## COLLEGE INTERNAL EVALUATION (CIE)-2023 DR KANAILAL BHATTACHARYYA COLLEGE 6<sup>th</sup> SEMESTER, SUBJECT-PHYSIOLOGY HONOURS, (DATE: 16/05/2023)

What are non-ionizing radiations? Give any two examples.

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What are non-ionizing radiations? Give any two examples.

**FULL MARKS-20 TIME-1 HOUR FULL MARKS-20 TIME-1 HOUR** PAPER-CC13 PAPER-CC13 1. Answer any 5 questions from the following: 1. Answer any three questions: 5×2=10 5×2=10 a) State the difference between Sertoli and Leydig cell. a) State the difference between Sertoli and Leydig cell. b) What are the functions of inhibin? b) What are the functions of inhibin? What is cryptorchidism? What is cryptorchidism? d) What is puberty? d) What is puberty? What is parturition? What is parturition? What is acrosome. Mention its function. f) What is acrosome. Mention its function. g) What is stem cell? What is stem cell? h) What is totipotency? What is totipotency? Define gastrulation. Define gastrulation. What is foetal-ejection reflex? What is foetal-ejection reflex? PAPRER-CC14 PAPRER-CC14 1. Answer any 5 questions from the following: 1. Answer any 5 questions from the following: 5X2 = 105X2 = 10a) Define filtration fraction. a) Define filtration fraction. b) What is PAH clearance test? Mention its use. What is PAH clearance test? Mention its use. Draw a suitable diagram showing neural connections of urinary bladder. Draw a suitable diagram showing neural connections of urinary bladder. d) What is the importance of brown fat in the regulation of body What is the importance of brown fat in the regulation of body temperature? temperature? What is TmG? e) What is TmG? What is the cause and symptoms of Diabetes insipidus? What is the cause and symptoms of Diabetes insipidus? Name the forces involved in glomerular ultra-filtration. Name the forces involved in glomerular ultra-filtration. Distinguish between eccrine and apocrine sweat glands. h) Distinguish between eccrine and apocrine sweat glands. Why renal circulation is called a portal system? Justify. Why renal circulation is called a portal system? Justify.

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FULL MARKS-20 TIME-1 HOUR FULL MARKS-20 TIME-1 HOUR

PAPER-DSEA4

1. Answer any 5 questions from the following:

5×2=10

- a) Define undernutrition and overnutrition.
- b) Write any two differences between Marasmus and Kwashiorkor.
- c) State any two importance of family planning.
- d) What are the characteristic signs and symptoms of IDD?
- e) What are communicable diseases? Give two examples.
- f) Define assisted reproductive technology (ART). Give two examples.
- g) Name any two preventive measures to control Hepatitis B infection.
- h) What causes Japanese Encephalitis and Swine flu?
- i) Mention any two differences between Rickets and Osteomalacia.
- Mention any dietary approaches that should be taken for the management of hypertension.

#### **PAPRER-DSEB3**

2. Answer any 5 questions from the following:

5X2 = 10

- a) What are zeitgebers? Give examples.
- b) Why SCN is regarded as the biological clock?
- c) Define circadian rhythm. Give any two examples in human.
- d) What are PERIOD genes?
- e) What are stressors? Give examples.
- f) What are somnogens?
- g) What is the difference between ultradian and infradian rhythm?
- h) Draw the Retino-hypothalamic tract. What is its importance?
- i) Define heat stress.
- j) What is Zet lag?

PAPER-DSEA4

1. Answer any three questions:

5×2=10

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- b) Write any two differences between Marasmus and Kwashiorkor.
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FULL MARKS-20 TIME-1 HOUR

#### PAPER-CC8

1. Answer any 5 questions from the following:

5×2=10

- a) What are the functions of myenteric plexus?
- b) What is Kupffer cell?
- c) What is Brunners gland? Mention its function.
- d) What do you mean by portal triad?
- e) Describe the reaction catalyzed by L-glutamate dehydrogenase and mention its significance.
- f) Mention the difference between hexokinase and glucokinase.
- g) What is oxidative deamination?
- h) Discuss the step where substrate-level phosphorylation takes place in TCA cycle.
- i) Why PEK-1 is the rate limiting steps of glycolysis?
- j) Write the significance of R-L cycle?

#### PAPRER-CC9

2. Answer any 5 questions from the following:

5X2=10

- a) What is meant by the coding strand of DNA?
- b) What is codon?
- c) What is wobble hypothesis? State its significance.
- d) Write the difference of inducible and repressible operon with example.
- e) What do you understand by recombinant DNA?
- f) What is meant by R value in chromatography?
- g) What is replication bubble?
- h) State two important applications of PCR.
- i) Name any two radioisotopes used in tracing metabolic pathways.
- j) What is the role of Rho factor in transcription?

### COLLEGE INTERNAL EVALUATION (CIE)-2023 DR KANAILAL BHATTACHARYYA COLLEGE 4<sup>TH</sup> SEMESTER, SUBJECT-PHYSIOLOGY HONOURS, (DATE: 16/05/2023)

FULL MARKS-20 TIME-1 HOUR

#### PAPER-CC8

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 $3 \times 2 = 6$ 

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### COLLEGE INTERNAL EVALUATION (CIE)-2023 DR KANAILAL BHATTACHARYYA COLLEGE

4<sup>TH</sup> SEMESTER, SUBJECT-PHYSIOLOGY HONOURS, (DATE: 17/05/2023)

FULL MARKS-20 TIME-1 HOUR

PAPER-CC10

1. Answer any 5 questions from the following:

5×2=10

- a) Mention one function of cyanocobalamin.
- b) State the deficiency symptoms of folic acid.
- c) What are Antivitamins? Give example.
- d) Why vit-C deficiency lead to anaemia?
- e) What is hypervitaminosis? Give example.
- f) Mention any two important dietary sources of calcium.
- g) Define B.M.R. mention its normal values?
- h) What do you mean by ACU?
- i) What do you mean by positive and negative nitrogen balance?
- j) Mention any two importance of dietary fibres.

#### **PAPRER-SECB**

2. Answer any 5 questions from the following:

5X2 = 10

- a) Differentiate food additive and adulterants with examples
- b) Mention any two uses of metanil yellow.
- c) Mention any two toxic effects of rhodamine B.
- d) Mention any two hazardous effects of aluminium foil.
- e) What is Chinese restaurant syndrome?
- f) why saccharine is harmful for gut microbiota?
- g) Mention any two physiological effects of dioxin.
- h) Mention two sources of bisphenol-a exposure on human body.
- i) Mention two sources of PCBs.
- j) What is incidental adulteration?

### COLLEGE INTERNAL EVALUATION (CIE)-2023 DR KANAILAL BHATTACHARYYA COLLEGE

4<sup>TH</sup> SEMESTER, SUBJECT-PHYSIOLOGY HONOURS, (DATE: 17/05/2023)

FULL MARKS-20 TIME-1 HOUR

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# COLLEGE INTERNAL EVALUATION (CIE)-2023 DR KANAILAL BHATTACHARYYA COLLEGE 2<sup>nd</sup> SEMESTER, SUBJECT-PHYSIOLOGY HONOURS, (DATE: 16/05/2023)

# COLLEGE INTERNAL EVALUATION (CIE)-2023 DR KANAILAL BHATTACHARYYA COLLEGE 2<sup>nd</sup> SEMESTER, SUBJECT-PHYSIOLOGY HONOURS, (DATE: 16/05/2023)

PAPER-CC3

FULL MARKS-20 TIME-1 HOUR FULL MARKS-20 TIME-1 HOUR

PAPER-CC3

1. Answer any 5 questions from the following:

5×2=10

5X2=10

- a) What is GGPCR? Give one example.
- b) Differentiate between G-actin and F-actin.
- c) What is Nissl Substance?
- d) Define Rheobase and Chronaxie.
- e) Why A-fibres possess higher conduction velocity than  $A\delta$ -fibres?
- f) What is titin?
- g) Define refractory period.
- h) What is EPSP and IPSP?
- i) What is isometric and isotonic muscle contraction?
- j) Distinguish between neurotransmitters and neuromodulators.

### PAPRER-CC4

- 2. Answer any 5 questions from the following:
  - a) What are meant by meninges of brain?
  - b) State Bell-Magendi law.
  - c) Distinguish between ionotropic and metabotropic receptors.
  - d) What is the origin and function of the Tract of Gall and Burdach?
  - e) What is the structure of nicotinic acetylcholine receptor?
  - f) Mention any two functions of histamine receptors.
  - g) State one merit and demerit of MRI.
  - h) Mention any two uses of CT SCAN.
  - i) Mention one exogenous and two endogenous opioid peptides.

1. Answer any three questions:

5×2=10

- a) What is GGPCR? Give one example.
  - b) Differentiate between G-actin and F-actin.
  - c) What is Nissl Substance?
  - d) Define Rheobase and Chronaxie.
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