driving	of Moto	or Vehicle under		
	(1) Cocaine						(2)	Chlo	oral Hydrate				
	(3)	Nitr	azapa	ım			(4)	Nor	e of the above				
63.	The	work	done	in a fi	ree ex	pansion proc	ess i	s :					
	(1)	Zero	)		(2)	Minimum		(3)	Maximum	(4)	Negative		
<u> </u>		eat cor peratu				ction of heat f		will a	lways be normal	to a su	rface of constant		
	(1)	adia	<b>b</b> atic		(2)	isobaric		(3)	isothermal	(4)	isometric		
<del></del>						transmissibi ral freq.) is :	lity i	if the	non-dimensiona	ıl frequ	ency ratio $\omega/\omega_{\rm r}$		
	(1)	less	than ,	$\sqrt{2}$			(2)	grea	iter than $\sqrt{2}$				
	(3)	less	than	$\frac{1}{\sqrt{2}}$			(4)	grea	iter than $\frac{1}{\sqrt{2}}$				
<del></del>	A sy	/stem	comp	rising	a sing	gle phase is ca	alled	a:					
	(1)	close	ed sys	tem			(2)	ope	n system				
	(3)	isola	ated sy	stem			(4)	hom	nogeneous system	m			
कळ	 या का	मासाठी	 ' जागा	 /SPA	CE F	———— Or rough '	 Wof	—— RK					

67. Failure theory used for brittle materials is :

	(1) maximum normal stress				(2)	maxi	aximum shear stress						
	(3)	maximum strain e	ener	gy	<b>(4)</b>	maxi	mum distorti	on energy	/				
68.	Rati	o of heat conduction	n ra	te to the rat	te of t	herma	ıl energy stora	ige in a s	olid is called as				
	(1)	Biot Number			(2)	Ecke	rt Number						
	(3)	Bond Number			<b>(4)</b>	Four	ier Number						
69.		relation between el en by :	lastic	modulus	(E), sł	near m	nodulus (G) aı	nd Poisso	n's ration (γ) is				
	(1)	$\frac{E}{2G} = \gamma $ (	(2)	$\frac{E}{2G} = 1 - \gamma$		(3)	$\frac{E}{2G} = 1 + \gamma$	(4)	$\frac{G}{2E} = 1 - \gamma$				
70.	Gea	 r strength is improv	ed b	 y:									
	(1)	Increasing pressu	re aı	ngle	(2)	Decr	easing pressu	re angle					
	(3)	Constant pressure	e ang	gle	(4)	Non	e of the above						
	If n	umber of members '	'm' a	and number	r of jo	ints a	re 'j' then for 1	edundan	t frame :				
	(1)	$m > 2j - 3 \qquad ($	(2)	m = 2j -	3	(3)	m < 2j - 3	<b>(4)</b>	m > 2j				
72.	The Stanton number may also be defined as the ratio of :												
	(1)	Nusselt number a	nd I	Reynold's n	umbe	r .							
	(2)	Nusselt number a	ınd t	he product	of Re	ynold	's number and	d Prandtl	number				
	(3)	Nusselt number a	ınd l	Prandtl nur	nber				•				
	(4)	Product of Reyno	ld's	number an	d Pra	ndtl ni	umber and Ni	ısselt nuı	nber				
73.		body is in equilib							n each force is				
	(1)	=	(2)	cos	-	(3)	tan	(4)	sec				
74.	fron	imply supported be n zero at each end ar ne beam is equal to	nd 'V	_				•	•				
	(1)	$\frac{\mathrm{WL}^2}{8}$	(2)	$\frac{WL^2}{12}$		(3)	$\frac{WL^2}{24}$	(4)	WL <sup>2</sup>				
	या का	 मासाठी जागा /SPAC	 Е FC	DR ROUGH	 [ WO]	 RK							

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75.	Violation of second law of thermodynamics is easily detected with help of a property called												
	(1)	enthalpy	(2)	quality		(3)	entropy	(4)	quantity				
76.	The	failure of the j	ower sy	stem, the sys	stem	is alw	ays so design	ed that :					
	(1)	The driver is	not able	to steer the	vehic	le wit	h effort.						
	(2)	The driver is	able to	steer the veh	icle n	nanua	lly with incre	ased effor	·t.				
	(3)	The driver is	able to	steer the veh	icle n	nanua	lly with decre	ased effo	rt.				
	(4)	None of the	above.										
77.	In modern automotive practice, the front wheels are usually provided with zero or a small camber angle of upto 1° positive for:												
	(1)	to pulls the v	ehicle or	n side									
	(2)												
	(3)	(3) to reduce rolling resistance											
	(4)	the tendency	of camb	er wheel to	retur	n in s	traight positic	n after tu	ırn				
78.	The objective of streamlining is to shape the vehicle body in a way that will smooth out the flow of air and thereby reduce the :												
	(1)	weight of ve	hicle		(2)	lift o	coefficient		•				
	(3)	drag coeffici	ent		(4)	spac	e for passeng	er accom	modation				
<del></del> 79.	The amount of fuel delivered by the injector depends upon the :												
	(1)	size of inject	or nozzle	2		-	•						
	(2)	pressure pus	hing fue	l through the	e inje	ctor							
	(3)	length of tim	e the inj	ector is open	ı ,								
	(4)	all the above	-	-									
 80.	— The	venturi in the	carburet	tor causes th	ne :								
	(1)	increase of a	ir velocit	y	(2)	decr	ease of air vel	locity					
	(3)	decrease of f		•	(4)		e of these	•					
 81.	Con	nmonly used a	ntifreeze	solution in	auton	nobile	coolant is:						
	(1)	Carbon disu			(2)	Glyd							
	(3)	Ammonium	-		(4)	•	n 12						
	(~)				(-/		··· ==						

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82.	The	The component of the torque converter that drives the oil is the:												
	(1)	turbine	(2)	impeller		(3)	free wheel	(4)	stator					
83.		Self protection for the occupants of passenger car which of the following criteria apply to all types of impact?												
	(a)	(a) efficient conversion of K.E. into work of deformation												
	(b)	low occupant deceleration												
	(c)	high occupant deceleration												
	(d)	d) maintenance of survival compartment												
	Ans	wer Options	:											
	(1)	(a) only			(2)	(a) a	and (b) only							
	(3)	(a), (b) and (	(c) only		(4)	(a),	(b) and (d) only	•						
84.	The	The cross members of the frame must stand against rocking movements of sprung axles:												
	(1)													
	(2)	Torsional deflection												
	(3)	Horizontal bending deflection												
	(4)	Only front frame deflection												
85.	The	The need of power assisted steering system for vehicle is to :												
	(1)	minimizes drive fatigue by lightening the action of the steering.												
	(2)	increase the required number of steering wheel turns from lock to lock.												
	(3)	reduce the production cost of vehicle.												
	(4)	provide dire	ectional st	ability to th	e veh	icle o	n straight roads	•						
86.	Due	Due to which of the following reasons the petrol engines are usually not supercharged?												
	(1)	Drop in volumetric efficiency												
	(2)	Increased knocking												
	(3)	Increased specific fuel consumption												
	(4)	Power loss												
								_						

L11			20		A							
87.	Am	Among the following which benefits from Variable Valve Timing (VVT) concept:										
	(a) optimize engine performance on all running speeds											
	(b)	(b) improve fuel economy										
	(c)	reduce harmful exhaust emission										
	(d)	(d) increase oil consumption										
	Ans	wer Options :										
	(1)	(a) only	(2)	(a) and (b) only								
	(3)	(a), (b) and (c) only	(4) (a), (b) and (d) only									
88.	Whi	Which of the following should be advantageous to integral body construction?										
	(a)	(a) stiffer structure for the same weight										
	(b)	) improved passenger accommodation										
	(c)	safer in collision										
	(d)	economical to manufacture										
	Ans	Answer Options:										
	(1)	(a) only	(2)	(a) and (b) only								
	(3)	(a), (b) and (c) only	(4)	(a), (b) and (d) only								
<del></del> 89.	The principle of hydride storage is based on the propensity of certain materials to assimilate hydrogen under:											
	(1)	Non-pressure to form a hydrogen compound										
	(2)	2) Pressure to form a hydrogen compound										
	(3)	Non-cryogenic system										
	(4)	Heating system to form a hydrog	en co	mpound								
90.	Dur whe	ŭ ŭ	the	wheels, resulting in oversteering condi	tion							

- (1) the slip angles of the front wheels are greater than those of the rear wheels.
- (2) the slip angles of the both front and rear wheels are same.
- the slip angles of the both front and rear wheels are zero. (3)
- the slip angles of the front wheels are less than those of the rear wheels. (4)

91.	Match the following:												
	(a)	Profi	ng		(i)	Ind	Induced by projected components in the air stream						
	(b)	Indu	lrag		(ii)	Co	Cooling and ventilation system						
	(c)	) Parasitic drag					Fui	Function of shape					
	(d)	Inter	rnal fl	.ow		(iv)	Sig	Significance of lifting force					
	Answer Options:												
		(a)	(b)	(c)	<b>(d</b> )								
	(1)	(iii)	(iv)	(i)	(ii)								
	(2)	(iv)	(i)	(ii)	(iii)								
	(3)	(i)	(ii)	(iii)	(iv)								
	<b>(4)</b>	(ii)	(iii)	(iv)	(i)								
92.	Independent suspension which ultimately reduces the 'yre scrub and increases tyre life due to:												
	(a)	low unsprung mass											
	(b)	steering geometry is altered											
	(c)	low sprung mass											
	(d)	high	high unsprung mass										
	Ans	Answer Options:											
	(1)	(a) c	nly					(2)	(a) and (b) only				
	(3)	(a), (	d (c) (	only			(4)	(b), (c) and (d) only					
93.	The engine ability to adjust the compression ratio according to operating condition results in :												
	(a)	The engine run with leaner mixture.											
	(b)	Imp	rove t	he en	gine ti	herma	al eff	iciency.					
	(c)	Not	lead (	to ove	r heat	ing aı	nd kr	nocking	at higher engine loa <b>d</b> s.				
	(d)	Mor	e fuel	effici	ent en	gine o	of gro	eater ou	ıtput.				
	Ans	wer C	Option	ns:									
	(1)	(a) c	only					(2)	(a) and (b) only				
	(3)	(a), (b) and (c) only						(4)	(a), (b) and (d) only				

94.	The	The roll centre height of the front and rear suspension linkage lie somewhere :											
	(1)	between the ground level and	the heig	tht of the wheel hubs									
	(2)	below the ground level											
	(3)	above the height of the wheel	hubs										
	(4)	ahead or behind the wheel hubs											
95.	For the same maximum pressure and temperature of Otto, Diesel and Dual cycles :												
	(1)	(1) The compression ratio will be same											
	(2)	The heat supplied will be sam	ıe.										
	(3)	Air standard η will be the san	ne										
	(4)	The heat rejected will be same											
96.	Among the following which benefits are achieved from the pressurized engine cooling system?												
	(a)	It allows the coolant to circulate at higher temperatures.											
	(b)	It allows the checking the coolant level of a hot engine.											
	(c)	It compensates from the reduction in atmospheric pressure when motoring in high altitude mountainous region.											
	(d)	This system allows the radiator to be reduced in size.											
	Ans	Answer Options:											
	(1)	(a) only	(2)	(a) and (b) only									
	(3)	(a), (b) and (c) only	(4)	(a), (c) and (d) only									
97.		The greater protection of passenger offered by an integral construction body is achieved mainly by designing the structure under :											
	(1)	ABS - Anti Break System	(2)	Passive safety									
	(3)	Active safety	(4)	Front bumper system									
— कच्च	 या का	मासाठी जागा /SPACE FOR ROUG	GH WOI										

98.	Tapered leaf spring becoming increasingly popular compared to conventional leaf spring:											
	(a)	Ligh	t wei	ght								
	(b)	Abse	ence o	of sque	eaking							
	(c)	The stresses are lower and more uniform										
	(d)	Occupy more space										
	Answer Options:											
	(1)	Only	/ (a)			(2)	(a) and (b) only					
	(3)	(a), (	d (c) c	only	(4)	(a), (b) and (d) only						
<del>-</del> 99.	Mate	ch the	follo	wing :								
	(a)	Fully	y auto	matic	transmission var	riable	(i)	Providing a higher ratio than that by the final drive.				
	(b)		tinuoi em (C	-	ariable transmissi	ion	(ü)	To minimize passenger's comfort and reduce shock loading.				
	(c)	Ove	r driv	e gear	s		(iii)	It minimizes driver's fatigue				
	(d) Torsional spring drive						(iv)	The expanding pulley and belt system.				
	Answer Options:											
		(a)	(b)	(c)	(d)							
	(1)	(iii)	(iv)	(i)	(ii)							
	(2)	(i)	(iii)	(ii)	(iv)							
	(3)	(iv)	(ii)	(iii)	(i)							
	(4)	(i)	(ii)	(iv)	(iii)							
100.	Loca	ation c	of the	ventil	ating air flow ove	er car	body	must be at :				
	(1)	low pressure zone over the car body										
	(2)	high pressure zone over the car body										
	(3)	(3) high velocity zone over the car body										

(4) low pressure zone under the car body

# सूचना — (पृष्ठ 1 वरून पुढे...)

- (8) प्रश्नपुस्तिकेमध्ये विहित केलेल्या विशिष्ट जागीच कच्चे काम (रफ वर्क) करावे. प्रश्नपुस्तिकेव्यितिरिक्त 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/किंवा 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 परीक्षाकक्षाबाहेर जाण्यापूर्वी उमेदवाराने आपल्या उत्तरपत्रिकेचा भाग-1 समवेक्षकाकडे न विसरता परत करणे आवश्यक आहे.

नपना	ਧਾਰਕ
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		•	•				
Pick out the	e corre	ect word to fill in the blank :					
Q.No. 201.	I congratulate you your grand success.						
	(1)	for	(2)	at			
	(3)	on	(4)	about			
	ह्या प्रश्नाचे योग्य उत्तर ''(3) on'' असे आहे. त्यामुळे या प्रश्नाचे उत्तर ''(3)'' होईल. यास्तव खालीलप्र प्रश्न क्र. 201 समोरील उत्तर-क्रमांक ''③'' हे वर्तुळ पूर्णपणे छायांकित करून दाखविणे आवश्यक आहे.						
	$\overline{}$	0 0					

प्र. कृत. 201. (1) (2) (4)

अशा पद्धतीने प्रस्तुत प्रश्नपुस्तिकतील प्रत्येक प्रश्नाचा तुमचा उत्तरक्रमांक हा तुम्हाला स्वतंत्ररीत्या पुरविलेल्या उत्तरपत्रिकेवरील त्या त्या प्रश्नक्रमांकासमोरील संबंधित वर्तुळ पूर्णपणे छायांकित करून दाखवावा. ह्याकरिता फंक्त काळ्या शाईचे बॉल्प्येन वापरावे, पेन्सिल वा शाईचे पेन वापरू नये.

कच्या कामासाठी जागा /SPACE FOR ROUGH WORK