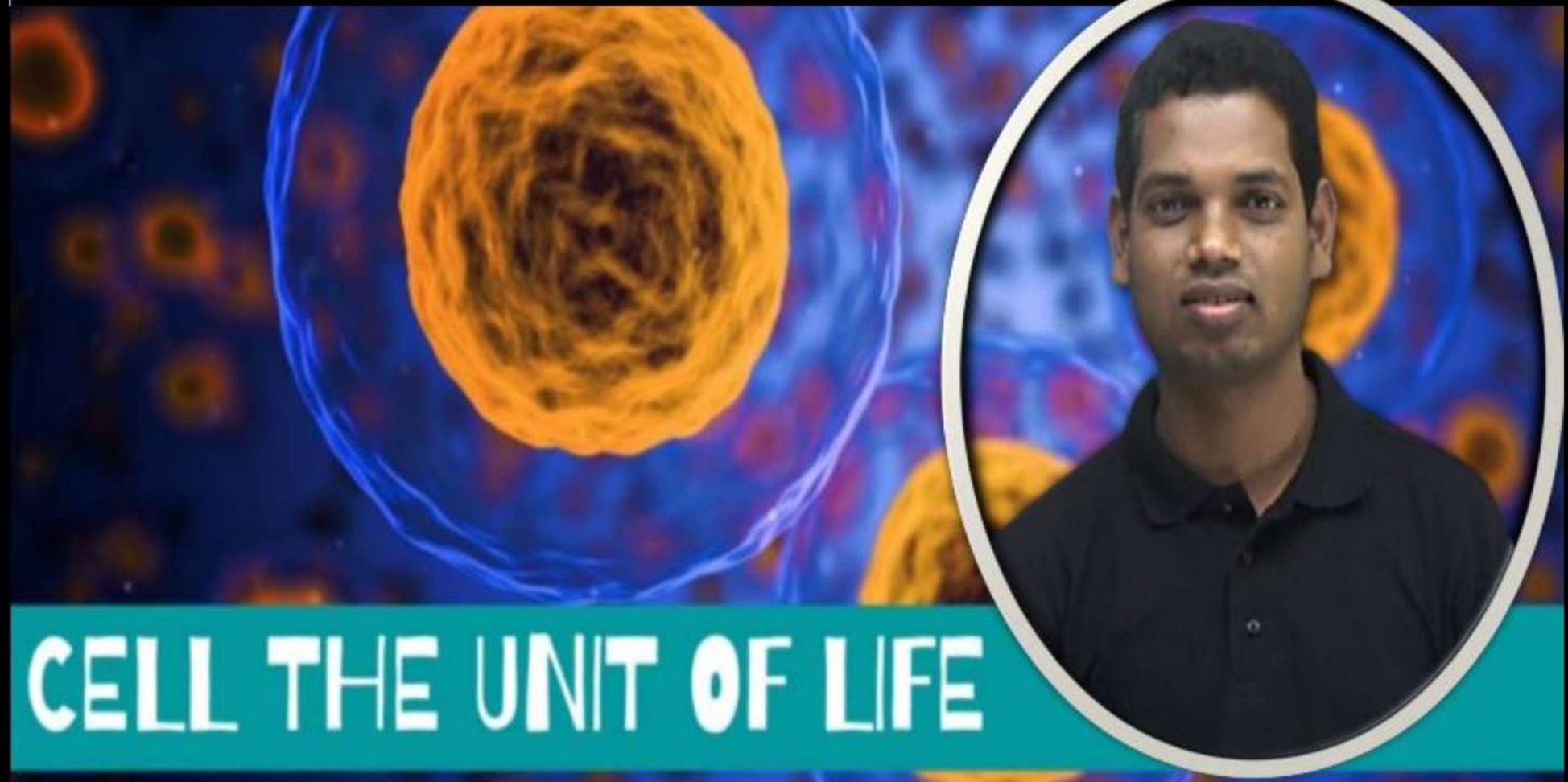
ARJUNA NEET BATCH



CELL THE UNIT OF LIFE

Test : 2 By : Biswajit Sir

Q1. Chromatins are chemically

A. Ribonucleoprotein ✗

B. Nucleoprotein ✓

C. Protein ✗

D. Nucleic acid ✗

Chromatins → NA + protein

↙ ↘

DNA RNA

Q2. Chromatins are

A. Observed in all phases of cell cycle

B. Observed in M phase of cell cycle

C. Observed in interphase of cell cycle

D. None

Q3. Chromatins are

A. Distinct

B. Indistinct

C. Elaborate

D. More than one

Q4. Chromatins are stained by

A. Acidic dye

B. Basic dye

C. Crystal violet

D. More than one

Q5. Who coined the term chromatin?

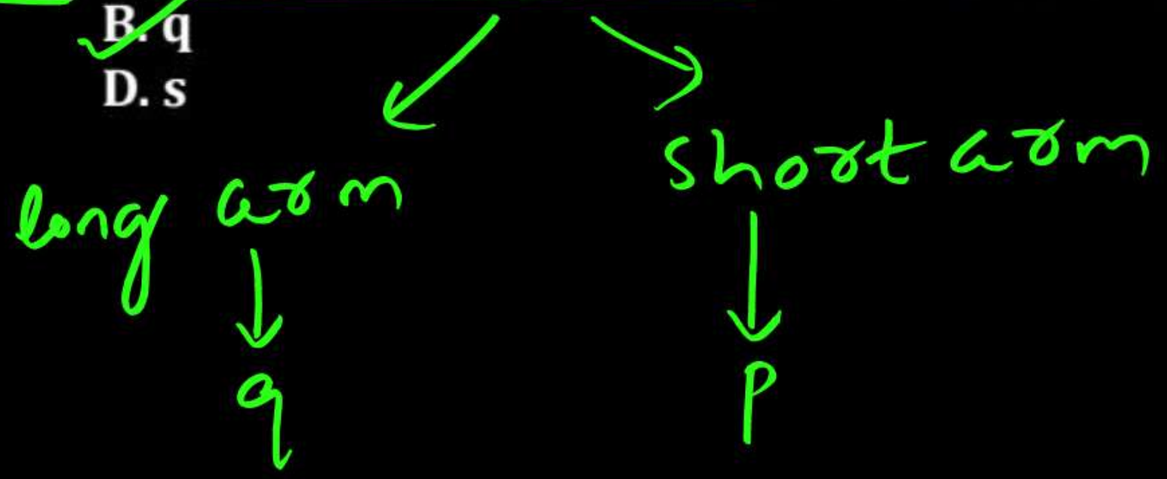
A. Robert Brown
B. Flemming
C. Robert Hooke
D. Christian Gram

Q6. Which is the best phase to study chromosomes structure?

A. Metaphase
B. Anaphase
C. Telophase
D. Prophase

Q7. The long arm of submetacentric chromosome is denoted by

A. p
B. q
C. r
D. s



Q8. Find out the odd one with respect to microbodies?

A. Spherosome T

B. Glyoxisome T

C. Peroxisome T

D. RER F

Q9. Microbodies are

A. Naked

B. Single membrane bound

C. Double membrane bound

D. Large in size

Small

Q10. Which of the following is not involved in photorespiration?

A. Choloroplast (T)

B. Peroxisome (T)

C. Mitochondrion (T)

D. Glyoxisome (F)

Q11. Which of the following is associated with conversion of lipid into carbohydrate?

A. Glyoxisome
B. Peroxisome
C. RER
D. Spherosome

Glyoxylate/gluconeogenesis → glyoxysome

lipid → glucose (carbohydrate)

Q12. Which of the following chromosome appears V shaped in anaphase?

A. Metacentoic
B. Submetacentoic
C. Acrocentoic
D. Telocentoic

Q13. Which of the following is essentially present in every chromosome?

A. Primary constriction

B. Secondary constriction

C. Centromere

D. More than one

Q14. Secondary constriction is

A. Stained by basic dye

B. Stained by acidic dye

C. Not stained

D. Located at variable phases

fixed

Q15. How many pairs of chromosomes have secondary constriction?

A. 10

B. 2

C. 5

D. 6

chromosome

13, 14, 15, 21, 22

Q16. Kinetochore is

A. Small in size T

B. Disc like structure T

C. Produces spindle fibre F

D. More than one ✓

Q17. Which of the following is active site of rRNA synthesis?

A. RER
B. SER
C. Nucleolus
D. Golgi complex

Q18. Nucleolus is

A. Single membrane bound

B. Double membrane bound

C. Naked

D. Not continuous with nucleoplasm

Q19. Which of the following chemicals get exchanged through nuclear pore?

A. RNA

B. Protein

C. Lipid

D. More than one

Q20. Which of the following membrane is not associated with ribosomes?

A. Outer nuclear membrane T

B. Inner nuclear membrane F

C. RER membrane T

D. More than one

Q21. Which of the following imparts unique phenotypic character to bacteria?

A. Nucleoid ×

B. Extrachromosomal DNA ✓

C. Cell wall ×

D. Plasmamembrane ×

plasmid → called → extrachromosomal DNA

Q22. Which of the following stain is used to stain bacteria?

A. Crystal violet ✓
B. Aidic dye ✗
C. Janus green
D. None of these

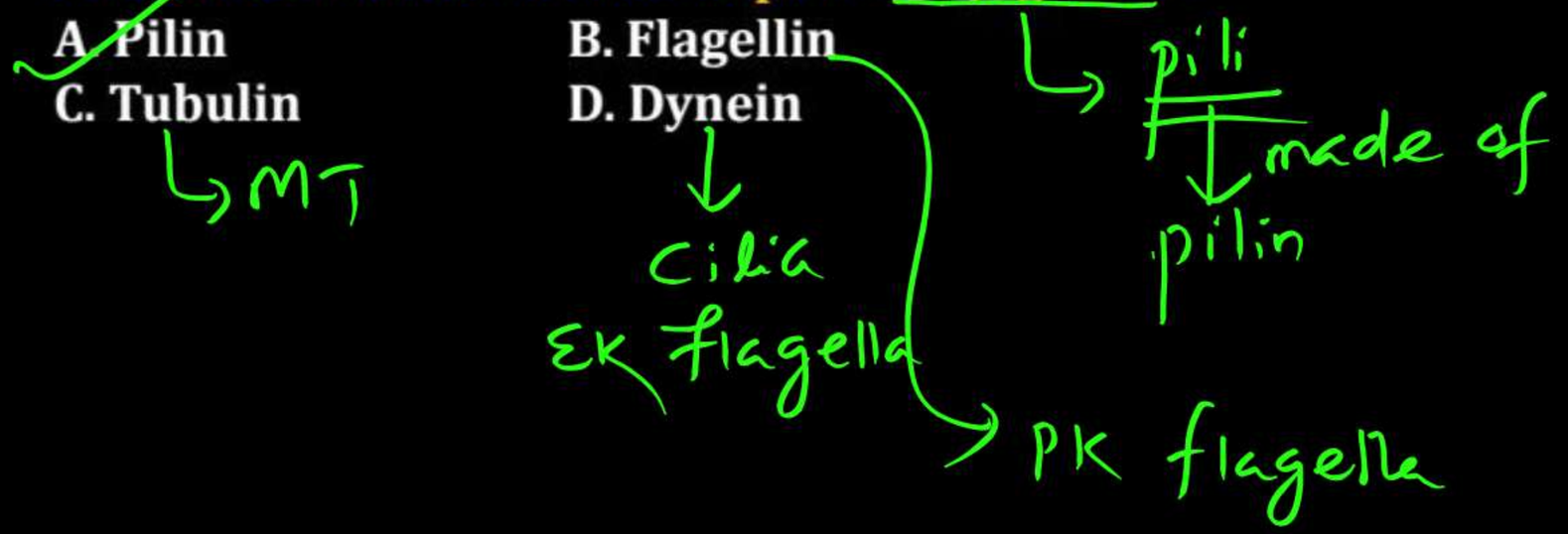
mit

gram staining

basic dye { crystal violet → 1° stain
saffranin → 2° stain

Q23. Which of the following special protein is present in surface structure of bacteria that helps in conjugation?

A. Pilin
B. Flagellin
C. Tubulin
D. Dynein



Q24. Which of the following is functionally equivalent to lysosome?

A. Periplasmic space → space b/w CW and PM + hydrolytic enzymes
B. Mesosome
C. Cell wall
D. Plasmamembrane

Q25. Which of the following is incorrect with respect to inclusion bodies?

A. Single membrane bound

B. Present in cytoplasm

C. Contains reserve materials

D. All of the above

Q26. Which of the following is not a structural component of bacterial Flagella?

A. Axoneme
B. Basal body
C. Hook
D. Filament

Cilia
EK flagella

. basa body
. hook
. filament

Q27. Which of the following is small bristle like structure?

A. Pili
B. Flagella
C. Fimbriae
D. Mesosome

Q28. How many basic shapes are there in bacteria?

A. 2
B. 4
C. 6
D. 8

→ Rod
Spherical
Spiral
Comma

Q29. Which of the following is not a prokaryotic cell?

A. PPLO

B. mycoplasma

C. E coli

D. Yeast

Q30. Which of the following is not true for nucleoid?

A. Nonmembrane bound
B. Contains DNA only
C. Called genomic DNA
D. All of the above

DNA
RNA
protein

Q31. Which of the following is the most variable phase of cell cycle?

A. G1
B. G2
C. Anphase
D. Metaphase

Q32. Which of the following is not a mitogen?

A. Auxin T

B. Cytokinin T

C. Insulin T

D. Proline F

→ x-1

Q33. How many mitotic divisions are required to produce 32 cells from a single cell?

A. 16
B. 32
C. 31
D. 5

32-1 = 31

Q34. By which phase of cell cycle condensation of chromosomes complete?

A. Prophase
B. Metaphase
C. Anphase
D. Telophase

Q35. In plant cells mitocyte can be

A. n

B. 2n

C. Can be both n and 2n

D. None

mitocyte
- plant → n, 2n
- animals → 2n (normally)

Q36. Which of the following is precursor of middle lamella?

A. Plasmamembrane
B. Cell wall
C. Cell plate
D. None

PK

Q37. In E. coli DNA replication takes place in

A. S phase ✗

B. G1 phase

C. Before binary fission ✓

D. M phase

Q38. In which phase mitotic apparatus is formed?

A. Late Prophase
B. Metaphase
C. Anpahse
D. Telophase

aster + SF

Q39. In which of the following phases sister chromatids separate?

A. anaphase I
B. G1
C. Metaphase
D. Anaphase II

anaphase → sister chromatids

anaphase I → homologous chromosomes

anaphase II → sister chromatids

Q40. How many metaphasic plates are formed in metaphase II?

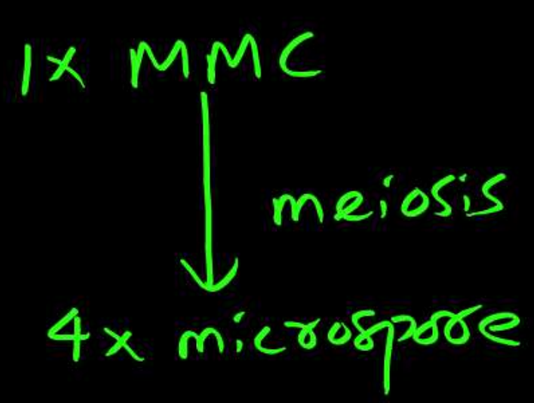
A. 1
B. 2
C. 3
D. 4

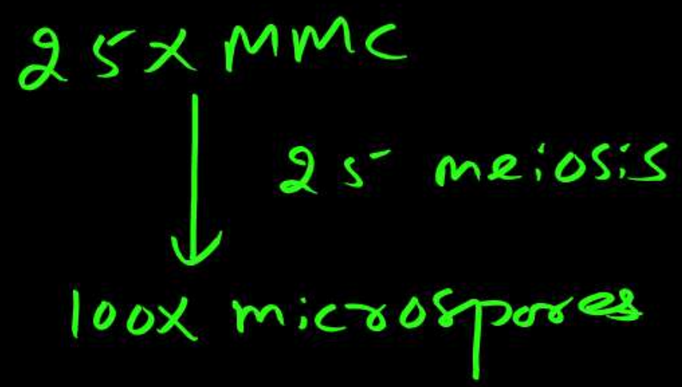
phase	no. of metaphasic plates
metaphase II / metaphase	1
metaphase I	2

Q41. How many Meiosis are required to produce 100 microspore from 25 microspore mother cells?

A. 100 **B. 99**

C. 25 **D. 50**





Q42. Which of the following event takes place in pachytene?

A. Crossing over

B. Synapsis → zygotene

C. Termilization of chiasmata diakinesis

D. Complete disappearance of nuclear envelope diakinesis

Q43. In which of the following phase synapsis takes place?

A. Leptotene
B. Zygotene
C. Pachytene
D. Diplotene

Q44. What would be the number of bivalents in a cell during meiosis if 2n = 20?

A. 5
B. 10
C. 20
D. 40

$2n = 20$

no. of bivalent $\longrightarrow n$ (if meiocyte $\rightarrow 2n$)

Q45. Which of the following phase is called spireme stage?

A. Early prophase
B. Anpahse
C. Telophase
D. Metpahse

Thank You बच्चों