

## cell - the unit of life

1-3

① They are semiautonomous organelles.

3-2

The enzymes present in the lysosome are synthesised at RER and are modified at Golgi bodies.

6-4

Apparato reticolare is other name for Golgi apparatus

8-4

Autophagy formation is the function of lysosomes.

12-4

Xenobiotics is the function of ER.

14- Nucleolus was discovered by Fontana.

16

Dalton Complex is other name for Golgi bodies

17 Refer NCERT

24 The organelle involved in photorespiration are  
a. chloroplast  
b. Peroxisomes  
c. Mitochondria

26 Ribosomes are attached to ER with the help of Ribophosin I, II.

28. Lysosomal enzyme act as best at 5 PH.  
ie acidic medium. they are not double  
membrane organelle.
- 36 Secondary wall is formed in the last and  
it is the load bearing part of the cell  
wall.
- 45- Aleuroplast is the site of protein  
storage.
47. Microtubule, microfilament and  
intermediate filament/fibres are the member  
of cytoskeleton structure.
- 50 Inclusion bodies are non living component.
51. Refer to Ques-19.
52. Endomembrane consist of  
a - ER, GB, Vacuole and Lysosomes
- 56 Refer to Q 47.

67. Polyribosomes are aggregation of several ribosomes are held together with the help of  $\alpha$  m-RNA.
73. Refer to explanation no-3.
84. Mitochondria and chloroplast contain dna. The some total of the gene present in cytoplasm is known as plasmid.
96. Fimbriae provide attachment to the bacteria with the help of ~~holdfast~~ Fimbriae.
101. Mitochondria are semiautonomous organelle. They do have to depend upon nucleus for its entire function.
102. Refer to Ques 28.
110. ER is directly connected to the outer membrane of nucleus envelope and goes up to cell membrane.
114. Sphaerosome are to do take part in digestion and are commonly known as plant vacuole.

118. Storage of lipids is done by Elaioplast.

### Assertion and Reason

3. Ribosomes are considered as the most primitive cell organelles as they are found in prokaryotes also.
4. Refer to Q. 84
12. The intrinsic protein which traversed the entire membrane is known as Transmembrane protein or tunnel protein.
13. Germinating ~~mitocho~~ seeds require a lot of Energy; therefore it shows the presence of large amount of Mitochondria.

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## Previous year Question

3. Mesosomes are infolding of plasma membrane and are the site of respiration in bacteria
4. Pilli - attachment to another bacteria  
(CONJUGATION)  
Flagella - Locomotion  
Fimbriae - Attachment to the substratum
9. Ribosomes are found within Mitochondria and chloroplast.
20. The genetic material of bacteria is referred as Genophore.
26. Cell theory is not applicable to viruses therefore they are not considered universal.
30. Golgi bodies in plants are called dictyosomes
36. Mitochondria and chloroplast have their own dna.
58. Peroxisome do not contain dna. They are associated with  $H_2O_2$  metabolism.
66. Refer to text.

73. Cell theory was proposed by Schleiden and Schwann and was modified by Virchow.
83. Golgi apparatus is absent in prokaryotes.
85. The respiratory enzymes are present in mitochondria.
88. If mitochondria are single layered i.e. without outer membrane it is known as mitoplast.
89. 80S ribosomes: ~~60S~~ has two sub-units 60S + 40S.
117. Ribosomes are rich in RNA and protein. ∴ it is known as ribonucleo-protein particle.
122. Ribosomes are present in the chloroplast and mitochondria. ∴ they are also known as organelle within organelle.
131. The enzymes of ETC are present on the inner side of the membrane.

- 133 Catalase is responsible for breakdown of  $H_2O_2$  in peroxisome.
- 142 Lysosome are responsible for digestion.
159. Lysosomes is not a double membraned organelle.
- 164 Both chloroplast and Mitochondria are the site of phosphorylation.
- 167  $F_1$  - Head and Stalk  
 $F_0$  = Base
171. the term Mitochondria was coined by Benda and Altman called it Bioplast.
- 177 Secondary cell wall grows by apposition or accretion.
- 183 Centriole are basically the characteristic of animal cell. In plants they are restricted to lower ~~to~~ mobile plants.
192. Circular naked DNA is the characteristic of prokaryotes.

193- ~~the~~

193 the infolding of the mitochondrial inner membrane is known as cristae.

195 Golgi Complex are found in those cell which ~~are seen in~~ mainly perform secretion.