

This booklet consists of **100** questions and **12** printed pages.

RGUCET/2023/PG/34

Series

NIL

RGUCET 2023
MASTER OF SCIENCE IN SPORTS PHYSIOLOGY

Full Marks: 100

Time: 2 Hours

Roll No.

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Day and Date of Examination :

Signature of Invigilator(s) :

Signature of Candidate :

General Instructions:

PLEASE READ ALL THE INSTRUCTIONS CAREFULLY BEFORE MAKING ANY ENTRY.

1. DO NOT OPEN THIS TEST BOOKLET UNTIL YOU ARE TOLD TO DO SO.
2. Candidate must write his/her Roll Number on the space provided.
3. This Test Booklet contains 100 Multiple Choice Questions (MCQs). Each question carries 1 mark. There shall be negative marking of 0.25 against each wrong attempt.
4. Please check the Test Booklet to verify that the total pages and total number of questions contained in the test booklet are the same as those printed on the top of the first page. Also check whether the questions are in sequential order or not.
5. Candidates are not permitted to enter into the examination hall 15 minutes after the commencement of the entrance test or leave the examination hall before 30 minutes of end of examination.
6. Making any identification mark in the OMR Answer Sheet or writing Roll Number anywhere other than the specified places will lead to disqualification of the candidate.
7. Candidates shall maintain silence inside and outside the examination hall. If candidate(s) is/are found violating the instructions mentioned herein or announced in the examination hall, they will be summarily disqualified from the entrance test.
8. In case of any dispute, the decision of the Entrance Test Committee, RGU shall be final and binding.
9. The OMR Answer Sheet consists of two copies, the Original copy and the Student's copy.

General English

1	Use the correct punctuation in the following sentence. O god ___ I' ve lost my wallet.				b	!
	a)?	b)!	c):	d);		
2	Synonyms of Indispensable.				d	Crucial
	a)Requirement	b)Pressing	c)Requisite	d)Crucial		
3	Antonym of Inscrutable.				b	Obvious
	a)Baffling	b) Obvious	c)Confuse	d)Reduce		
4	Select the correct Question tag:				b	Isn't it?
	a)Is it?	b)Isn't it?	c)Does it?	d)Did it?		
5	Choose the correct word of the misspelled word:"Embarrassad"				b	Embarrassed
	a)Embarassed	b)Embarrassed	c)Embarased	d)Embarrassed		
6	Many villagers work ____ farms.				c	On
	a)In	b)At	c)On	d)For		
7	Atal Bihari Vajpayee, had been a Prime Minister for:				c	Three Times
	a) One time	b)Two Times	c)Three Times	d)Four Times		
8	India Launched the "NET ZERO" innovation virtual center with which country?				b	UK
	a) USA	b) UK	c) Australia	d) South Korea		
9	Who is known as the father of computer?				c	Charles Babbage
	a) B. Pascal	b) H. Hollerith	c) Charles Babbage	d) J.V. Neumann		
10	Which country launched the world's first nation wise 5G mobile network?				d	South Korea
	a) China	b) USA	c) India	d) South Korea		
11	What is the maximum number of Members in Lok Sabha?				c	

	a) 512	b) 542	c) 552	d) 532		552
12	The Arjuna Awards were instituted in the year-				c	1961
	a) 1965	b) 1963	c) 1961	d) 1975		
13	India first took part in the Olympic Games in the year-				a	1920
	a) 1920	b) 1928	c) 1972	d) 1974		
14	Who won gold medal in the diamond league championship 2023 of javelin throw event?				a	Neeraj Chopra
	a) Neeraj Chopra	b) Jacob Vadlejch	c) Ulian Weber	d) Urtis Thompson		
15	'Washington Declaration' is a bilateral agreement that was signed between the US and which country?				c	South Korea
	a) Canada	b) UK	c) South Korea	d) Australia		
16	Which is the regulatory authority for civil aviation security in India?				a	BCAS
	a) BCAS	b) NITI Aayog	c) DRDO	d) ISRO		
17	'Integrated Defence Staff Headquarters' will be set up in which state/UT?				c	New Delhi
	a) Gujarat	b) Maharashtra	c) New Delhi	d) Punjab		
18	NITI Aayog released the 'Best Practices in Social Sector: A Compendium, 2023', in collaboration with which institution?				c	UNDP
	a) UNICEF	b) UNESCO	c) UNDP	d) UNEP		
19	The Smart Cities Mission has been extended from June 2023 to which year?				a	2024
	a) 2024	b) 2025	c) 2027	d) 2030		
20	Which city is the host of the 'QUAD Summit 2023'?				b	Sydney
	a) New Delhi	b) Sydney	c) Tokyo	d) New York		
21	Which country hosted the 'ASEAN India Maritime Exercise (AIME-2023)'?				b	Singapore
	a) India	b) Singapore	c) Thailand	d) Myanmar		

22	If P ALE is coded as 2134, EARTH is coded as 41590, how is PEARL coded in that code?				b	24153
	a) 29530	b) 24153	c) 25413	d) 25430		
23	If P means \times , Q means \div , R means $+$ & S means $-$, then what is the value of $154 Q 14 S 7 P 3 R 25$?				d	15
	a) 35	b) 57	c) 42	d) 15		
24	Crime: Punishment: Deed:?				d	Prize
	a) Pleasure	b) Hatred	c) Sin	d) Prize		
25	If NOIDA is written as OPJEB, then what will be the code for DELHI?				c	EFMIJ
	a) EFMAK	b) EFAMK	c) EFMIJ	d) EFMIK		

26	Which of the following is present on the surface of intestinal epithelial cells?				D	Microvilli
	a) Zymogen granules	b) Pinocytic vesicles	c) Phagocytic vesicles	d) Microvilli		
27	Which of the following organs is known as the "graveyard" of RBCs?				A	Spleen
	a) Spleen	b) Kidney	c) Liver	d) Gall bladder		
28	The basic functional unit of a human kidney is known as				A	Nephron
	a) Nephron	b) Pyramid	c) Henle's loop nephron	d) Nephridia		
29	Single uriniferous tubule does not contain				B	Collecting duct
	a) Loop of Henle	b) Collecting duct	c) Distal convoluted tubule	d) Bowman's capsule		
30	Which of the following joints is immovable?				A	Fibrous joint
	a) Fibrous joint	b) Synovial joint	c) Cartilaginous joints	d) Ball and Socket joint		
31	The middle portion of the human sperm contains				D	Mitochondria

	a) Nucleus	b) Proteins	c) Centriole	d) Mitochondria		
32	The balancing organ of the ear is				B	Vestibular apparatus
	a) Organ of Corti	b) Vestibular apparatus	c) Tectorial membrane	d) Cochlea		
33	Which of the following is a part of the hindbrain?				C	Cerebellum
	a) Hypothalamus	b) Spinal cord	c) Cerebellum	d) Corpus callosum		
34	Which of the following parts of the brain controls body temperature and hunger?				D	Hypothalamus
	a) Thalamus	b) Pons	c) Cerebellum	d) Hypothalamus		
35	Which of the following parts acts as an endocrine gland after ovulation?				D	Graafian follicle
	a) Vitelline membrane	b) Stroma	c) Germinal epithelium	d) Graafian follicle		
36	The bacterium Yersinia pestis causes _____				A	Bubonic Plague
	a) Bubonic Plague	b) Rubella	c) Roseola	d) measles		
37	Which of the following terms describes the body's ability to maintain its normal state?				D	Homeostasis
	a) Anabolism	b) Catabolism	c) Metabolism	d) Homeostasis		
38	Which of the following best describes the human body's defense mechanism against environmental bacteria?				B	Mucous membranes
	a) Hair in the nose	b) Mucous membranes	c) Osteoblasts	d) Saliva		
39	Which cells in the blood do not have a nucleus?				C	Erythrocyte
	a) Lymphocyte	b) Monocyte	c) Erythrocyte	d) Basophil		
40	Which of the following terms describes the motion of bending the forearm toward the body?				C	Flexion
	a) Abduction	b) Pronation	c) Flexion	d) Eversion		
41	In which of the following positions does a patient lie face down?				B	Prone

	a) Supine	b) Prone	c) Lateral	d) Erect		
42	If the foot is abducted, it is moved in which direction?				B	Outward
	a) Inward	b) Outward	c) Upward	d) Downward		
43	A patient has a fracture in which the radius is bent but not displaced, and the skin is intact. This type of fracture is known as which of the following?				A	Closed, greenstick
	a) Closed, greenstick	b) Complex, comminuted	c) Simple, pathologic	d) Compound, transverse		
	a) Terminal plate	b) Nerve center	c) Dendrite	d) Synapse		
44	Which of the following controls body temperature, sleep, and appetite?				C	Hypothalamus
	a) Adrenal glands	b) Thalamus	c) Hypothalamus	d) Thyroid gland		
45	Which of the following is a substance that aids the transmission of nerve impulses to the muscles?				A	Acetylcholine
	a) Acetylcholine	b) Cholecystokinin	c) Oxytocin	d) Prolactin		
46	Which of the following best describes the location where the carotid pulse can be found?				B	On the anterior side of the neck
	a) On the medial aspect of the wrist	b) On the anterior side of the neck	c) In front of the ears and just above eye level	d) In the middle of the groin		
47	The thoracic cage is a structural unit important for which of the following functions?				A	Respiration
	a) Respiration	b) Alimentation	c) Menstruation	d) Mentation		
48	Which of the following substances is found in greater quantity in exhaled air?				C	Nitrogen
	a) Carbon monoxide	b) Carbon dioxide	c) Nitrogen	d) Oxygen		
49	At which of the following locations does bile enter the digestive tract?				B	Duodenum
	a) Jejunum	b) Duodenum	c) Ileocecum	d) Gastroesophageal		

				sphincter		
50	Which of the following structures is part of the small intestine?				D	Ileum
	a) Cecum	b) Ascending colon	c) Sigmoid colon	d) Ileum		
51	Which of the following organs removes bilirubin from the blood, manufactures plasma proteins, and is involved with the production of prothrombin and fibrinogen?				C	Liver
	a) Kidney	b) Spleen	c) Liver	d) Stomach		
52	The general meaning of "corpus" is best described by which of the following?				A	Body
	a) Body	b) Abdomen	c) Chest	d) Head		
53	Which of the following is the term for an abnormally low white blood cell count?				C	Leukopenia
	a) Leukoplakia	b) Leukemia	c) Leukopenia	d) Leukocytosis		
54	Adipose tissue is made of which of the following?				C	Fat cells
	a) Muscles	b) Skin	c) Fat cells	d) Tendons		
55	Which of the following is the medical term for hair loss?				D	Alopecia
	a) Impetigo	b) Eczema	c) Folliculitis	d) Alopecia		
56	Which of the following terms is used to describe a lateral curvature of the spine?				B	Scoliosis
	a) Kyphosis	b) Scoliosis	c) Lordosis	d) Osteoporosis		
57	Which of the following is the chemical symbol for iron?				B	Fe
	a) Fr	b) Fe	c) I	d) Ir		
58	Which of the following physicians specializes in treating patients with diseases of the liver?				A	Hepatologist
	a) Hepatologist	b) Hematologist	c) Nephrologist	d) Oncologist		
59	Which of the following branches of medicine specializes in the study of the musculoskeletal system?				C	Orthopedics
	a) Nephrology	b) Gynecology	c) Orthopedics	d) Urology		

60	Which of the following structures keep blood flowing unidirectionally in humans?				D	Valves
	a) Septum	b) Neuron	c) Bronchiole	d) Valves		
61	Which of the following is the structural and functional unit of the human nervous system?				C	Neuron
	a) Brain	b) Dendron	c) Neuron	d) Axon		
62	Which of the following is a balancing organ in humans?				A	Vestibular region
	a) Vestibular region	b) Cochlea	c) Organ of corti	d) Eardrum		
63	Which of the following human cells produce insulin?				A	Alpha cells
	a) Alpha cells	b) Delta cells	c) F cells	d) Beta cells		
64	Division of human egg is _____				D	Holoblastic and unequal
	a) Holoblastic and equal	b) Isoblastic	c) Meroblastic	d) Holoblastic and unequal		
65	Which of the following control breathing rate in humans?				D	Medulla oblongata
	a) Thalamus	b) Hypothalamus	c) Cerebellum	d) Medulla oblongata		
66	Which of the following is true for aerobic respiration in humans?				B	Glucose + oxygen = Carbon dioxide + water
	a) Glucose + CO ₂ = Carbon dioxide + water	b) Glucose + oxygen = Carbon dioxide + water	c) Glucose + water = carbon dioxide + water	d) Glucose = Carbon dioxide + water		
67	Red cell count is carried out by _____				B	Haemocytometer
	a) Electrogram	b) Haemocytometer	c) Sphygmomanometer	d) Haemoglobinometer		
68	Neurons that carry impulses away from the central nervous system are _____				D	Efferent nerves

	a) Extensors	b) Sensory nerves	c) Afferent nerves	d) Efferent nerves		
69	A nerve impulse is first received by _____				C	Dendrite
	a) Axon	b) Soma	c) Dendrite	d) Synapse		
70	The function of flame cell is _____				A	Excretion
	a) Excretion	b) Reproduction	c) Respiration	d) Digestion		
71	Which blood vessel carries the least amount of urea?				B	Renal vein
	a) Hepatic portal vein	b) Renal vein	c) Renal artery	d) Pulmonary vein		
72	Which of the following facilitates reabsorption of water by nephron?				C	Loop of nephron
	a) Cortex	b) Medulla	c) Loop of nephron	d) Pelvis		
73	_____ is a quick response to the stimuli that passes the brain.				D	Reflex action
	a) Receptors	b) Knee jerk	c) Voluntary action	d) Reflex action		
74	The antigens for ABO and Rh blood groups are present on _____				B	red blood cells
	a) platelets	b) red blood cells	c) white blood cells	d) plasma		
75	What is the process of transfer of human blood known as?				B	Transfusion
	a) Processing	b) Transfusion	c) Transporting	d) Transferring		
76	Who discovered blood groups?				C	Karl Landsteiner
	a) Ernst Haecker	b) Thomas Cooley	c) Karl Landsteiner	d) Camillo Golgi		
77	If the blood group of an individual is A then the antibody present is _____				C	Anti B antibodies
	a) Anti A antibodies	b) Anti O antibodies	c) Anti B antibodies	d) Anti OA antibodies		
78	Nervous system is _____				C	A rapid

	a) A slow communication system	b) A moderate communication system	c) A rapid communication system	d) An external communication system		communication system
79	_____ controls the voluntary functions of the body.				A	peripheral nervous system
	a) peripheral nervous system	b) central nervous system	c) Neurons	d) autonomic nervous system		
80	Stress hormone is _____				B	Adrenaline
	a) Vasopressin	b) Adrenaline	c) Sex hormone	d) Oxytocin		
81	Which of the following is responsible for sleep cycle movements?				A	Melatonin
	a) Melatonin	b) Serotin	c) Dopamine	d) Adrenaline		
82	Which of the following hormone is a modified amino acid?				D	Epinephrine
	a) Prostaglandins	b) Estrogen	c) Progesterone	d) Epinephrine		
83	Oxygen is carried by _____				C	Erythrocytes
	a) Monocytes	b) Leucocytes	c) Erythrocytes	d) Platelets		
84	When CO ₂ concentration in blood increased breathing becomes _____				C	faster and deeper
	a) shallower and deeper	b) slow and deep	c) faster and deeper	d) no effect on breathing		
85	The oxygen toxicity is related to _____				B	Failure of ventilation of lungs
	a) Blood poisoning	b) Failure of ventilation of lungs	c) Collapsing of the alveolar wall	d) Improper functioning of alveoli		
86	After deep inspiration maximum expiration of lungs is called _____				B	Vital capacity
	a) Total lung capacity	b) Vital capacity	c) Inspiratory capacity	d) Functional residual capacity		
87	Pulmonary ventilation movements are due to _____				A	Costal muscles and diaphragm
	a) Costal muscles and diaphragm	b) Diaphragm	c) Costal muscles	d) Wall of lungs		

88	Total lung capacity of an adult is _____				D	5000-6000ml
	a) 2500-5000ml	b) 4000-5500ml	c) 3000-6000ml	d) 5000-6000ml		
89	Bile salts acts as activator of which enzyme?				A	Lipase
	a) Lipase	b) Pancreatic lipase	c) Trypsin	d) Pepsinogen		
90	Which of the following vitamin can be produced by the liver?				A	Vitamin A
	a) Vitamin A	b) Vitamin B	c) Vitamin C	d) Vitamin D		
91	Stores liver's digestive juice until they are needed by the intestines.				C	Gall bladder
	a) Villi	b) Pancreas	c) Gall bladder	d) Stomach		
92	Which is the readily available source of energy in the body?				D	Carbohydrates
	a) Protein	b) Lipids	c) Vitamins	d) Carbohydrates		
93	An artificial pace maker is implanted and connected to the heart in patients _____				D	with irregularity in heart rhythm
	a) having 90% blockage	b) having high blood pressure	c) suffering from arteriosclerosis	d) with irregularity in heart rhythm		
94	Cardiac output is determined by _____				B	heart rate and stroke volume
	a) heart rate	b) heart rate and stroke volume	c) stroke volume	d) blood flow		
95	In human being the duration of cardiac cycle is _____				B	0.8 sec
	a) 0.008 sec	b) 0.8 sec	c) 8 sec	d) 0.5 sec		
96	An electrocardiogram is a graphic illustration of _____				A	cardiac conduction system
	a) cardiac conduction system	b) cardiac cycle	c) cardiac output	d) systemic and pulmonary circuits		
97	Which of the following has the thickest wall?				B	Left ventricle

	a) Right ventricle	b) Left ventricle	c) Right atrium	d) Left atrium		
98	Pacemaker is _____				C	SA node
	a) Bundle of HIS	b) AV node	c) SA node	d) Ventricle muscles		
99	How many types of teeth are present?				C	4
	a) 5	b) 3	c) 4	d) 2		
100	Salivary amylase is also known as _____				A	Ptyalin
	a) Ptyalin	b) Pepsin	c) Glyoxylase	d) Gastrin		

SPACE FOR ROUGH WORK