DE-2928
B. Sc. (Bioscience) (Sem. I) Examination
March / April – 2016
Basic Cell Biology - 101
(New Course)

Time : 2 Hours] [Total Marks : 50

सूचना / Instructions :

(1) Fill up strictly the details of signs on your answer book.

Name of the Examination :
B. Sc. (Bioscience) (Sem. I)
Name of the Subject :
Basic Cell Biology-101 (New Course)
Subject Code No. : 2928
Section No. (1, 2, ...) : Nil

Seat No. :

(2) This exam contains 50 multiple choice questions, each worth 1 mark.

All questions carry 50 marks. Choose only ONE most appropriate answer per question.

(3) Do not crease or fold the answer sheet.

O.M.R. Sheet बर्चा अंगणी अत्यन्ती सूचनामुळे आपेक्षित O.M.R. Sheet-ची पत्ता एकूण घेतेचे होते.

Important instructions to fill up O.M.R. Sheet is given on back side of the provided O.M.R. Sheet.
1 Characteristics of plant cell
(A) Presence of cell wall
(B) Both Presence of chloroplast and Presence of cell wall
(C) None of these
(D) Presence of chloroplast

2 What is "S" in a 80S ribosome?
(A) Svedberg unit
(B) Centrifugal force
(C) Centimeter
(D) SI unit

3 Which cell organelles are responsible for synthesis of protein?
(A) Chloroplast
(B) Nucleus
(C) Ribosome
(D) Lysosome
4. The empty _______ is found in bacteria.
   (A) Nucleus
   (B) Ribosome
   (C) Lysosome
   (D) Mitochondrion

5. _______ is an important function of mitochondrion.
   (A) storage of protein and lipid
   (B) provides mechanical strength to the cell
   (C) None of these
   (D) intracellular & extracellular digestion

6. _______ is present in _______.
   (A) animal cell
   (B) both plant cell and animal cell
   (C) None of these
   (D) plant cell
7. Which of the following is not the characteristic of Prokaryotes?
(A) Absence of membrane bound organelles
(B) Absence of nucleus
(C) Absence of mitochondria
(D) DNA is connected to Histones

8. The ER is present in
(A) Nucleolus
(B) Nucleus
(C) Cytoplasm
(D) Chromosomes

9. ________ is present in plant cell.
(A) Golgi body
(B) Mitochondrion
(C) All of these
(D) Chloroplast

10. Which of the following is an example of animal cell?
(A) Virus
(B) Blue green algae
(C) Bacteria
(D) Red blood cell
11 Dark reaction of photosynthesis takes place in
   (i) Grana of the chloroplast.
   (ii) Stroma of the chloroplast.
   (A) Only (i) is right and (ii) is wrong.
   (B) Only (ii) is right and (i) is wrong.
   (C) Both (i) and (ii) are right.
   (D) Both (i) and (ii) are wrong.

12 Which of the cell organelle is called 'suicide bag' of the cell?
   (A) Ribosome
   (B) Lysosome
   (C) Chromosome
   (D) Golgi body

13 Inner membrane and outer membrane is present in ________.
   (A) Mitochondrion
   (B) Both Chloroplast and Mitochondrion
   (C) None of these
   (D) Chloroplast
14. 70S ribosome is found in ________.
   (A) Bacteria
   (B) Chloroplast
   (C) All of these
   (D) Mitochondrion

15. Characteristics of animal cell
   (A) Presence of chloroplast
   (B) Presence of cell wall
   (C) None of these
   (D) Presence of vacuoles

16. Cell membrane is
   (A) Non permeable membrane
   (B) Selective permeable membrane
   (C) Semi permeable membrane
   (D) Permeable membrane

17. Which of the following is a common structure in both Prokaryotes and Eukaryotes?
   (A) Cell membrane and ribosome
   (B) Nucleus and nuclear membrane
   (C) Mitochondria and chloroplast
   (D) Golgi body and vacuoles
18 કોષનો આકાર
(A) બાલુકોષીય
(B) ઘાલકર
(C) આંખદું તમામ
(D) વરફા
The shape of a cell
(A) Polygonal
(B) Cuboidal
(C) All of these
(D) Flat

19 અંગો કોષ કે જેમાં કોષેન્દ્ર પડતા હોય અને કોષેન્દ્રમાં ક્લામસુરૂણ જેવું મુખ્ય નથી.
(A) શુંકાટી લોકેશ શકે
(B) પ્રમાણ લોકેશ શકે
(C) સંક્રમણ લોકેશ શકે
(D) લેક્ટેરિયા લોકેશ શકે
The cell which haven't possess nuclear membrane and mitochondria in the cytoplasm.
(A) May be sperm cell
(B) May be protozoa
(C) May be ovum
(D) May be bacteria

20 નીકળાણી કાળજી _______ માં કોષ છે.
(A) પ્રેરભૂશીલ
(B) અમીલ
(C) ઓલ્સીબેટેરીયા
(D) ક્લીનનો કોષ
Chloroplast is found in
(A) paramecium
(B) amoeba
(C) Oscillatoria
(D) algal cell
21. Who proposed the cell theory?
   (A) Camille Golgi
   (B) Lambda
   (C) None of these
   (D) Robert Brown

22. Nucleus, mitochondrion, chloroplast are absent in
   (A) Animal cell
   (B) Plant cell
   (C) None of these
   (D) Bacteria

23. How eukaryotic cell differs from prokaryotic cell?
   (A) Well defined nucleus
   (B) Both Membrane bound organelles and Well defined nucleus
   (C) None of these
   (D) Membrane bound organelles
24. Which of the following is not a chemical composition of cell wall?
   (A) Chitin
   (B) Peptidoglycan
   (C) Cellulose
   (D) Protein

25. Which kind of ribosome is found in prokaryotes?
   (A) 80 s
   (B) 70 s
   (C) 60 s
   (D) 90 s

26. Mitochondrion is found in
   (A) Amoeba
   (B) Paramecium
   (C) All of these
   (D) Penicillium

27. An animal cell can be differentiated from a plant cell by the presence of-
   (A) Mitochondria
   (B) Centriol
   (C) Ribosome
   (D) Endoplasm
28 Which of the following is not seen in prokaryotes?
(A) Absence of membrane bound organelles
(B) Centriol
(C) All of these
(D) Nucleolus

29 Which one of the following is an exemption to cell theory?
(A) Protozoan
(B) Bacteria
(C) Viruses
(D) Protists

30 DNA _______ ma amavetu che.
(A) Kshethra
(B) Kshethra
(C) Aayeek tamam
(D) Neevala
DNA is present in
(A) Mitochondria
(B) Nucleus
(C) All of these
(D) Chloroplast
31. What is the function of ribosomal peptidyl transferase?
(A) To separate protein molecule
(B) To collect monosaccharide
(C) To separate polysaccharide
(D) To collect protein molecule

32. Which of the following is a type of endoplasmic reticulum?
(A) Smooth
(B) Both Rough and Smooth
(C) None of these
(D) Rough

33. Where is nucleolus found?
(A) Nucleus
(B) Cytoplasm
(C) Ribosome
(D) Chloroplast
34. The study of structure and function of cell is known as
(A) Bacterial cytology
(B) Cell biology
(C) All of these
(D) Plant cytology

35. Which of the following is not a phase of mitotic cell division?
(A) Interphase
(B) Telophase
(C) Anaphase
(D) Metaphase

36. The main part of mitotic cell division is _______ and _______.
(A) Metaphase and Anaphase
(B) Mitosis and Meiosis
(C) Metaphase and Telophase
(D) Karyokinesis and Cytokinesis
37. DNA replication _______ all the time.  
   Replication of DNA takes place in _______ phase  
   (A) G₁  
   (B) M  
   (C) G₂  
   (D) S

38. In meiosis, the products _______ appear.  
   (A) Metaphase II  
   (B) Anaphase II  
   (C) Anaphase I  
   (D) Metaphase I  
   Chiasmata is formed during  
   (A) Metaphase II  
   (B) Anaphase II  
   (C) Anaphase I  
   (D) Metaphase I

39. In meiosis, the products _______ appear.  
   (A)  
   (B)  
   (C)  
   (D)  
   A cell produced after meiotic cell division  
   (A) Diploid gametes  
   (B) Haploid gamete  
   (C) None of these  
   (D) Diploid somatic

40. _______ is also called as Reduction division.  
   (A) Meiosis II  
   (B) Meiosis I  
   (C) Binary fission  
   (D) Mitosis
41. After the replication of DNA, cell divides twice which is known as ________.
   (A) Meiosis
   (B) Binary fission
   (C) All of these
   (D) Mitosis

42. रंगलेणी, बे रंगलेणीका अने ________ नु भनेको हुँ.
   (A) मुख्यकार
   (B) नयुक्तीकोकार
   (C) नयुक्तीकार
   (D) नयुक्तीअस

Chromosomes consists of two chromatids and ________.
   (A) Centromere
   (B) Nucleosome
   (C) Spindles
   (D) Nucleus

43. नीचे पैकी कियो तबको अर्धविवृत्तिव्यवस्थानी प्रक्रियानो नभै?
   (A) गैतरहरु - II
   (B) अनाहरु - II
   (C) आणि भला हारु अहेको नभै
   (D) सापोर्यक्यानेसील

Which of the following is not a phase of meiotic cell division?
   (A) Metaphase - II
   (B) Anaphase - II
   (C) None of these
   (D) Cytokinesis
44  Equation division means
(A) Mitosis
(B) Meosis - II
(C) Binary fission
(D) Meosis - I

45  Which of the following is diploid?
(A) Zygote
(B) Ovum
(C) None of these
(D) Sperm cell

46  Chemical composition of chromosome is
(A) Nucleoside
(B) Nucleoprotein
(C) Polynucleotide
(D) Nucleotide
47. Which of the following is in the best order for chromosomal structure?
(A) Chromatid – Nucleosome – Chromatin – Chromonema
(B) Chromatin – Nucleosome – Solenoid – Chromatid
(C) Nucleosome – Solenoid – Chromonema – Chromatid
(D) Nucleosome – Solenoid – Chromatin – Chromonema

48. Which of the following is a non-living thing in the cell?
(A) Chloroplast
(B) Endoplasmic reticulum
(C) Cell wall
(D) Centromere

49. Which of the following is not a chloroplast shape?
(A) Cup shape
(B) Ribbon shape
(C) All of these
(D) Network

50. Which cell organelle is responsible for cellular respiration?
(A) Nucleus
(B) Ribosome
(C) Mitochondrion
(D) Golgi body