



AAH-003-001642 Seat No. _____

Third Year B. Sc. (Sem. VI) (CBCS) Examination

April/May - 2016

Z-602 : Zoology

(Physiology, Histology, Microtechniqueus) (New Course)

Faculty Code : 003
Subject Code : 001642

Time : **2.30** Hours] [Total Marks : **70**

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Instructions : (1) Illustrate your answer with neat and labelled diagram.

(2) Figures to the right side indicate full marks of the questions.

1 Give the answer of followins MCQs : 20

(1) Which of the following is largest immunoglobins ?

$$(A) \quad I_g G \qquad \qquad \qquad (B) \quad I_g M$$

$$(C) \quad I_g A \qquad \qquad \qquad (D) \quad I_g E$$

(2) During muscle contraction C_a^{++} ions bind with

(C) G. actin (D) Myosin

(8) Which phase is sexually receptive phase in non-primate sexual cycle ?

(A) Ana estrus (B) Estrus
(C) Diestrus (D) Polyestrous

(9) Rods and cones of eyes are modified.

(A) Multipolar neuron (B) Unipolar neuron
(C) Bipolar neuron (D) None of these

(10) Which is true sequence ?

(A) Fixation, embedding in wax, tissue collection, sectioning
(B) Sectioning, fixation, embedding in wax, tissue collection
(C) Tissue collection, embedding in wax, sectioning, fixation
(D) Tissue collection, fixation, embedding in wax, sectioning

(11) LH surage occurs during which phase of the menstrual cycle?

(A) At the middle of the cycle
(B) Menstrual phase
(C) After leutial period
(D) At the begining of proliferative phase

(12) The nutritive cells are found in seminiferous tubules are

(A) Leyding cells (B) Atertic follicular cells
(C) Sertoli cells (D) Chromaffin cells

(13) Which of the following disease is not related to thyroid gland ?

(A) Acromegaly (B) Myxoedema
(C) Cretinism (D) Goitre

(14) In the extrinsic clotting path way the active factor VII activate factors.

(A) X and XI (B) IX and XI
(C) IX and X (D) XI and XII

(15) Corpus albicinum is found in T.S. of

(A) Testis (B) Ovary
(C) Renal gland (D) Muscles

(16) Systole causes

(A) Entry of blood in to lungs
(B) Entry of blood in to heart
(C) Exit of blood from lung
(D) Exit of blood from ventricles

(17) Test buds on the posterior side of tongue in human recognize

(A) Bitter taste (B) Sweet taste
(C) Sour taste (D) Salt taste

(18) The balancing organ of ear is

- (A) Lagena and sacculus
- (B) Semicircular canal and utriculus
- (C) Semicircular canal and otolith
- (D) Otolith and lagena

(19) Colour on oxygenation of haemocyanin is

- (A) Orang red
- (B) Blue
- (C) Reddish
- (D) Purple red

(20) Inflammatory response, in allergy, is caused by the release of

- (A) Histamines
- (B) Interferon
- (C) Antibodies
- (D) Prothrombin

2 (a) Write any three out of six :

06

- (1) Write short note on Haemotoxyline.
- (2) S.A. node and A.V. node location and function.
- (3) Iron containing respiratory pigment.
- (4) Explain fluid and spiro's theory of blood clotting.
- (5) Hormones of pancreas.
- (6) Single staining techniques.

(b) Write any three out of six : 09

- (1) Female gonadal hormones.
- (2) Phonoreceptor.
- (3) Regulation of heart-beat.
- (4) Disorder of thyroid hormones.
- (5) Electro cardiogram.
- (6) Histological structure of testis.

(c) Write any two out of five : 10

- (1) Immunoglobins - their types and function in detail.
- (2) Structure of heart.
- (3) Mechanism of blood clotting.
- (4) Pituitary gland's hormones and its disorders.
- (5) Photoreceptors.

3 (a) Write any three out of six : 06

- (1) Describe - Cori cycle.
- (2) Write a short note on blood-pressure.
- (3) Male gonadal hormones and its function.
- (4) Bouin's fluid as fixative.
- (5) Eosin.
- (6) allergy.

(b) Write any three out of six : **09**

- (1) Double staining technique.
- (2) Cardiac cycle.
- (3) Histological structure of ovary.
- (4) Describe - Test bud.
- (5) Estrus cycle.
- (6) Explain Howell's theory of blood co-agulation.

(c) Write any two out of five : **10**

- (1) Describe in brief - menstrual cycle.
- (2) Process of making histological slides.
- (3) Physical and chemical events during muscle sliding filament theory.
- (4) Histological structure of adrenal gland and its hormonal function.
- (5) Transport of gases during respiration.
