

KINGDOME PLANTAE

Biology F.Sc. Part-I

1.	The number of species of plants is:					
	(A)	340,000	(B)	350,000		
	(C)	30,000	(D)	370,000		
2.	Whi	ch of the following is not the c	harac	teristic of the plants?		
	(A)	Eukaryotic	(B)	Embryo		
	(C)	Motile	(D)	Cellulose		
3.	Mos	ses belongs to:				
	(A)	Bryopsida	(B)	Anthocerotae		
	(C)	Hepaticopsida	(D)	Lycopsida		
4.	Whi	ch of the followings is not a br	yoph	yte?		
	(A)	Bryopsida	(B)	Anthocerotae		
	(C)	Hepaticopsida	(D)	Lycopsida		
5.	Mar	chantia is an example of:				
	(A)	Bryopsida	(B)	Anthocerotae		
	(C)	Hepaticopsida	(D)	Lycopsida		
6.	Fun	aria is an example of:				
	(A)	Bryopsida	(B)	Anthocerotae		
	(C)	Hepaticopsida	(D)	Lycopsida		
7.	Whi	ch of the following plant is cal	led ar	nphibious plant?		
	(A)	Bryophytes	(B)	Embryophytes		
	(C)	Tracheophytes	(D)	None of the above		

8.	Whi	ch of the following is a male re	prod	uctive cell?
	(A)	Antheridia	(B)	Archegonia
	(C)	Anthrozooids	(D)	Oocyte
9.	Whi	ch of the following is a female	repro	oductive organ?
	(A)	Antheridia	(B)	Archegonia
	(C)	Anthrozooids	(D)	Oocyte
10.	Whi	ch of the following is a male re	prod	uctive cell?
	(A)	Antheridia	(B)	Archegonia
	(C)	Anthrozooids	(D)	Oocyte
11.	Thal	llus body is present in which o	f the t	following?
	(A)	Bryopsida	(B)	Anthocerotae
	(C)	Hepaticopsida	(D)	Lycopsida
12.	Whi	ch of the following is not a cha	racte	r of monocots:
	(A)	Petals 5 or multiple of five	(B)	Single cotyledon
	(C)	Scattered vascular bundle	(D)	Parallel venation
13.	Win	gs are involved in pollination i	n cas	e of:
	(A)	Ferns	(B)	Gymnosperms
	(C)	In only pinus	(D)	Angiosperms
14.	Mer	istematic tissues are present in	ı:	
	(A)	Bryopsida	(B)	Anthocerotae
	(C)	Hepaticopsida	(D)	None of the above
15.	Whi	ch of the following is a diploid	?	
	(A)	Antheridia	(B)	Oospore
	(C)	Anthrozooids	(D)	Oocyte
16.	The	vascular plants are:		
	(A)	Bryophytes	(B)	Embryophytes
	(C)	Tracheophytes	(D)	None of the above
17.	Whi	ch of the following are called c	lub n	nosses?
	(A)	Bryopsida	(B)	Psilopsida
	(C)	Sphenopsida	(D)	Lycopsida

18.	Whi	ch of the following is called wl	nisk f	ern?
	(A)	Filicineae	(B)	Psilopsida
	(C)	Sphenopsida	(D)	Lycopsida
19.	Whi	ch of the following is called ho	rse ta	il?
	(A)	Bryopsida	(B)	Psilopsida
	(C)	Sphenopsida	(D)	Lycopsida
20.	Whi	ch of the following are true fe	rns?	
	(A)	Filicineae	(B)	Psilopsida
	(C)	Sphenopsida	(D)	Lycopsida
21.	Rhiz	zome is present in:		
	(A)	Filicineae	(B)	Psilopsida
	(C)	Sphenopsida	(D)	Lycopsida
22.	Ligu	lles are present in:		
	(A)	Filicineae	(B)	Psilopsida
	(C)	Sphenopsida	(D)	Lycopsida
23.	Whi	ch of the following group of pl	lants l	have microphylls?
	(A)	Rhynia	(B)	Llycopodium
	(C)	Adiantum	(D)	Gingko
24.	The	unequal growth during evolut	ion o	f megaphylls is called:
	(A)	Overtopping	(B)	Planation
	(C)	Webbing	(D)	Fusion
25.	Whi	ch of the following plants are	also c	alled arthrophytes?
	(A)	Filicineae	(B)	Psilopsida
	(C)	Sphenopsida	(D)	Lycopsida
26.	Whi	ch of the following is a class?		
	(A)	Filicineae	(B)	Psilopsida
	(C)	Sphenopsida	(D)	Lycopsida
27.	Circ	inate venation is present in:		
	(A)	Rhynia	(B)	Lycopodium
	(C)	Adiantum	(D)	Gingko

28.	3. Fronds are present in:			
	(A)	Filicineae	(B)	Psilopsida
	(C)	Sphenopsida	(D)	Lycopsida
29.	Whi	ch of the following is called ma	aiden	hair fern?
	(A)	Rhynia	(B)	Lycopodium
	(C)	Adiantum	(D)	Gingko
30.	The	thin walled cells in the edge of	the c	apsule of adiantum are:
	(A)	Annulus	(B)	Stomium
	(C)	Indusium	(D)	Frond
31.	Oos	phere is formed in the:		
	(A)	Neck	(B)	Venter
	(C)	Antheridium	(D)	Capsule
32.	The	plants which produce seeds ar	e call	ed:
	(A)	Bryophytes	(B)	Pteridophytes
	(C)	Tracheophytes	(D)	Spermatophytes
33.	The	evolution of seed occurs in:		
	(A)	Triassic period	(B)	Carboniferous period
	(C)	Devonian period	(D)	Silurian period
34.	Mat	ch seed with one of the followi	ng:	
	(A)	Ovary	(B)	Ovule
	(C)	Stamen	(D)	Carpel
35.	Mat	ch megasporangium with one	of the	following:
	(A)	Ovary	(B)	Ovule
	(C)	Stamen	(D)	Carpel
36.	Mat	ch male gametophytes with on	e of t	he followings:
	(A)	Stamen	(B)	Pollen
	(C)	Carpel	(D)	Ovary
37.	Whi	ch of the following structures	is abs	ent in gymnosperms?
	(A)	Pollen	(B)	Archegonium
	(C)	Pollen tube	(D)	Ovary

38.	The female gametophyte of angiosperms are composed of:			
	(A)	3 cells	(B)	5 cells
	(C)	7 cells	(D)	9 cells
39.	The	endosperm forms:		
	(A)	Testa	(B)	Tegmen
	(C)	Store food	(D)	All of the above
40.	The	number of petals in monocots	is:	
	(A)	4,5 or multiple	(B)	3 or multiple
	(C)	4 or multiple	(D)	5 or multiple
41.	The	number of species of family R	osace	ae is:
	(A)	1000	(B)	15000
	(C)	2000	(D)	3000
42.		ich of the following are not aceae?	the c	haracteristics of the leaves of family
	(A)	Alternate	(B)	Adnate
	(C)	Ex-stipulate	(D)	Compound
43.	Whi	ich of the following is the char	acteri	stic of the flower of the Rosaceae?
	(A)	Unisexual	(B)	Perigynous
	(C)	Actinomorphic	(D)	Sessile
44.	Whi	ich of the following is not the p	lacen	tation of the family Rosaceae?
	(A)	Basal	(B)	Axile
	(C)	Marginal	(D)	All of the above
45.	Nun	nber of petals in family Rosace	eae ar	e:
	(A)	3	(B)	4
	(C)	5	(D)	6
46.	Whi	ich of the following fruits does	not b	elong to family Rosaceae?
	(A)	Apple	(B)	Mango
	(C)	Apricot	(D)	Peach
47.	The	branches of which tree are use	ed as	walking sticks:
	(A)	Pyrus	(B)	Crataegus
	(C)	Rose	(D)	Almond

48.	Whi	ch of the following trees is used for making tobacco pipes?			
	(A)	Pyrus	(B)	Crataegus	
	(C)	Rose	(D)	Almond	
49.	Cap	sicum frutenscens is a:			
	(A)	Potato	(B)	Tobacco	
	(C)	Tomato	(D)	Red pepper	
50.	Ova	ry is obliquely placed in which	of th	e following families?	
	(A)	Rosaceae	(B)	Solanaceae	
	(C)	Poaceae	(D)	Fabaceae	
51.	Vita	min C is present in the fruit of	f:		
	(A)	Physalis	(B)	Solanum tubersum	
	(C)	Capsicum annum	(D)	Lysopersicum	
52.	Whi	ch of the following plants is ri	ch in	atropine?	
	(A)	Petunia	(B)	Datura	
	(C)	Solanum nigrum	(D)	Physalis	
53.	Whi	ch of the following is an ornan	nenta	l plant?	
	(A)	Petunia	(B)	Datura	
	(C)	Solanum nigrum	(D)	Physalis	
54.	The	number of species of family fa	bacea	ae are:	
	(A)	3000	(B)	6000	
	(C)	9000	(D)	12000	
55.	Cice	er arietinum is:			
	(A)	Sweet pea	(B)	Peanut	
	(C)	Chick pea	(D)	Shisham	
56.	Whi	ch of the following is not the fl	loral (character of the family Fabaceae?	
	(A)	Bisexual	(B)	Actinomorphic	
	(C)	Bracteate	(D)	Perigynous	
57.	Whi	ch of the following are the ant	erior	most petals?	
	(A)	Standard	(B)	Wing	
	(C)	Keel	(D)	None of the above	

58.	The fruit of family Fabaceae is a:				
	(A)	Nut	(B)	Pod	
	(C)	Cryopsis	(D)	None of the above	
60.	Whi	ch of the followings is a fodder	r crop	?	
	(A)	Butea	(B)	Medicago	
	(C)	Dalbergia	(D)	Clitoria	
61.	Veg	etable oil is obtained from:			
	(A)	Hypogea	(B)	Medicago	
	(C)	Dalbergia	(D)	Clitoria	
62.	The	seed of plant used as "ratti":			
	(A)	Hypogea	(B)	Medicago	
	(C)	Dalbergia	(D)	Clitoria	
63.	The	number of species of Caesalpi	niace	ae present in Pakistan is:	
	(A)	300	(B)	500	
	(C)	40	(D)	60	
64.	The	biological name of Kachnar is	:		
	(A)	Tamarindus indica	(B)	Cassia fistula	
	(C)	Bauhinia varigata	(D)	Cassia senna	
65.	The	biological name of amaltas is:			
	(A)	Tamarindus indica	(B)	Cassia fistula	
	(C)	Bauhinia varigata	(D)	Cassia senna	
66.	Whi	ch of the following inflorescenc	e is no	ot present in family Caesalpiniaceae?	
	(A)	Panicle	(B)	Spike	
	(C)	Terminal raceme	(D)	Helicoids	
67.	Nun	nber of calyx in family Caesalp	oiniac	eae is:	
	(A)	3	(B)	4	
	(C)	5	(D)	6	
68.	Nun	nber of corolla in family Caesa	lpini	aceae are:	
	(A)	5	(B)	10	
	(C)	15	(D)	20	

69.	The	leaves of which of following pl	lants	are used for curing ring worms?
	(A)	Tamarindus indica	(B)	Cassia fistula
	(C)	Bauhinia varigata	(D)	Cassia senna
70.	Whi	ch of the followings is used in	tanni	ng?
	(A)	Acacia nilotica	(B)	Cassia fistula
	(C)	Bauhinia varigata	(D)	Cassia senna
71.	The	total number of species of Mir	nosac	ceae is:
	(A)	2000	(B)	2200
	(C)	2800	(D)	2600
72.	Whi	ch of the following plants is "t	ouch	me not"?
	(A)	Acacia nilotica	(B)	Albizzia lebbek
	(C)	Mimosa podica	(D)	Prosopis cineraria
73.	Whi	ch of the followings plants is t	he "k	ikar":
	(A)	Acacia nilotica	(B)	Albizzia lebbek
	(C)	Mimosa podica	(D)	Prosopis cineraria
74.	Whi	ch of the following is the inflo	rescei	nce of family Mimosaceae?
	(A)	Corymb	(B)	Cymose
	(C)	Panicle	(D)	Spike
75.	Whi	ch the followings is the floral o	chara	cter of family Mimosaceae?
	(A)	Monosexual	(B)	Actinomorphic
	(C)	Hypogynous	(D)	Perigynous
76.	The	placentation in family Mimosa	aceae	is:
	(A)	Axile	(B)	Basal
	(C)	Marginal	(D)	All of the above
77.	Gun	n is obtained form:		
	(A)	Acacia nilotica	(B)	Albizzia lebbek
	(C)	Mimosa podica	(D)	Prosopid cineraria
78.	The	dye "katha" is obtained from:		
	(A)	Acacia nilotica	(B)	Albizzia lebbek
	(C)	Acacia catechu	(D)	Prosopis cineraria

79.	The leaves of plants used as blood purifier:			
	(A)	Acacia nilotica	(B)	Albizzia lebbek
	(C)	Mimosa podica	(D)	Prosopis cineraria
80.	The	number of genera of the famil	ly Gra	amineae is:
	(A)	300	(B)	500
	(C)	600	(D)	700
81.	The	biological name of rice is:		
	(A)	Triticum vulgare	(B)	Avena sativa
	(C)	Oryaz sativa	(D)	Bambusa
82.	The	biological name of oat is:		
	(A)	Triticum vulgare	(B)	Avena sativa
	(C)	Oryaz sativa	(D)	Bambusa
83.	The	grasses are:		
	(A)	Annual herbs	(B)	Annual tree
	(C)	Perennial tree	(D)	None of the above
84.	The	spiklets are arranged on slend	ler ax	is called:
	(A)	Thalamus	(B)	Pedicel
	(C)	Rachilla	(D)	Glumes
85.	Hair	r-like structures present on spi	ikelet	are called:
	(A)	Lemma	(B)	Palae
	(C)	Awn	(D)	Glumes
86.	The	bracts which cover the spikele	ets ar	e called:
	(A)	Lemma	(B)	Palae
	(C)	Awn	(D)	Glumes
87.	Whi	ch of the following is the char	acteri	stic of the flower of family Poaceae?
	(A)	Large	(B)	Pedicillate
	(C)	Complete	(D)	Hypogynous
88.	The	perianth of the family Poacea	e is ca	alled:
	(A)	Lemma	(B)	Palae
	(C)	Lodicules	(D)	Glumes

89.	The	fruit if family poaceae is a:				
	(A)	Nut	(B)	Caryopsis		
	(C)	Pod	(D)	Legume		
90.	Whi	ich of the following is an ornan	nenta	l plant?		
	(A)	Zea mays	(B)	Festuca		
	(C)	Oryza	(D)	Avena		
91.	Sug	ar is obtained form:				
	(A)	Zea mays	(B)	Avena sativa		
	(C)	Saccharum munja	(D)	Saccharum officinarum		
92.	Rop	es are formed form:				
	(A)	Zea mays	(B)	Avena sativa		
	(C)	Saccharum munja	(D)	Saccharum officinarum		
93.		The phylogenetic system of classification is a system in which the organ are classified on the basis of:				
	(A)	External similarities	(B)	Internal similarities		
	(C)	Similarity in origin	(D)	Similarity in organization		
94.	King	gdom plantae mainly includes:				
	(A)	Eukaryotic autotrophic, multic	ellula	r, non-motile organisms		
	(B)	Develop from embryos				
	(C)	Have cell wall outer to cell me	mbraı	ne. This cell wall is made up cellulose.		
	(D)	They have vascular tissue (xyle	em an	d phloem)		
95.	Whi	ich of the following divisions of	f Trac	cheophyta is called Whisk ferns:		
	(A)	Psilopsida	(B)	Lycopsida		
	(C)	Sphenopsida	(D)	Pteropsida		
96.	Whi	ich of the followings is not the	chara	cter of the bryophytes?		
	(A)	Vascular system absent				
	(B)	Gametophyte dominant				
	(C)	Gametophyte attached to spore	phyte			
	(D)	Homosporous				

of seed plants that contains the micro-gametophyte or male gametophyte including the gametes is called a pollen grain.

How pollen or male gamete of Pinus is transferred to female gametophyte? Due to wings pollen can float in air for a longer period of time and can travel long distances. The gymnosperms have successfully evolved a totally new mechanism of transfer of male gamete to the female gametophyte through air.

What are characteristics of megasporangium and female cone of Pinus?

The megasporangium is located on female cone. Each female cone is composed of large number of spirally arranged scales which are woody in texture. At the base of each scale is an ovule. An ovule is actually a megasporangium which is protected by one additional layer called integument. Each megasporangium has a single diploid megaspore mother cell. The megaspore mother cell divides by meosis to produce four haploid megaspores.

How pollination and fertilization occur in Pinus?

During pollination the pollen land directly on the ovules. Only some pollens are able to form pollen tubes through which male gametes are transferred to the embryo sac for fertilization purpose. More than one egg can be fertilized to form several zygotes, but one zygote usually survives to form a single embryo.

What happens after fertilization in Pinus?

After fertilization the ovule becomes the seed. The seed now contains an embryo along with some stored food material. The seed upon germination shall give rise to new sporophyte plant.

What are angiosperms?

Angiosperms are the flowering vascular plants. The term Angiosperms literally means "enclosed seeded". In these plants fertile leaves bearing ovules are folded and joined at the margins to form ovaries in which seeds are enclosed. The ovary after fertilization is changed into a fruit.

What is a flower?

A flower is a modified shoot which consists of a pedicel, a thalamus or torus, and floral leaves i.e., sepals, petals, stamens and carpels.

What type of androecium is present in Solanaceae?

5 stamens, free but inserted on the corolla tube (epipetalous), rarely stamens 4 and didynamous (arranged in two whorls of 2 each).

What type of gynoecium is found in Potato family?

A compound pistil of 2 united carpels ovary obliquely placed. Superior, bilocular, or imperfectly 4-locular by false septum.

What is Placentation and fruit of Solanaceae?

The placenetation is axile. The fruit is a berry or capsule.

What is the economic Importance of potato and tomato?

Potato: The most important plant in the family is Solanum tuberosum (Potato white or Irish Potato). In Ireland peoples are completely dependent on Potatoes.

Tomato: Lycopersicum esculentum (tomato), the favourite home garden vegetable, was once believed to be poisonous.

What is the economic importance of Brinjal, Capsicum and Physalis? Solanum melangena (egg plant or brinjal) is food plant.

Capsicum: The fruit of Capsicum annum and Capsicum frutescens are rich in vitamin C and A, are used as condiment.

Physalis: Pysalis (Ground-Cherry) produces an edible fruit enclosed in a bladder like persistent calyx, the husk, giving the name husk tomatoes.

What is the economic importance of Nicotiana tobacum, Atropa belladonna and Datura.

Nicotiana tobacum is of great commercial value as its leaves are dried and made into tobacco, which is used in making cigarettes. Atropa belladonna and Datura, are rich in atropine and daturine (powerful alkaloids) respectively, are used medicinally

What are Ornamental plants of family Solanaceae?

Many, plants are cultivated in the gardens for their beautiful flowers, these include Petunia, Nicotiana, Cestrum and Solanum etc.

Differentiate between essential and non-essential parts of flower?

The sepals and petals are non-essential or non-reproductive parts, and stamens and carpels are the essential or reproductive parts of the flower.

What is the role of sepals and petals in flower?

The sepals and the petals protect the stamens and the carpels. They also attract insects for pollination. When the pollination is over, the sepals usually and the petals always fall off.

What are stamen and carpel?

The stamens and carpels are the reproductive parts of flower. The stamen consists of a filament and an anther. The anther contains microspore mother cell which produces haploid microspores or pollen grains through meiosis.

What is male gametophyte of angiosperms?

Pollen grain germinates to form a pollen tube. The microspore divides by mitotic divisions to form two male gametes and the tube nucleus. At this stage of development, the pollen grain is called male gametophyte, having two male gametes.

What is female gametophyte?

The megaspore present in ovule develops into female gametophyte. This consists of seven cells only. One of these cells is the egg or oosphere.

What is double fertilization?

In angiosperms, the fusion of one male gamete with the egg and the other male gamete with the secondary (fusion) nucleus is called double fertilization.

What is endosperm?

Endosperm is a triploid nucleus formed by the fusion of one gamete and secondary nucleus in angiosperms.

What is the advantage (importance) of double fertilization? or What role double fertilization plays in the storage of food?

It is an important evolutionary advancement in which food storage in fertilized ovule is made only on fertilization i.e., formation of zygote. This actually helps the plant to economize its food resources.

Name the subclasses of class Angiospermae.

The class Angiospermae is divided into two sub-classes: Monocotyledonae and Dicotyledonae.

Distinguish between subclasses Monocotyledonae and Dicotyledonae or differentiate between dicotyledonous (dicots) and monocotyledonous (monocots).

In Monocotyledonae or monocots, the embryo has one cotyledon. The leaf venation is parallel and the floral leaves are usually in three's or multiple of three. The primary root is replaced by an adventitious root system. While in Dicotyledonae or dicots, the embryo has two cotyledons. The leaf venation is in the form of a netwrok (reticulate) and floral leaves are in two's, five's or multiples of these numbers. The primary root persists as a tap root that develops lateral roots.

What are familiar plants of family Rosaceae (rose family) or Enlist names of four genera of family Rosaceae.

Pyrus (pear); Rosa (rose); Malus (apple); Fragaria (strawberry) etc.

What are important fruits of family Rosaceae (rose family).

Important fruits are Apple, Pear, Almond, Apricot, and Strawberry etc.

How many genera and species of Rosaceae are known?

A family about 100 genera and 2000 species, distributed over most of the earth, and abundant in eastern Asia, North America and Europe. In Pakistan 29 genera and about 213 species are reported.

Give vegetative characters of Rose family.

Trees, shrubs and herbs. Herbaceous or woody, branched. Stem of the shrubby plants usually have spines. Alternate, rarely opposite, simple or compound, with paired

97.	The	bryophytes are also called am	phibi	ous plants because:				
	(A)	Their shape is amphibian like	(B)	They live in water				
	(C)	They cannot live without water	(D)	The live both in water and land				
98.	The	heteromorphic alternation of	gener	ation are those in which:				
	(A)	Gametophyte and sporophyte are similar in structure and size						
	(B)	Gametophyte and sporophyte are dissimilar structure but similar in size						
	(C)	Gametophyte and sporophye are similar in structure but dissimilar in size						
	(D)	Gametophyte and sporophyte a	re dis	similar in both structure and size				
99.		ich of the followings is no ophytes?	t the	e characteristic of gametophyte of				
	(A)	Haploid	(B)	Dominant				
	(C)	Dependent	(D)	Free living generation				
100.	Whi	ich of the followings is the char	acter	istic of the sporophyte of bryophytes?				
	(A)	Haploid	(B)	Dominant				
	(C)	Dependent	(D)	Free living generation				
101.	Whi	ich stage of the followings is ha	ploid	in bryophytes?				
	(A)	Sporophyte	(B)	Gametophyte				
	(C)	Zygote	(D)	Embryo				
102.	Whi	ich of the followings is not the	adapt	ation of bryophytes on land?				
	(A)	They have compact body						
	(B)	They have pores in their body						
	(C)	They transfer their sperms by water						
	(D)	They have rhizoids						
103.	Prot	tonema stage is produced in:						
	(A)	Hepaticeae	(B)	Musci				
	(C)	Anthocerotae	(D)	Pteridophytes				
104.	Ant	hocerotae are slightly advance	d tha	n the Musci and Hepaticeae due to:				
	(A)	Sporophyte is dominant over g	ameto	pphyte				
	(B)	Gametophyte is dominant over	sapro	pphyte				
	(C)	Sporophyte has chloroplast						
	(D)	Gametophyte has chloroplast						

105.		believed that the alternation in		generation inc	crease t	he cha	ance of	
	(A)	Gametes and spores at the sam	e time	;				
	(B)	Gametes						
	(C)	Spores						
	(D)	Zygote						
106.	Whi	ch of the following characteris	tics is	s absent in trach	eophyte	s?		
	(A)	A) They have root, stem and leaves						
	(B)	They have vascular systems in	stems	, roots and leaves	s			
	(C)	They have protected sporangia						
	(D)	Their gametophyte is dominant	t					
107.	Whi	ch of the following plants are	rootle	ss?				
	(A)	Psilopsida	(B)	Lycopsida				
	(C)	Sphenopsida	(D)	Pteropsida				
108.	Rhiz	come is:						
	(A)	Under ground stem	(B)	Under ground ro	oot			
	(C)	Under ground fruit	(D)	None of the abo	ve			
109.		evolution of leaf took pla coximately:	ice i	n some primit	ive ferr	ı like	plants	
	(A)	350 million years ago	(B)	360 million year	rs ago			
	(C)	370 million years ago	(D)	None of above				
110.	Une	qual growth takes place during	g whi	ch stage during	evolutio	n of se	ed?	
	(A)	Overtopping	(B)	Planation				
	(C)	Fusion or wedding	(D)	None of the abo	ve			
111.	The	sporophylls are:						
	(A)	Reproductive stem	(B)	Reproductive le	aves			
	(C)	Reproductive roots	(D)	None of the abo	ve			
112.	Ligu	les are present in the leaves of	i :					
	(A)	Psilopsida	(B)	Lycopsida				
	(C)	Sphenopsida	(D)	Pteropsida				

113.	Which of the following are also called arthrophytes?							
	(A)	Psilopsida	(B)	Lycopsida				
	(C)	Sphenopsida	(D)	Pteropsida				
114.	The	sporangia of class Filicineae is	calle	ed foliar sporangia because:				
	(A)	The sporangia are flower like						
	(B)	The sporangia develop from le	aves					
	(C)	The sporangia are attached wit	h leav	ves				
	(D)	None of the above						
115.		pattern of development of the his case,	leav	e of ferns is called circinate vernation.				
	(A)	Leaves coil over others						
	(B)	Leaf coil on itself						
	(C)	Leaves are arranged on stem in	a coi	il pattern				
	(D)	None of the above						
116.	Sort	us in Adiantum is a:						
	(A)	Group of leaves	(B)	Group of stems				
	(C)	Group of spores	(D)	Group of sporangia				
117.	Mei	osis in Adiantum takes place d	uring	; :				
	(A)	Spermatozoa formation	(B)	Egg formation				
	(C)	Spore formation	(D)	None of the above				
118.	A m	onoecious plant is the one in w	hich	:				
	(A)	Male and female reproductive	organ	s are present on different plants				
	(B)	Male and female reproductive	organ	s are present on same plant				
	(C)	Male and female reproductive	organ	s are present on same stem or leaf				
	(D)	None of the above						
119.	The	unfertilized egg is called:						
	(A)	Oospore	(B)	Oosphere				
	(C)	Zygote	(D)	None of the above				
120.	The	evolution of seed occurred abo	out 30	65 million years ago during late:				
	(A)	Devonian period	(B)	Jurassic period				
	(C)	Triassic period	(D)	None of the above				

121.	Seed	l may be defined as:		
	(A)	A fertilized ovule	(B)	A fertilized ovary
	(C)	A fertilized zygote	(D)	A fertilized embryo
122.	Hete	erosporous condition is necessa	ry fo	r the evolution of seed because:
	(A)	Two types of spore become mo	otile	
	(B)	Only smaller spore is motile ar	ıd larg	ger spore remains immotile
	(C)	Only larger spore become moti	le and	d smaller spore becomes immotile
	(D)	Larger spore stores food and sr	naller	spore becomes motile
123.	Meg	aspores are retained within th	e meş	gasporangium, so that:
	(A)	It stores food	(B)	It protects Zygote
	(C)	It changes into seed	(D)	None of the above
124.	Red	uction to a single functional meg	gaspo	re per sporangium takes place so that:
	(A)	Seed has only one embryo	(B)	Fruit can be formed
	(C)	The healthy embryo is produced	(D)	None of above
125.	Fem	ale gametophyte is:		
	(A)	Carpel	(B)	Ovule
	(C)	Ovary	(D)	Embryo sac
126.	Mal	e Gametophyte is:		
	(A)	Pollen grain	(B)	Anther
	(C)	Stamen	(D)	Pollen sac
127.	Whi	ich of the following structure is	not j	present in Gymnosperm?
	(A)	Pollen grain	(B)	Ovule
	(C)	Ovary	(D)	Archegonium
128.	How	v many species of Angiosperms	are	present?
	(A)	235,000	(B)	250,000
	(C)	230,000	(D)	260,000
129.	Whi	ich of the following characteris	tics is	s not of the monocot?
	(A)	They have single cotylendon in	the s	seed
	(B)	The number of sepals or petals	is 3 c	or multiple of 3
	(C)	The vascular bundles are scatte	ered ir	the stem
	(D)	They have reticulate veins in the	ne lear	ves

130.	Whi	ch of the following plants do 1	ot be	long to family Rosaceae?
	(A)	Orange	(B)	Pyrus
	(C)	Rosa	(D)	Apple
131.	The	floral characteristic not found	d in fa	mily Solanaceae:
	(A)	They have five sepals	(B)	They have five petals
	(C)	They have five stamens	(D)	They have five carpals
132.	Whi	ch of following plants is a wee	ed?	
	(A)	Solanum tubersum	(B)	Nocotiana tovacum
	(C)	Lycopersicum esculentum	(D)	Solanum nigrum
133.	Legu	ume is the characteristic of fru	ıit in 1	the family:
	(A)	Rosaceae	(B)	Solanceae
	(C)	Fabaceae	(D)	Poaceae
134.	Fam	ily poaceae has a characterist	ic infl	lorescence called:
	(A)	Spike	(B)	Spikelet
	(C)	Raceme	(D)	Umbel
135.	How	many species of plants are ki	nown	?
	(A)	412000	(B)	227000
	(C)	360000	(D)	120000
136.	Whi	sk ferns belong to the group:		
	(A)	Lycopsida	(B)	Filicinae
	(C)	Psilopsida	(D)	Pteropsida
137.	Bryo	ophytes are generally thought	to ha	ve evolved from:
	(A)	Golden algae	(B)	Green algae
	(C)	Red algae	(D)	Brown algae
138.	Gan	netophyte in bryophytes is:		
	(A)	Diploid	(B)	Pentaploid
	(C)	Haploid	(D)	Triploid
139.	The	class hepaticae includes abou	t:	
	(A)	1100 sps.	(B)	600 sps.
	(C)	1200 sps.	(D)	900 sps.

140.	Pter	opsida is divided into how ma	ny cla	isses?
	(A)	3	(B)	5
	(C)	4	(D)	6
141.	Whi	ch of the following are highly	evolv	ed of all the plants on earth?
	(A)	Gymnosperms	(B)	Bryophytes
	(C)	Pteridophytes	(D)	Angiosperms
142.	Fam	ily Rosaceae has how many go	enera	in Pakistan?
	(A)	30	(B)	29
	(C)	27	(D)	31
143.	The	botanical name of egg plants i	s:	
	(A)	Atropa bellodone	(B)	Capsicum annum
	(C)	Solanum melangena	(D)	Datura.
144.	It be	elongs to family caesalpinaceae	: :	
	(A)	Cassia fistula	(B)	Lupinus
	(C)	Arachis hypogaea	(D)	Butea
145.	Hor	nworts are placed in the class:		
	(A)	Antheridia	(B)	Anthocerotae
	(C)	Axile	(D)	Arthrophytes
146.	The	male sex organs of bryphytes	are ca	alled:
	(A)	Anthocerotae	(B)	Axile
	(C)	Arthrophytes	(D)	Antheridia
147.	The	sex organs in a moss plant are	mixe	d with sterile hairs called:
	(A)	Fronds	(B)	Paraphyses
	(C)	Protonema	(D)	Psilopsida
148.	The	spores of a moss develop into	an alg	ga-like structure called:
	(A)	Paraphyses	(B)	Fronds
	(C)	Protonema	(D)	Psilopsida

149.		ch of the following are called ular tissue?	vasci	ular plants because of the presence of
	(A)	Arthrophytes	(B)	Fronds
	(C)	Tracheophytes	(D)	Psilopsida
150.	Whi	ch is considered to be the earl	iest g	roup of vascular plants?
	(A)	Protonema	(B)	Paraphyses
	(C)	Fronds	(D)	Psilopsida
151.	Whi	ch were the first land plants tl	nat fo	rmed the true leaves and roots?
	(A)	Lycopods	(B)	Spermatophytes
	(C)	Protonema	(D)	Heterosporous
152.	The	gametophyte of Lycopsida is 1	nainl	y:
	(A)	Protonema	(B)	Lycopods
	(C)	Tracheophytes	(D)	Under ground
153.	Sph	enopsida or horsetails are also	calle	d:
	(A)	Arthrophytes	(B)	Arthrophytes
	(C)	Anthocerotae	(D)	Antheridia
154.	The	leaves of class Filicinae are ca	lled –	
	(A)	Ramenta	(B)	Arthrophytes
	(C)	Circinate vernation	(D)	Fronds
155.	The	pattern of development in a yo	ung,	immature frond is called:
	(A)	Spermatophytes	(B)	Ramenta
	(C)	Circinate vernation	(D)	Solanaceae
156.	In A	diantum, the rhizome is cover	ed by	brownish scales called:
	(A)	Spermatophytes	(B)	Ramenta
	(C)	Circinate vernation	(D)	Fronds
157.	Firs	t complete seeds appeared abo	ut ho	w many million years ago?
	(A)	365	(B)	366
	(C)	364	(D)	367

158.	Whi	ch is an integumented indehis	cent r	negasporangium?
	(A)	Heterosporous	(B)	Ramenta
	(C)	Fronds	(D)	Ovule
159.	Alls	seeds producing plants are call	led:	
	(A)	Spermatophytes	(B)	Circinate vernation
	(C)	Ramenta	(D)	Heterosporous
160.	The	gymnosperms produce seeds,	but n	o fruitsthats why called as:
	(A)	Ramenta	(B)	Heterosporous
	(C)	Enclosed Seeded	(D)	Open Seeded
161.	The	term Angiosperm literally me	ans:	
	(A)	Ramenta	(B)	Enclosed seeded
	(C)	Circinate vernation	(D)	Fronds
162.	Fam	ily Rosaceae has about how m	any s	pecies?
	(A)	2001	(B)	2003
	(C)	2000	(D)	2002
163.	Cap	sicum frutescence belongs to t	he fai	mily:
	(A)	Spermatophytes	(B)	Circinate vernation
	(C)	Heterosporous	(D)	Solanaceae
164.	Plac	entation in family Solanaceae	is:	
	(A)	Basal	(B)	Marginal
	(C)	Axile	(D)	All of these
165.	Fam	ily Fabaceae has about ———		-genera in Pakistan.
	(A)	83	(B)	85
	(C)	82	(D)	84
166.	Clite	oria ternatea belongs to the fa	mily:	
	(A)	Fabaceae	(B)	Mimosaceae
	(C)	Dissimilar	(D)	Cassia alata

167.	The leaves of which plant are use to cure ring worm and skin diseases.					
	(A)	Cassia fistula	(B)	Capsicum annum		
	(C)	Cassia alata	(D)	None of these		
168.	Albi	zzia lebbek is a member of the	fami	lly:		
	(A)	Fabaceae	(B)	Poacaea		
	(C)	Mimosaceae	(D)	None of the above		
169.		sexual reproduction is said to ng gametes are:	o be o	oogamous or heterogamous if the two		
	(A)	In bundle	(B)	In circle		
	(C)	Scattered	(D)	In periphery		
170.	The	vascular bundles in a monoco	t sten	ı are:		
	(A)	Mimosaceae	(B)	Heterospory		
	(C)	Scattered	(D)	Angiosperms		
171.	Whi	ich is the phenomenon of prod	uctio	n of two types of spores?		
	(A)	Heterogametic	(B)	Homospory		
	(C)	Homo gametic	(D)	Heterospory		
172.	Dou	ble fertilization is the characte	eristic	feature of:		
	(A)	Axile	(B)	Solanaceae		
	(C)	Angiosperms	(D)	Scattered		
173.	Tra	cheophytes:				
	(A)	Non-vascular plants	(B)	Psilopsida		
	(C)	Anthocerus	(D)	Vascular plants		
174.	Нер	aticeae:				
	(A)	Psilopsida	(B)	Antheridia		
	(C)	Non-vascular plants	(D)	Anthocerus		
175.	Ant	herozoids:				
	(A)	Vascular plants	(B)	Anthocerus		
	(C)	Non-vascular plants	(D)	Antheridia		

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176.	Hornwort:				
	(A) Non-vascul	lar plants	(B)	Anthocerus	
	(C) Antheridia		(D)	Psilopsida	
177.	Rootless sporop	hyte:			
	(A) Non-vascul	lar plants	(B)	Anthocerus	
	(C) Antheridia		(D)	Psilopsida	
178.	Cooksonia:				
	(A) Picea		(B)	Stigma	
	(C) Double fert	tilization	(D)	Dichotomously branched	
179.	Seeds:				
	(A) Double fert	tilization	(B)	Late Devonian	
	(C) Dichotomo	usly branched	(D)	Stigma	
180.	Hemlock:				
	(A) Stigma		(B)	Dichotomously branched	
	(C) Double fert	tilization	(D)	Picea	
181.	Carpel:				
	(A) Dichotomo	usly branched	(B)	Picea	
	(C) Late Devor	nian	(D)	Stigma	
	. ,		, ,	8	

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Answers

Sr.	Ans.								
1.	(C)	2.	(C)	3.	(A)	4.	(D)	5.	(C)
6.	(A)	7.	(A)	8.	(A)	9.	(B)	10.	(C)
11.	(C)	12.	(A)	13.	(B)	14.	(B)	15.	(B)
16.	(C)	17.	(D)	18.	(B)	19.	(C)	20.	(A)
21.	(B)	22.	(D)	23.	(B)	24.	(A)	25.	(C)
26.	(A)	27.	(C)	28.	(A)	29.	(A)	30.	(B)
31.	(B)	32.	(D)	33.	(C)	34.	(B)	35.	(B)
36.	(B)	37.	(D)	38.	(B)	39.	(C)	40.	(B)
41.	(C)	42.	(C)	43.	(C)	44.	(C)	45.	(C)
46.	(B)	47.	(B)	48.	(A)	49.	(D)	50.	(B)
51.	(C)	52.	(B)	53.	(B)	54.	(C)	55.	(C)
56.	(B)	57.	(C)	58.	(B)	59.	(C)	60.	(B)
61.	(A)	62.	(B)	63.	(D)	64.	(C)	65.	(B)
66.	(D)	67.	(C)	68.	(B)	69.	(B)	70.	(C)
71.	(B)	72.	(C)	73.	(A)	74.	(D)	75.	(B)
76.	(C)	77.	(A)	78.	(C)	79.	(A)	80.	(C)
81.	(C)	82.	(B)	83.	(A)	84.	(C)	85.	(C)
86.	(D)	87.	(D)	88.	(C)	89.	(B)	90.	(B)
91.	(D)	92.	(C)	93.	(C)	94.	(D)	95.	(A)
96.	(C)	97.	(C)	98.	(D)	99.	(C)	100.	(C)
101.	(B)	102.	(C)	103.	(B)	104.	(C)	105.	(C)
106.	(D)	107.	(A)	108.	(A)	109.	(A)	110.	(A)
111.	(B)	112.	(B)	113.	(C)	114.	(C)	115.	(B)
116.	(D)	117.	(C)	118.	(B)	119.	(B)	120.	(A)

Sr.	Ans.								
121.	(A)	122.	(D)	123.	(C)	124.	(C)	125.	(D)
126.	(A)	127.	(C)	128.	(A)	129.	(D)	130.	(A)
131.	(D)	132.	(D)	133.	(C)	134.	(B)	135.	(C)
136.	(C)	137.	(B)	138.	(C)	139.	(D)	140.	(A)
141.	(D)	142.	(B)	143.	(C)	144.	(A)	145.	(B)
146.	(D)	147.	(B)	148.	(C)	149.	(C)	150.	(D)
151.	(A)	152.	(D)	153.	(B)	154.	(D)	155.	(C)
156.	(B)	157.	(A)	158.	(D)	159.	(A)	160.	(D)
161.	(B)	162.	(C)	163.	(D)	164.	(C)	165.	(C)
166.	(A)	167.	(C)	168.	(C)	169.	(A)	170.	(C)
171.	(D)	172.	(C)	173.	(D)	174.	(C)	175.	(D)
176.	(B)	177.	(D)	178.	(D)	179.	(B)	180.	(D)
181.	(D)								