



श्री चित्रा तिरुनाल आयुर्विज्ञान और प्रौद्योगिकीसंस्थान, तिरुवनंतपुरम्-11  
SREE CHITRA TIRUNAL INSTITUTE FOR MEDICAL SCIENCES & TECHNOLOGY  
THIRUVANANTHAPURAM—695 011

ENTRANCE EXAMINATION - ACADEMIC SESSION JANUARY 2022

Program: PG Diploma in Clinical Perfusion

Time:90 Minutes

Max.Marks: 100

(Select the most appropriate answer)  
(There are **no** negativemarks for wrong answers)

1. "Cell drinking" is called
  - a. Phagocytosis
  - b. Apoptosis
  - c. Pinocytosis
  - d. Necrosis
2. Anaemia is the deficiency of
  - a. Leukocytes
  - b. Platelets
  - c. Haemoglobin
  - d. Proteins
3. 1 gm Haemoglobin carries \_\_\_\_\_ of oxygen
  - a. 2.3ml
  - b. 1.34ml
  - c. 5.6ml
  - d. 0.50ml
4. In Sickle cell anaemia glutamic acid is replaced by valine. Which one of the following triplets code for valine?
  - a. AAG
  - b. GAA
  - c. GGG
  - d. GUG
5. Scientist who firstly explained the blood circulation
  - a. William Harvey
  - b. Leeuwenhoek
  - c. Louis Pasteur
  - d. Gohn Gibbon
6. Which of the following is not a true amphibian animal?
  - a. Frog
  - b. Salamander
  - c. Tortoise
  - d. Toad
7. Mushroom is associated with
  - a. Fern
  - b. Lichens
  - c. Algae
  - d. Fungi
8. Which Vitamin is effective in blood clotting?
  - a. Vitamin A
  - b. Vitamin K
  - c. Vitamin B
  - d. Vitamin D

9. \_\_\_\_\_ production is associated with the function of liver
- a. Lipase
  - b. HCL
  - c. Urea
  - d. Mucus
10. Which of the following is also called "Jelly Fish"
- a. Hydra
  - b. Physelia
  - c. Aurelia
  - d. Matrideam
11. World AIDS Day is organized every year on
- a. Dec 1
  - b. Dec 15
  - c. Dec 6
  - d. Dec 30
12. Name of the disease connected with Rh factor
- a. Erythropoiesis
  - b. Haemophilia
  - c. Erythroblastosis
  - d. Myxoedema
13. Which organ produce enormous amount of heat?
- a. Heart
  - b. Lungs
  - c. Kidney
  - d. Liver
14. Hypothermia is
- a. Increase in temperature
  - b. Decrease in CO<sub>2</sub>
  - c. Decrease in temperature
  - d. Increase in CO<sub>2</sub>
15. The Pacemaker of heart
- a. AV Node
  - b. SA Node
  - c. Purkinje fibres
  - d. Bundle of His
16. Normal Cardiac cycle is
- a. 0.8sec
  - b. 1.8sec
  - c. 8.0sec
  - d. 0.08sec
17. Largest phylum in animal kingdom
- a. Arthropoda
  - b. Protozoa
  - c. Annelida
  - d. Chordata
18. The artery which carries deoxygenated blood
- a. Radial artery
  - b. Brachial artery
  - c. Pulmonary artery
  - d. Hepatic artery
19. Insulin hormone is a
- a. Peptide
  - b. Carbohydrate
  - c. Fatty acid
  - d. Glycolipid
20. Volume of air remaining in lungs even after forced expiration
- a. Tidal Volume
  - b. Residual Volume
  - c. Vital capacity
  - d. IRV

21. Normal tidal volume is
- a. 500ml
  - b. 300ml
  - c. 1500ml
  - d. 300ml
22. Which of the following is the antigen presenting cells?
- a. B cells
  - b. RBC
  - c. T cells
  - d. Mast cell
23. Decrease secretion of growth hormone
- a. Cretinism
  - b. Dwarfism
  - c. Acromegaly
  - d. Gigantism
24. The oxygen dissociation curve is
- a. Straight line
  - b. Circular curve
  - c. Sigmoid curve
  - d. Rhombus shaped
25. The valve between left atrium and left ventricle is
- a. Tricuspid valve
  - b. Mitral valve
  - c. Semilunar valve
  - d. pulmonary valve
26. The letter T- lymphocytes refers to as
- a. Thalamus
  - b. Thyroid
  - c. Thymus
  - d. Tonsil
27. Opium is extracted from
- a. Papaver Somniferum
  - b. Datura stramonium
  - c. Belladonna
  - d. Cannabis
28. Which ion involves in blood clotting
- a. Calcium
  - b. Potassium
  - c. Magnesium
  - d. Chloride
29. Insufficient blood supply in human body is refer as
- a. Ischemia
  - b. Hemorrhage
  - c. hemostasis
  - d. hyperthermia
30. \_\_\_\_\_ is the PH of human blood
- a. 7.2
  - b. 6.8
  - c. 7.4
  - d. 7.9
31. The pericardium membrane can
- a. Encloses the heart
  - b. Membrane that line the aorta
  - c. make in heart valves
  - d. found in veins
32. Thrombocytopenia is a condition
- a. Increased WBCs
  - b. Decreased platelets
  - c. Decreased RBCs
  - d. Increased RBCs

33. Most abundant immunoglobulin present is
- |        |        |
|--------|--------|
| a. IgA | c. IgG |
| b. IgM | d. IgE |
34. Albumin produced in
- |           |                   |
|-----------|-------------------|
| a. Spleen | c. Kidney         |
| b. Liver  | d. Erythropoietin |
35. Maximum amount CO<sub>2</sub> transfer in body as
- |                    |                |
|--------------------|----------------|
| a. Carbide         | c. Bicarbonate |
| b. Carbon monoxide | d. Amylase     |
36. Number of lobes in right lungs have
- |      |      |
|------|------|
| a. 3 | c. 2 |
| b. 4 | d. 1 |
37. Pituitary gland is located in
- |              |            |
|--------------|------------|
| a. Abdominal | c. Cranial |
| b. Throacic  | d. spinal  |
38. \_\_\_\_\_ is the process the stomach muscle contract to propel food through the digestive tract
- |                  |                |
|------------------|----------------|
| a. Regurgitation | c. Peristalsis |
| b. Secretion     | d. Synthesis   |
39. Gas exchange in lungs is in
- |            |                |
|------------|----------------|
| a. Bronchi | c. Capillaries |
| b. Pleura  | d. Alveoli     |
40. Oxygenated blood carries from heart by
- |                     |                |
|---------------------|----------------|
| a. Pulmonary artery | c. Aorta       |
| b. Pulmonary vein   | d. Capillaries |
41. Cranial nerve that senses the smell is
- |                |              |
|----------------|--------------|
| a. Hypoglossal | c. Olfactory |
| b. Vagus       | d. Glossal   |
42. Fibrous protein found in the dermis
- |             |              |
|-------------|--------------|
| a. Collagen | c. Heparin   |
| b. Melanin  | d. lipocytes |
43. Sternum is connected to ribs by
- |                     |                            |
|---------------------|----------------------------|
| a. Bony matter      | c. White fibrous cartilage |
| b. Hyalin cartilage | d. Aerolar tissue          |
44. Life span of WBC is
- |               |                      |
|---------------|----------------------|
| a. 20-30 days | c. less than 10 days |
| b. 30 days    | d. 120 days          |

45. Urea is removed by which cycle in uricotelic animals  
 a. Ornithine cycle                      c. Krebs cycle  
 b. Kelvin cycle                            d. None of the above
46. Urine produced by kidney by  
 a. Diffusion                                c. Osmosis  
 b. Countercurrent mechanism            d. Facilitate transport
47. Arteries that supply blood to the heart is  
 a. Carotid arteries                        c. Coronary arteries  
 b. Pulmonary arteries                  d. Subclavian arteries
48. The substance that lost during dehydration is  
 a. Calcium chloride                      c. Potassium chloride  
 b. Sodium chloride                        d. Magnesium chloride
49. Sunshine vitamin is  
 a. Vitamin C                                c. Vitamin A  
 b. Vitamin D                                d. Vitamin K
50. Respiratory centre is located in  
 a. Medulla oblongata                      c. Cerebellum  
 b. Cerebrum                                d. Spinal cord
51. Heart beat increases at the time of interview because of  
 a. Renin                                      c. Adrenaline  
 b. Rennin                                    d. Diuretic ADH
52. Virus has  
 a. RNA                                        c. Both RNA and DNA  
 b. DNA                                        d. Either RNA or DNA
53. Largest ovule in plant kingdom are found in  
 a. Pinus                                        c. Thuja  
 b. Cycas                                        d. Gnetum
54. The basic unit of classification is  
 a. Genus                                      c. Subspecies  
 b. Species                                      d. Variety
55. Binomial nomenclature was introduced by  
 a. Linnaeus                                  c. Bentham and Hooker  
 b. Darwin                                      d. Aristotle
56. Pouched mammals are known as  
 a. Prototherians                              c. Eutherians  
 b. Metatherians                                d. Therians
57. The classification of Linnaeus was mainly based on  
 a. Sepals                                      c. Petals  
 b. Carpels                                      d. Stamens

58. The symbiotic relationship of algae and fungus is found in  
 a. Lichen                      c. Pneumatophore  
 b. Mycorrhiza                d. Bacteriophage
59. Fungi are filamentous with the exception of "X" which is unicellular. Identify X  
 a. Yeast                        c. Mucor  
 b. Albugo                      d. Lichen
60. Larva of house-fly lacks  
 a. Eyes                         c. Spiracles  
 b. Wings                        d. None of these
61. Ticks and mites are actually  
 a. Arachnids                    c. Insects  
 b. Crustaceans                d. Myriapods
62. The sugarcane plant has  
 a. Dumb-bell shaped guard cells                      c. Reticulate venation  
 b. Pentamerous flowers                                d. Capsular fruits
63. Floral diagram fails to indicate  
 a. Epiphyly and epipetaly                            c. Position of ovary on the thalamus  
 b. Aestivation and placentation                    d. Cohesion of carpels and stamens
64. Cork cambium is  
 a. Lateral meristem                                    c. Intercalary meristem  
 b. Apical meristem                                    d. Primitive meristem
65. Prostate gland secretion helps in formation of  
 a. Larva                         c. Semen  
 b. Cocoon                        d. None of these
66. Cessation of menstrual cycle in women is called  
 a. Menopause                                          c. Ovulation  
 b. Lactation                                            d. Parturition
67. Corpus luteum is a mass of cells found in  
 a. Brain                         c. Pancreas  
 b. Ovary                        d. Spleen
68. XO chromosomal abnormality in humans causes  
 a. Turner's syndrome                                c. Patau's syndrome  
 b. Down's syndrome                                 d. Klinefelter's syndrome
69. Which disease has XXY chromosome constitution?  
 a. Turner's syndrome                                c. Okazaki syndrome  
 b. Down's syndrome                                 d. Klinefelter's syndrome

70. Theory of Pangenesis was given by  
 a. Lamarck                      c. Darwin  
 b. Oparin                      d. DeVries
71. "*Homosapiens*" implies  
 a. Human race                      c. Modern man  
 b. Human beings                      d. None of these
72. Wings of pigeon, mosquito and bat show  
 a. Divergent evolution                      c. Convergent evolution  
 b. Atavism                      d. All of these
73. The treatment of snake-bite by anti venom is an example of  
 a. Artificially acquired active immunity      c. Naturally acquired passive immunity  
 b. Artificially acquired passive immunity      d. Specific natural immunity
74. Which of the following disease is due to an allergic reaction?  
 a. Goitre                      c. Skin cancer  
 b. Hay fever                      d. Rheumatic fever
75. Inflammatory response, in allergy is caused by the release of  
 a. Antigen                      c. Histamines  
 b. Histones                      d. Antibodies
76. Essential oils are those which  
 a. Are essential to the plant itself                      c. Produce perfumes  
 b. Are used as lubricants                      d. Are essential for human beings
77. Which of the following is a viral disease of poultry birds?  
 a. Anthrax                      c. Coccidiosis  
 b. Ranikhet                      d. None of these
78. Introduction of foreign gene for improving genotype is called  
 a. Tissue culture                      c. Genetic engineering  
 b. Vernalization                      d. Eugenics
79. The scientific process by which crop plants are enriched with certain desirable nutrients is called  
 a. Crop protection                      c. Bio-fortification  
 b. Breeding                      d. Bio-remediation
80. Territoriality occurs as a result of  
 a. Competition                      c. Predation  
 b. Parasitism                      d. Co-operation
81. Obligate parasites live on  
 a. Living host only                      c. Dead organic matter only  
 b. Living host and dead organic matter                      d. Artificial liquid medium

82. Food chain starts with
- |               |                |
|---------------|----------------|
| a. Autotrophs | c. Carnivores  |
| b. Herbivores | d. Decomposers |
83. Trophic levels are formed by:
- |            |                                   |
|------------|-----------------------------------|
| a. Plants  | c. Organisms linked in food chain |
| b. Animals | d. Carnivores                     |
84. The trees occurring in two seasons is the characteristic feature of
- |                               |                      |
|-------------------------------|----------------------|
| a. Temperate deciduous forest | c. Grassland         |
| b. Tropical savannah          | d. Coniferous forest |
85. Acid rain is due to pollution of
- |               |                                        |
|---------------|----------------------------------------|
| a. Dust       | c. SO <sub>2</sub> and NO <sub>2</sub> |
| b. Pesticides | d. Carbon particle                     |
86. Deforestation causes
- |                   |                    |
|-------------------|--------------------|
| a. Soil erosion   | c. Noise pollution |
| b. Soil pollution | d. Air pollution   |
87. Euthanasia (mercy killing) was first legalized in:
- |                         |           |
|-------------------------|-----------|
| a. Switzerland          | c. France |
| b. Netherlands(Holland) | d. Italy  |
88. From where did Mahatma Gandhi start the famous Dandi March?
- |           |              |
|-----------|--------------|
| a. Surat  | c. Bardoli   |
| b. Mumbai | d. Ahmedabad |
89. The person who served as the President of India twice, was:
- |                        |                  |
|------------------------|------------------|
| a. Radha Krishnan      | c. Zakir Hussain |
| b. Dr. Rajendra Prasad | d. V.V Giri      |
90. Who is the constitutional head of the Government of India?
- |                   |                           |
|-------------------|---------------------------|
| a. President      | c. Chief Justice of India |
| b. Prime Minister | d. Attorney General       |
91. The largest producer of rubber is:
- |              |             |
|--------------|-------------|
| a. Sri Lanka | c. Japan    |
| b. India     | d. Malaysia |
92. The disease rheumatism effects:
- |         |           |
|---------|-----------|
| a. Legs | c. Lungs  |
| b. Ears | d. Joints |
93. Weight of blood in the body is:
- |                                                                |
|----------------------------------------------------------------|
| a. About 7 litres in normal body or 7% of the total bodyweight |
| b. About 5 litres in normal body or 5% of the total bodyweight |
| c. About 10 litres in normal body or 10% of the bodyweight     |
| d. None of these                                               |



94. The earthquake is measured by:
- a. Lactometer
  - b. Seismograph
  - c. Hygrometer
  - d. Barometer
95. Which of the following metals forms an amalgam with other metals?
- a. Tin
  - b. Mercury
  - c. Lead
  - d. Zinc
96. Which of the following is a non-metal that remains liquid at room temperature?
- a. Phosphorous
  - b. Bromine
  - c. Chlorine
  - d. Helium
97. Toxic substances are detoxified in human body in
- a. Kidney
  - b. Lungs
  - c. Liver
  - d. Stomach
98. The shoulder blade is made of
- a. clavicle
  - b. Humerus
  - c. Ilium
  - d. Scapula
99. Bipolar nerve cells are present in
- a. Skin tactile corpuscles
  - b. Spinal cord
  - c. Retina of eye
  - d. All the above
100. Hearing impairment results from damage to which part of brain?
- a. Frontal lobe
  - b. Parietal lobe
  - c. Temporal lobe
  - d. Cerebellum





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Answer Key

Question No.	Correct answer	Question No.	Correct answer	Question No.	Correct answer
1.	C	38.	A	75.	C
2.	C	39.	D	76.	C
3.	B	40.	C	77.	B
4.	D	41.	C	78.	C
5.	A	42.	A	79.	C
6.	C	43.	B	80.	A
7.	A	44.	A	81.	A
8.	B	45.	A	82.	A
9.	C	46.	B	83.	C
10.	C	47.	C	84.	A
11.	A	48.	B	85.	C
12.	C	49.	B	86.	A
13.	D	50.	A	87.	B
14.	C	51.	C	88.	D
15.	B	52.	D	89.	B
16.	A	53.	B	90.	A
17.	A	54.	B	91.	D
18.	C	55.	A	92.	D
19.	A	56.	B	93.	A
20.	B	57.	D	94.	B
21.	A	58.	A	95.	B
22.	C	59.	A	96.	B
23.	B	60.	B	97.	C
24.	C	61.	A	98.	D
25.	B	62.	A	99.	C
26.	C	63.	C	100.	C
27.	A	64.	B		
28.	A	65.	A		
29.	A	66.	A		
30.	C	67.	B		
31.	A	68.	A		
32.	B	69.	B		
33.	C	70.	C		
34.	B	71.	B		
35.	C	72.	C		

