440. Sorus in Pteris is produced on	45
1) Ramenta2) Placenta 3) Rhizome 4) Stomium	
441. In <i>Pteris</i> , the multicellular hairs interspread with developing sporangia are called	
1) Ramenta 2) Scales	45
3) Paraphysis 4) Apophysis	
442. If the indusium orginates from the receptacle it is called	
1) True indusium 2) False indusium	
3) Open indusium 4) Closed indusium	
443. Which of the following is not related to sorus of Pteris	
1) Mixed sorus 2) Coenosorus	
3) Intra marginal and superficial sorus	
4) Covered by true indusium	LF
444. In Pteris fertile pinna differs from a normal pinna in	45
1) Shape and size 2) Type of venation	
3) Arrangement over rachis 4) Presence of sori	
445. Number of coenosori present on each fertile pinnule	
1) 1 2) 2 3) 4 4) Many	15
446. Group of sporangia is called	43
1) Ramenta 2) Sorus	
3) Placenta 4) False indusium	
447. The sori in Pteris are found on	
1.Lateral surface of sporophyll	45
2. Abaxial surface of Sporophyll	
3. Adaxial surface of sporophyll	
4. On the margins of leaves	
448. The sori bearing leaves of <i>Pteris</i> are known as	45
1. Aphylls2. Sporophylls	
3. Tropophylls 4. Sclerophylls	
449. The <i>Pteris</i> plant is	10
1. Homosporus 2. Heterosporous	46
3. May be Heterosporous (or) Homosporous	
4.Eusporous	10
450. Indusium of <i>Pteris</i> is	46
1. Outer false & Inner true 2. Outer & Inner false	
3. Outer true & Inner false 4. Outer and inner true	
LEVEL - II	
451. Assertion (A): The sorus in <i>Pteris</i> is said to be a	
mixed type.	
Reason(R): In <i>Pteris</i> an aggregation of old and	46
young sporangia without any regular arrangement	
is seen	
452. Assertion (A): <i>Pteris</i> is homosporous	
Reason (R): One kind of spores are produced in	
Pteris	46
453. Assertion (A): Sorus in <i>Pteris</i> is coenosorus	
Reason (R). The snorangia are ground in a	
continuous and linear type of sorus	
continuous and mour type of solus	

454.	Assertion (A): Sorus in P	<i>teris</i> is co	enosorus
	Reason (R): An aggrega sporangia without any reg in <i>Pteris</i> sorus	ution of o ular arran	ld and young gement is seen
455.	The sorus in <i>Pteris</i> is		
	1) Gradate sorus covered	by true ind	lusium
	2) Gradate sorus covered	by false in	dusium
	3) Mixed sorus covered by	v false ind	usium
	4) Mixed sorus covered b	y true indu	
	+) winked solus covered b	y u ue mai	ISIUIII
	STRUCTURE OF SI	PORANO	GIUM
LEV	EL - I		
456.	The cells of the annulus in	<i>Pteris</i> are	e thickened on
	1. Side walls		
	2. Inner tangential and rad	ial walls	
	3. Outer walls	4. Outer	and side walls
457.	The narrow and radially ele	ongated ce	lls in the jacket
	of sporangium of Pteris as	re called	C C
	1. Lip cells	2. Hypos	tomium
	3. Epistomium	4. Stomi	um
458.	Under normal circumstanc	es, number	r of reductional
	divisions necessary for the	formation	of full number
	of spores in the sporangiu	m of Pter	<i>is</i> is
	1.48 2.6	3.12	4.24
459.	The spore mother cells in t are surrounded by	the sporan	gium of <i>Pteris</i>
	1. Annulus	2. 1-2 lay	vered Tapetum
	3. Endothecium	4. Stomi	um
460.	In <i>Pteris</i> the no. of spor produced in each sporang	re mother ium are	cells usually
	1.12 2.24	3.32	4.64
461.	Which combination of ch (<i>Pteris</i>) Sporangium?	aracteristi	ics is for a fern
	1. Sessile, Unicellular, nor	n-jacketed	
	2. Stalked, Unicellular, New York, N	on jackete	d
	3. Sessile, Multicellular, n	on Jackete	ed
	4. Stalked, Multicellular, J	lacketed.	
462.	The ferns in which the ent	ire sporan	gium develops
	from a single superficial c	ell of the	sporophyll are
	known as		
	1. Leptosporangiate	2. Euspo	rangiate
	3. Unisporongiate	4. Mesos	sporongiate
463.	In Pteris meiosis occurs w	vhen	
	1. Spores are formed	2. Game	tes are formed

3. Prothallus is formed4. Sex organs are formed

	52	22.	Match	the f	ollov	wing	with	respec	t to	Pteris
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522.	Mate	h the f	ollowin	gwith	respect to Pteris	527
	List I List II					
	A) Prothallus			I.	Cordate	528
	B) Le	aflet		II	. Lanceolate	
	C) Sp	oore		Π	I. Triangular	
	D)Ca	apsule		N	7. Rectangular	
	, <u> </u>			V) Oval		529
		А	В	С	D	
	1)	IV	II	III	V	
	2)	V	Π	III	Ι	
	3)	Ι	Π	III	IV	
	4)	Ι	II	III	V	
523.	Mate	h the f	ollowin	g with	respect to Pteris	530
	List]	[L	istII	
	A) Prothallus			I.	Tapetum	
	B) Rhizome			II	. Dictyostele	
	C) Le	aflet		Π	I. Open dichotomous venation	531
	D) Sporangium			IV. Deep U shaped apic notch		
				V	Nucellus	LE
		А	В	С	D	532
	1)	IV	II	Ι	III	
	2)	IV	II	V	Ι	
	3)	IV	II	III	Ι	522
	4)	IV	II	III	V	555
524.	Mate	h the f	ollowin	g with	respect to Pteris	
	List-	[L	ist-II	
	A. Sporangium			l.	Leptosporangiate type	
	B. Gametangia			II. T	534	
	C. Paraphyses			II. N		
	D. Leaf				/. Frond	
		٨	P	C V.	D	
	1)	П	Ш	V	D IV	
	2)	I	III	IV	V	
	3)	T	III	V	, IV	535
	4)	I	III	Ī	IV	
	-		A NIT	НЕРІ	DIA	
LEV	EL -	r	4 1 1 1	1112181		
525	Numł	- per of c	percula	r cells i	n the antheridial jacket of	536
	Pteris is					

			UNI	T - I :: PTERIS
527.	Number of cells in a ja	cket of	f an anthe	ridium of <i>Pteris</i>
	1.3 2.6	3. 3	32	4.36
528.	The male gametes in	Pteris	are are	
	1. Non motile		2. Motile	, biflagellated
	3. Motile, Multiciliated	t		
	4. Non Motile, Multin	ucleat	e	
529.	The antheridial wall	of Pter	ris consis	sts of
	I. One ring cell and ty	wo op	ercular c	ells
	II.Two ring cells and	one o	percular	cell
	III. Three Opercular of	ells		
	1. I & II are correct 3. II alone is correct		2. II & I 4. I and	II are correct III are correct
530.	The following prot regarded single celled	hallus 1 stalk	cell of of anthe	<i>Pteris</i> can be ridium
	1) Cap cell		2) First r	ing cell
	3) Second ring cell		4) Basal	cell
531.	Number of antherozo <i>Pteris</i> is	oids fo	ormed in	antheridium of
	1) 48 2) 12	3)	36	4) 32
LEV	EL - II			
532.	In Pteris, antherdia ar	nd arch	negonia a	re respectively.
	1. Stalkless & stalke	d	2. Stalke	ed and Sessile
	3. Both Stalked		4. Both	Stalkless
533.	Antheridia of Pteris	are		
	1) Small, sessile, ova	1 2)	Small, se	ssile, globular
	3) Small, stalked, glo	bular		
	4) Large, sessile, glob	oular		
534.	First ring cell of anthe	ridiun	n is	
	1) In between basal of	cell an	d cap ce	11
	2) In between basal c	ell an	d second	ring cell
	3) In between cap ce	ll and	second r	ing cell
	4) Adjacent to cap ce	ell		-
535.	During the dehiscenc absorb water are	e of a	ntheridiu	m the cells that
	1) Jacket cells	2).	Androcy	rtes
	3) Both jacket cells a	and an	drocytes	
	4) Neither jacket cell	ls nor	androcy	tes
536.	There are 100 antheri 25% of androcytes degenerated. How expected to be formed	dia in s in e man ed?	the proth each ant y spern	allus of <i>Pteris</i> . heridium got natozoids are

	1. Two	2. Four	3. One	4. Many
526.	The ratio of	androcytes ar	nd spermatozo	oids in <i>Pteris</i> is
	1.2:1	2.1:2	3.1:1	4.1:many

1) 2400 2) 1200

3) 3200

4) 6400

	А	В	С	D	
1)	IV	III	Π	Ι	
2)	Ι	III	IV	V	
3)	Ι	III	Π	IV	
4)	Ι	III	Π	V	

550. Match the following with respect to Pteris

List	tΙ		L	ist II	
A)Archegonium			I.	Globular	
B)A	ntheridi	ium	II	. Oval shap	oed
C) (Capsule		Π	I. Uniseriat	e
D)Paraphyses			Ν	/.Flask sha	ped
			V	Pear shape	ed
	А	В	С	D	
1)	IV	Ι	Π	V	
2)	IV	Ι	Π	III	
3)	IV	V	Ι	III	
4)	Ι	IV	Π	III	

FERTILIZATION

LEVEL - I

551. In normal conditions, the number of archegonia fertilized on each prothallus is

1) Many 2) 1 3) 3 4) 4

552. The growth of prothallus of Pteris stops

1. After fertilization

- 2. After the formation of rhizoids
- 3. After the formation of embryo
- 4. After establishing to the soil
- 553. Which of the following is **not involved** in the fertilization of *Pteris*

3. Archegonia 4. Ciliated Sperm

LEVEL-II

554. Arrange the following events in a sequence in the life cycle of *Pteris*

I. Reduction division III. Prothallus	II. Formation of sporangium IV. Oogamy
1) III, I, IV, II	2) II, I, IV, III
3) I, II, III, IV	4) II, I, III, IV

EMBRYO

LEVEL - I

- 555. In Pteris, embryo develops from
 - 1) Spore 2) Zygote
 - 3) Spore mother cell 4) Egg
- 556. In *Pteris*, during the formation of sporophyte, the organ that grows first is
 - 1) Leaf 2) Rhizome 3) Root 4) Rhizoids

LEVEL - II

- 557. Calyptra is a structure
 - Formed by the venter of archegonium (Prothallus)
 Formed at the base of antheridia
 - 3. Formed in the centre of the capsule
 - 4.Formed at the base of leaves

LIFE CYCLE

LEVEL-I

558. Life cycle in Pteris is

1) Haploid	2) Diploid

- 3) Diplo-haplontic 4) Haplo-diplontic
- 559. Pteris shows
 - 1) Isomorphic alternation of generations
 - 2) Heteromorphic alternation of generations
 - 3) Both isomorphic and heteromorphic alternation of generations
 - 4) No alternation of generations

LEVEL - II

560. Assertion (A) : The life cycle of *Pteris* is called Diplohaplontic

Reason (R) : In *Pteris* there is heteromorphic alternation of diploid and haploid phases in which diploid phase is dominant.

- 561. In Pteris/Pteridophytes this statement is true
 - 1. Sporophyte is dependent upon Gametophyte
 - 2. Gametophyte is dependent on Sporophyte
 - 3. Both gametophyte and sporophyte are dependent upon each other.
 - 4. Gametophyte and sporophyte are independent of each other.