

**Biological Sciences; Top – MCQs**  
**(Cell/Biology)**

1. Study of cell = cell biology / cytology.
2. The plasma membrane is covered by a cell wall in which cells = Plants / Bacteria / Fungi / Algae...
3. The father of cytology = Robert Hooke...
4. Who has concluded that the cells are the ultimate units forming the structure of all plant tissues?  
**Scheiden** (German biologist)
5. The nucleolus was first recognised by = Fontana...
6. The principal structural element of a living cell = Carbon
7. Who proposed the hypothesis: bodies of animals and plants are made of cells, products of cells = Theodor Schwann
8. The smallest cell = Mycoplasma
9. A plant cell differs from animal cell in having = cell wall
10. Cell membrane is selective permeable membrane.
11. The mutation theory of evolution was enunciated by: Hugo de Vries.
12. Plasma membrane in eukaryotic cells is made up of: phospholipid-protein.
13. Which scientist explained that cell divide and new cells are formed from the preexisting cells = Rudolf Virchow.
14. Which is the oldest organism on earth = blue-green algae.
15. RER (Rough endoplasmic Reticulum) looks rough due to: attachment of ribosomes.
16. Power house of the cell is called = mitochondria.
17. A membrane which permits one substance to pass through more easily than another is called = selective permeable membrane.
18. Graveyard of cell = lysosome
19. Fluid filled region in cell = cytoplasm
20. Store house of water in cell = vacuole
21. Plant cell; who is responsible for color contribution = chromoplast
22. Site in the leaves where the process of photosynthesis takes place = mesophyll cells.
23. DNA stands for Deoxyribonucleic acid
24. Brain of the cell = nucleus
25. The term meiosis was coined by = Farmer and Moore
26. In plant cells, turgidity and rigidity is provided by + vacuole full of sap
27. Identify the cell that is amoeboid in shape = WBCs
28. Police of body = WBCs
29. Leucocytes = WBCs
30. Which is the part of immunity = WBCs
31. Life span of WBCs = Approx 1 week.
32. Period between two cell divisions is called = interphase.
33. How many cells in meiosis are needed to produce 200 cells = 50.
34. Which of the following is present in the green pigments of leaves
35. Green pigment in leaves = chlorophyll
36. Chlorophyll function = trapping of sunlight
37. Chlorophyll/sunlight absorb/why? For photosynthesis



38. Photosynthesis = food preparation process
39. Photosynthesis-production= glucose.
40. The smallest prokaryotic organism is= Mycoplasma
41. Principal function of cell wall includes= protection/support/shape/main tenace.
42. During cell division the hereditary characters are transmitted in the form of = Nucliec Acids.
43. Pre mitotic gap is also known as= G-2 phase
44. Network of cisternae in the cell= endoplasmic reticulum.
45. In cell the orgenlle consist of vesicle= golgi complex.
46. Golgi complex- discovered by= Camilo golgi.
47. Largest cell in the human body = Nerve cell
48. Which organelle performs the principal function of packaging material= Golgi apparatus.
49. The single stack of golgi apparatus found in plants and fungi is= Dictyosome
50. Eukaryotic rybosomes are called= 80S-Ribosomes.
51. Mitochondria are able to produce their own= proteins.
52. Dinosaurs were in = Meso-Zoic Era.
53. RER is also known as= Ergastoplasm.
54. Darwin's theory of natural selection is based on= over production/struggle for existence and variation/survival of fittest.
55. The small particles on the outer membrane of mitochondria are stackless and are called= sub units of parson.
56. Which is called immovable property in cell= nucleic acid.
57. Fluid Mosaic Model is related to= Cell membrane.
58. Fluid mosaic model explains = structural and functional aspects of cell membrane.
59. Chief constituent of cell wall= Cellulose
60. Reason of rigidity of cell wall= Lignin.
61. Which hormone is found in the gaseous form= Ethylene
62. Growth Harmones=STH
63. Largest Gand= Liver
64. Bile is released by=Liver
65. Chief Chemist of body= Liver
66. Which can regenerate = Liver
67. Which is responsible for the conversion of trach into maltose= Amylase
68. Trypsin Function= Proteins into polypeptides.
69. Pepsin is released in= stomach
70. Bag like Organ/J-shape organ= stomach
71. Bean shaped organ= kidney
72. Fist like structure= heart
73. Fileteration of blood=kidneys
74. Basic functional unit of kidneys= nephrons
75. Backflow of blood/prevents= bicuspid/tricuspid valves.
76. Gaseous exchange takes place in= alveoli
77. Blood consists of = plasma and blood cells
78. Plasma %= 55%
79. Parotid glands are located in= oral cavity
80. Sub-mendibular glands are located in= oral cavity



81. Sub-lingual glands are located in= oral cavity
82. Adrenal glands are located in= top of the kidneys
83. Stress hormones = adrenalin and non-adrenalin
84. Fight and flight chemicals /hormones= adrenalin and non-adrenalin.
85. Prolactin is released= females only
86. Prolactin is responsible for =milk production
87. Emotional brain= Amygdala
88. Most sensitive layer of eye= retina
89. Image formation= retina
90. Colored part of eye= iris
91. Shortsightedness is fixed through= concave lens
92. Far sightedness is fixed through= convex lens
93. Short sightedness is also called= myopia
94. Far sightedness is also called as= hyperopia
95. Nightblindness is also named as= nyctalopia
96. Digestion – duration= 36 hours
97. Maximum digestion takes place in= small intestine
98. Re absorption of water is related to= colon/large intestine
99. Villi are present in = ileum
100. Lipase= fats into fatty acids
101. Hearing part of the ear= cochlea
102. Auditory nerves are present in= cochlea
103. It helps in maintaining body balance positions= semicircular canals
104. Short term memory is related to= hippocampus
105. Involuntary actions are controlled by= medulla oblongata
106. Provision of cushion to brain= meninges
107. Infection in meninges= meningitis
108. Skull bone= cranium
109. Neuron cells are present in= brain
110. Cells which can't be recovered again= neuron cells
111. Menstrual cycle/controlled by= hypothalamus
112. Optic nerves are present in= eyes
113. Focusing of light onto retina is done by=lens
114. Transparent layers= cornea
115. Sensory information is handled by which part of brain= thalamus
116. Largest part of brain=cerebrum
117. Strongest part of teeth=dentin
118. Outermost covering of teeth=enamel
119. Reddish part of eye = choroid
120. Part which helps in the nourishment of eye= choroid
121. Quantity of blood in humans= 5 liters
122. Reabsorption of salt is related to= loop of henle
123. PCT=Proximal Convoluted Tubule
124. DCT= Distal Convoluted Tubule
125. Oxygenation of blood is related to= lungs



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### Session-2 of GSA for MPT-2026: TOP MCQs:

1. Instrument used in generators to reverse the direction of electric current = **Commutator**
2. Instrument used to compare the intensity of colors = **Colorimeter**
3. Instrument used for projecting pictures on the screen = **Cinematograph**
4. Instrument used to determine the longitude of vessels in sea = **Chronometer**
5. Instrument used to determine the heights and levels = **Cathetometer**
6. Instrument used to trace the movements of human heart, recorded on cardiograph = **Cardiogram**
7. Instrument used to measure the quantity of heat = **Calorimeter**
8. Instrument used to measure the diameter of cylinders & wires = **Callipers**
9. Instrument used to measure infra-red radiations = **Bolometer**
10. To measure the atmospheric pressure = **Barometer**
11. Instrument used to measure the intensity of sound = **Audiometer**
12. Instrument used to measure the altitudes in the aircrafts = **Altimeter**
13. Instrument used to measure the electric current = **Ammeter**
14. Instrument used to measure the intensity of radiations/UV-rays = **Actinometer**
15. Instrument used to measure the low temperature = **Cryometer**
16. Instrument used to measure the growth in plants = **Crescograph**
17. Instrument used to measure the change in the volume of substances = **Dilatometer**
- 18- Instrument used to convert the mechanical energy into the electrical energy= Dynamo..
- 19- Instrument used to measure the electrical potential difference= Electrometer.
- 20- Instrument used to detect the presence of electric charge= Electroscope.
- 21- Instrument used to examine the internal body= Endoscope.
- 22- Instrument used to measure the depth of oceans= Fathometer.
- 23- Instrument used to reproduce the recorded sounds= Gramophone.
- 24- Instrument used to measure the relative density of liquids= Hydrometer.
- 25- Instrument used to measure the moisture content /humidity of air/gas= Hygrometer.
- 26- Instrument used to show the changes in atmospheric humidity= Hygroscope.
- 27- Instrument used to determine the boiling point of liquids= Hypsometer.
- 28- Instrument used to measure the relative density of milk= Lactometer.
- 29- Instrument used to determine the speed of aircraft's relative to the speed of sound= Machmeter.
- 30- Instrument used to convert the sound waves into the electric signals= Microphone.
- 31- Instrument used to obtain a magnified view of small objects= Microscope.

32- Instrument used to compare the luminous intensity of the two sources of light= Photometer.

33- Instrument used for visual examination of ear drum= Otoscope.

34- Instrument used to view the objects above sea level= Periscope.

35- Instrument attached to the wheel of a vehicle, to measure distance travelled= Odometer.

36- Instrument used to measure the temp = **Thermometer**

37- Instrument used for recording of the intensity and origin of earthquake = **Seismograph**

38- Instrument used to measure the rainfall = **Rain Gauge**

39- Instrument used to measure the salinity of solutions = **Refractometer**

40- Instrument to measure the high temperature = **Pyrometer**

41- Air is? **Mixture of gases**

42- Gases are suspended in the atmosphere due to? **Gravity**

43- Envelope of gases surrounding the earth = **Atmosphere**

44- Cloud formation takes place in = **Troposphere**

45- Aircrafts travel in? **Upper troposphere**

46- Ozone layer is present in? **Stratosphere**

47- Filtration of UV rays? **Ozone layer**

48- Ionization takes place in? **Thermosphere**

49- Protection from meteors is related to? **Mesosphere**

50- Average height of troposphere = **12–16 km**

51- Average height of stratosphere = **50 km**

52- Weather patterns are related to? **Troposphere**

53- Green House Effect takes place in? **Atmosphere/Troposphere**

54- Circulation of water on Earth? **Hydrological cycle**

55- CO<sub>2</sub>/CH<sub>4</sub>/CFCs/N<sub>2</sub>O = **Greenhouse Gases**

56- Science to gather information = **Remote sensing**

57- To represent the data/maps = **GIS - Geographic Information System**

58- Computer system is = **GIS**

59- Solid Waste Management was first introduced in? **Athens**

60-Composting is? **Biological decomposition**

61- Organic compounds are? **Vitamins...**

62- Beri-Beri is caused due to the deficiency of? **Vitamin B1**

63-Scurvy caused **Vitamin C (Defi)**

64- Cheilosis is caused= deficiency of **B2**

65- Pellagra is caused= deficiency of **B3**

66- Rickets is caused= deficiency of **vitamin D**

**67- Night blindness is caused-deficiency of vitamin A...**

**Chemical names.....68-80**

**68-Vitamin C= Ascorbic acid**

**69- Vitamin B1= Thiamine**

**70-Vitamin B2= Riboflavin**

**71-B3 NIacin**

**72-B5 Pantothonic acid**

**73-86 Pyridoxine**

**74-B7= Biotin**

**75-B9 Folic Acid/Folate/Folacin**

**76-B12 Cobalamin**

**77- A Retinol**

**78-D Calciferol**

**79- E= Tochoferol**

**80-K Phylloquinine**

**81- Osteoporosis= deficeincy of calcium**

**82- Anemia Iron.. Deficiency of**

**83- Vitiligo is caused by? deficiency of vitamin B12.**

**84-Bacteria can be seen? Compound microscope...**

**85- Number of nephrons in the kidneys approxi= 2 millions**

**86- Numbers of alveoli is the lungs approx. 500 millions.**

**87- Nodes responsible to generate the lectric current in the human heart- SA-Nodes.**

**88- Smallest bone in the human body= Stapes.**

**89- Stapes is present in? Ear/Middle ear...**

**90- Ear drum is also named as? Tympanic Membrane...**

**91-Inflammation of Liver= Hepatitis**

**92- EBOLA is a deadly virus.**

**93-Scurvy is Bleeding gums.**

**94-Scurvy-treatment= Aonia...**

**95- A disease caused by fungus is? Ringworm**

**96- The disease caused by nematodes = Filaria**

**97- Poor sanitation conditions may not be the likely reason behind the disease = Arthritis**

**98- Poor sanitation facilities = Typhoid**

**99- Water Borne disease is = Cholera**

**100- Alzheimer disease? It is a disorder of the brain**

**101- Disease may transmit from one person to another = AIDS**

**102- Hysteria is related = Young women**

**102- Small Pox is caused by? Variola virus**

**103- Brain is enclosed in = Cranium**

**104- Reflex actions are related to? Spinal Cord**

**105- Calcitonine is related to? Lowers down the concentration of calcium ions in the blood**

**106- Ductless glands = Endocrine glands (e.g., Pituitary gland / Thyroid gland, etc.)**

**107- Master gland is = Pituitary gland**

**108- Stimulation of thyroid gland? TSH / Pituitary gland**

**109- Stimulation of adrenal glands = ACTH / Pituitary gland**

**110- weight of pituitary gland= seed of pea**