Faculty of Agriculture **Final Exam for Food Safety, Desert Land and Agribusiness English programs**

Agric. Botany Dept. **Level one (1st semester 2020)** **Time: 2 Hours**

Course: Botany (Morphology &Anatomy) **Code: AB0801** **Total mark: 60 marks**

Model Exam 2

Choose The Correct Answer:

1-The cell is surrounded by non-living protective outer covering known as

A-Plasma lamea B- Cell wall C- Cytoplasmic membrane D- Tonoplast.

2-Only example of living cell which can function without nucleus is the

A-Cambial cell B- Companion cell C-Sieve tube cell D-Tracheids.

3-Chromoplasts are found in

A-flower petals B-ripe fruits C-Carrot roots D- All

4-In Chromoplasts, instead of chlorophyll they contain

A-Carotenoid B- Xanthophyll C- Chlorophyll D-A &B only

5-Roots differ mainly from shoots in the absence of

A- Nodes B- Internodes C- Size D- A &B only

6-Lateral roots originate from the pericycle

A-Endogenously B- Exogenously C- Both

7-In roots, some of the epidermal cells develop into

A-Scales B- Root hairs C- Trichomes

8-proliferous layer is replaced by the outer layer of cortex that are being suberized and called

A-Epidermis B- Exodermis C- Ectodermis. D-Endodermis

9-Endodermis is the

A-First layer of cortex B- Last layer of cortex C- Middle layer of cortex

10-Endodermis is functioning in the

A-Prevention of water and solutes passage B-Control the rate of water and solutes passing

C- Both

11-Endodermal cells can prevent a lekage of solutes from the vascular cylinder to the cortex, consequently salts concentration in the stele is

A- Decreased B-Increased

12-Pericycle functions are

A-Initiation of lateral roots B- initiation parts of the vascular ring C-initiation of phellogen D- All

13-In the center of the stele in roots, xylem seemed as

A-Triangle shaped B- Star shaped C- Rectangle shaped

14-In T.S. wide central pith is found in roots of

A-Dicots B- Monocots C-Both

15- The primary xylem which matures first is called

A-Meta xylem B- Protoxylem C-Secondary Xylem

16-Monocoat roots are

A-Diarch B- pentarch C- Polyarch

17-The roots is called exarch because the maturation of xylem

A-Starts from inside to outside B- Starts from outside to inside

18-Thickening in metaxylem is

A-Annular or spiral B-Pitted or reticulate

19-In roots, phloem forms separate strands

A-Parallel B- Alternating with xylem C-Both

20-The vascular bundles in roots are

A- Collateral B- Radial C-Concentric

21-In the initiation of lateral roots, cells of pericycle resume their meristematic activity and divide by

A-Anticlinal walls B- Periclinal walls C- Both

22-Dicot plants include all plants have embryos with

A- One cotyledone B- Two Cotyledone C-Multi cotyledons D- All

23-Dicot plants have broad leaves with

A-Parallel venation B- Reticulate venation C-longitudinal venation D- A&B only

24-Monocot stems have vascular bundles with

A-Fasciular cambium B- Non fasciular cambium C- Both

Note:-Questions from 25 to 36 in Fig A

25- Fig. A indicates a T.S. In a

A- Monocot root B- Dicot Root C- Monocot stem D-Dicot stem

26-Number 1 refers to

A- Cortex B- Epidermis C- Root hair

27- Number 2 refers to

A-Cortex B-Epidermis C- Endodermis

28-Number 3 refers to

A-Cortex B- Endodermis C-Pericycle

29- Number 4 refers to

A- Endodermis. B- Pericycle. C- Periderm.

30- Number 5 refers to

A- Proto xylem B- Meta xylem C- Phloem

31-Number 6 refers to

A-Protoxylem B-Meta xylem C-Phloem

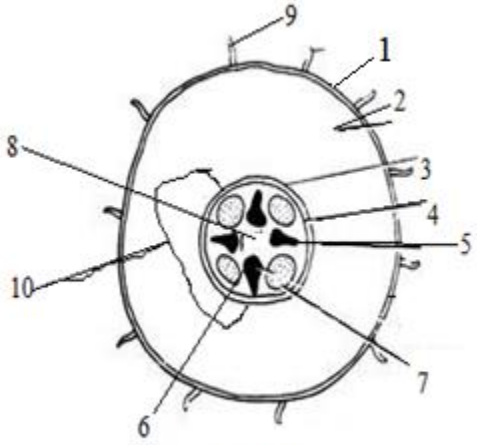

Fig A

32-Number 5+6 refers to

A-Primary xylem B-Secondary xylem C-Primary phloem D-Secondary phloem

33- Number 7 refers to

A-Proto xylem B- Meta xylem C- Phloem

34- Number 8 refers to

A-Pith B- Vacuole C-Air vacuole

35- Number 9 refers to

A-Root hair B-Root scale C- Root stele

36-Number 10 refers to

A-Cortex B-Vascular cylinder C- Endodermis

Note: Question from 37 to 40 on Fig B

37- Fig. B shows the

A-The spring and autumn woods B- Sap and heart woods

38-Number 1 refers to

A- Cambiom ring B-Cortex C-Pericycle

39-Number 2 refer to

A-Spring wood B-Autumn wood C- Hard wood

40-Number 3 refers to

A- Autumn wood B- Spring wood C-Hard wood

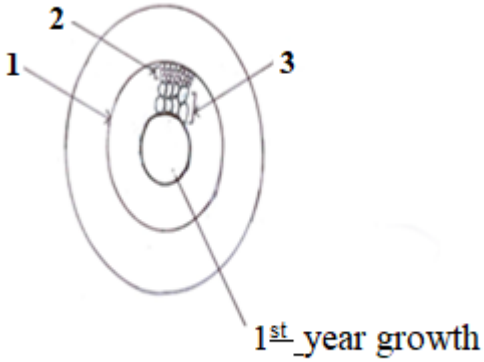

Fig B

Note: Questions from 41 to 70 are True or False (Your Answer in Answer sheet A is True and B is False)

41- Tylosis are abundant in sap wood than in hard wood.

42- Green algae have no chlorophyll.

43- Potato Tubers is a kind from aerial stems.

44-The only cell with 3 N is the endosperm cell.

45- Monocot stem differs from dicots in the presence of the ground tissue.

46-In transition region the radial arrangement of bundles in roots change with collateral arrangement in stem.

47-The cortex in dicot root is wider than in monocot root.

48- The sieve tube is the only case of a living cell function without nucleus.

49-The pollen grain is the female gametophytes.

50-The Sap wood is lighter than the hard wood.

51- The increase in thickness results in the destruction of outer tissues and this stimulate the formation of periderm.

52-Sap wood is still functioning, while hard wood stopped functioning.

53- Meristematic cells have no vacuole.

54-Stomata are thicker in mesophytes than in xerophytes.

55- In squash stem the vascular bundles appear in two circles.

56-Sweet potato is a kind of subterranean stem.

57- The root system in hydrophytes is larger and deeper more than in xerophytes.

58-Monocots possess secondary growth, while dicots not.

59-Dicots seeds have embryo with two cotyledons.

60- Water and air are factors affecting on seed germination.

61- Golden algae is a kind from prokaryotic.

62- Collenchyma tissue function is storage food and air.

63-Lichens are organisms made up from fungi + algae.

64-Egg plant is a plant from family Cucurbitaceae.

65- The flowers in Cucurbitaceae family are bisexual.

66-Hypogeal germination possess, when cotyledons stay underground.

67- Mosses are vascular plants, while ferns are non-vascular plants.

68- The plant consists from two main systems root system and shoot system.

69- Xylem is a living tissue, while phloem is a dead tissue.

70- Palm Dates is a plant from Poaceae family.

Note: Questions from 71 to 74 on Fig C

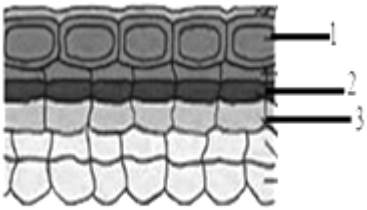

Fig C

71-Fig. C refers to

A-Cortex tissue B-Periderm tissue

72- Number 1 shows the

A-Cork cells B-Epidermis cell

73-Number 2 shows the

A-Vascular cambium B- Cork cambium

74- Number 3 shows the

A-Phelloderm B-Exodermis

Notes: Questions from 75 to 80 on Fig D

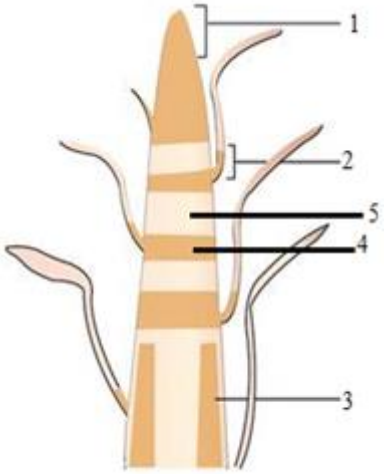

Fig D

75-Fig. D refers to the types of

A-Meristem tissue B-Mature tissue C-Paranchyma tissue

76-Number 1 refers to

A-Lateral meristem B-Apical meristem C-Intercalary meristem.

77-Number 2 refers to

A-Lateral meristem B-Intercalary meristem C- Apical meristem.

78-Number 3 refers to

A-Intercalary meristem B- Apical meristem. C-Lateral meristem.

79-Number 4 refers to

A-Node B-Internode C-Buds

80-Number 5 refers to

A-Internode B-Node C- Axillary bud

With our Best wishes *The Examiners*