

National Cadet Corps (076)

Marking Scheme

CLASS XII 2024-25

TIME: 3 HOURS

Maximum Marks: 70

General Instructions

1. The question paper consists of two parts i.e. PART-I (49 marks) and PART-II (21marks).
2. Part-I is compulsory for all and it comprises of Section-A, Section-B and Section-C.
3. Part-II shall be attempted as per the chosen wing and it comprises of Section-D,Section-E and Section-F.
4. The paper consists of 01, 02, 04 and 06 mark(s) questions.
5. The answer to the 01 mark question is based on MCQ.
6. The answer to the 02 mark question should not exceed 50 words.
7. The answer to the 04 mark question should not exceed 150 words.
8. The answer to the 06 mark question should not exceed 250 words.

S. No.	PART-I: COMMON SUBJECTS (Total Marks : 49)	Marks
	SECTION A	
1.	Choose correct answer	
i)	b)Federal	1 (K/R)
ii)	b) left	1(A)
iii)	c) Attention	1(C)
iv)	a) Shooting	1(A)
v)	c) 1 and 3	1 (C)
vi)	a) Both A and R are true and R is the correct explanation of A.	1 (A)
vii)	d) 1,2 & 3	1 (C)
viii)	a) Child Relief and You	1 (A)
ix)	c) Children between 16-25 years of age	1 (A)
x)	b)Height	1 (K/R)
xi)	c) 300 lbs	1 (A)

	SECTION-B	
2.	<p>Ans.: Common Language, Education, Removal of Casteism, Removal of Communalism, Removal of Regionalism or any other relevant option</p> <p>(OR)</p> <p>Ans.: Sovereignty, Integrity, Unity, Security</p>	2 (A)
3.	<p>Ans.: Ethics and Social Values, Cultural and Traditional Values, Discipline and Patriotism (Any Two)</p>	2 (A)
4.	<p>Ans.: Wheeling is used when Marching in single file or in threes, the inner man "wheels" on the circumference of a circle and changes direction through 90 degrees.</p>	2 (K/R)
5.	<p>Ans.: The purpose of SWOT is to actively promote the identified strengths, minimize weaknesses by planning them out of existence, exploit the opportunities before the window closes and have contingency plans in place to minimize threats before they materialize.</p>	2 (A)
6.	<p>Ans.: Traffic control, relief, shelter management, evacuation and rescue, first aid, sanitation etc.</p> <p>(OR)</p> <p>Ans.: Don't keep any inflammable material in the kitchen, Always check the gas cylinder for leakage, and switch off the regulator when the gas is not in use. (Any two)</p>	2 (C)
7.	<p>Ans.: Education, Healthcare, Treatment, Rehabilitation</p>	2 (A)
8.	<p>Ans.: Solid Waste, Liquid Waste, Radioactive Waste, Municipal Solid Waste, Biomedical Waste, E-Waste, Hazardous Waste (Any four)</p> <p>(OR)</p> <p>Ans.: Soil pollution, water pollution, air pollution, sound pollution. (Any four)</p>	2 (K/R)
9.	<p>Ans.: "Guard parade par", "Guard Savdhan", "Guard Dahine Saj", "Guard Bagal Shashtra", "Guard Nirikshan ke liye Hajir Hai" (explained)</p>	4 (K/R)
10.	<p>Ans:</p> <p>(1) Follow Through: The firer maintain the firing position until the bullet has reached the target.</p> <p>(2) Declaration: If the aim at the time of firing is not correct, the firer declares and correct shot should not be declared.</p> <p>(3) Limber up: The exercise (No. 5) to assist in coordination and tuning of muscles, eye and brain.</p> <p>(4) Trajectory: The path travelled by a bullet from barrel to target is known as trajectory.</p> <p>(OR)</p> <p>Ans.: The laws of aiming are:</p> <ul style="list-style-type: none"> Focusing on the target so that a clear picture is formed on the retina of the eye and getting true centre of the target. Then with the eye, focus to the foresight. 	4 (K/R)

	<ul style="list-style-type: none"> • Holding the rifle properly and keeping it upright. • Close the left eye and focus the foresight. • See the foresight through the black sight „U“. The foresight is seen right in the centre of the U. The tip of the foresight must be aligned in the centre and in level with the shoulder of the U. 	
11.	Ans.: Medical examination of Food handlers, Regular health check-up, Education on hygiene, Regular handwashing, trimming of nails, covering of hair, covering mouth and nose while coughing and sneezing etc.	4 (C)
12.	<p>.Ans.: Clothes, Glider, Harness, Pair of Gloves, Parachute, Helmet and Variometer (Explain)</p> <p>(OR)</p> <p>Ans.: Definition: Parasailing is a recreational kiting activity in which a person is towed behind a vehicle or a boat while being attached to a specially designed canopy wing that reminds one of a parachute. Types: Winch Boat Parasailing, Beach Parasailing, Platform Parasailing</p>	4 (A)
	SECTION-C	
13.	<p>1. Ans.: Tone and Pitch</p> <p>2. Ans.: Cautionary and Executive</p>	4x½=2 (Case)
14.	<p>1. Ans.: An individual's (his/ her) personality</p> <p>2. Ans.: Gordon Allport</p> <p>3. Ans. : Heredity, Environment, Education</p> <p>4. Ans.: Mask</p>	6 (Case)
	PART-II: SPECIAL SUBJECTS (ARMY WING) (Total Marks: 21)	
	SECTION-D	
15.		5
i)	a) Permanent	K/R
ii)	Topographical	(K/R)
iii)	a) 1110 mm	(K/R)
iv)	d) Reverse	(K/R)
v)	a) Both A & R are true and R is the correct explanation of A.	(A)

	SECTION-E	
16.	<p>Ans.: Paramveer Chakra,, Mahaveer Chakra, Veer Chakra (Any two)</p> <p>(OR)</p> <p>Ans.: Age: 19 and 25 Years as 01 Jan of the year in which course is due to commence for Oct Course. 01 Jul of the year in which course is due to commence for Apr Course. Educational Qualification: Final Year appearing/Graduate with 50% Aggregate marks, 2 year service in NCC Senior Div (Army) with minimum B Grade in C Certificate Exam.</p>	2 (K/R)
17.	<p>Ans.: The angle between magnetic north and true north is known as magnetic variation.</p>	2 (K/R)
18.	<p>Ans.: A map is said to be set as oriented when it is placed such that it corresponds directly with the ground i.e. when true north on the map points to true north on the ground.</p>	2 (Create)
19.	<p>Ans.: Light in weight, can be operated easily, can select required zone (or any other relevant point)</p> <p>(OR)</p> <p>Ans.: Top panel, side panel, front panel, back panel.</p>	2 (A)
20.	<p>Ans.: Camouflage means to disguise an object in plain sight in order to conceal it from something or someone. Personal camouflage is done in these manners: (1) Use of disruptive pattern clothing and local vegetation; (2) Camouflage of face; and (3) Camouflage of equipment</p> <p>(OR)</p> <p>Ans.: Single file formation, File formation, Diamond formation, Extended line, Arrowhead, Spearhead (Explain any two)</p>	4 (C)
	SECTION-F	
21.	<p>Read the paragraph and answer the questions given below.</p> <p>Cariappa served in Iraq, Syria and Iran from 1941– 1942 and then in Burma in 1943-1944. He spent many of his soldiering years in Waziristan. He earned his 'Mentioned in Despatches' as DAA and QMG of General (later Field Marshal) Slim's 10th Division. He was the first Indian Officer to be given command of a unit in 1942. By 1944, Cariappa was a Temporary Lieutenant-Colonel. After command, he volunteered to serve in 26 Division engaged in clearing the Japanese from Burma, where he was decorated with an "Officer of the Order of the British Empire." In 1946, he was promoted as the Brigadier of the Frontier Brigade Group. Post-Independence, Cariappa was appointed as the Deputy Chief of the General Staff with the rank of Major General. On promotion as Lieutenant General, he became the Eastern Army Commander.</p>	4 (Case)

	1. In which year Cariappa was given command of a unit?	
	a) 1941	
	b) 1942	
	c) 1944	
	d) 1946	
	2. When was he promoted as Brigadier?	
	a) 1939	
	b) 1944	
	c) 1946	
	d) 1951	
	3. Which quality of General is being shown in the paragraph?	
	a) Slavery	
	b) Cowardship	
	c) Anxiety	
	d) Leadership	
	4. After independence, Cariappa was promoted to which rank?	
	a) Colonel	
	b) Brigadier	
	c)) Lieutenant-Colonel	
	d) Major General	
	PART-II: SPECIAL SUBJECTS (NAVY WING) (Total Marks: 21)	
	SECTION-D	
15.		5
i)	c) Chief of the Naval Staff (CNS)	(Kn)
ii)	c) Searcher	(Kn)
iii)	b) Navigating using celestial bodies	(Kn)
iv)	. Sisal	(Kn)
v) *	.Both A & R are true and R is the correct explanation of A	(Appl)

	SECTION-E	
16.	<p>Ans- Reading a drawing is crucial in ship modeling as it provides essential information for constructing the model accurately. The drawing, also known as a constructional chart, assembled plan, or blueprint, includes two key aspects: the Top View or 'Plan' and the Side View or 'Elevation.' From these views, modelers can measure the length, breadth, height, and thickness of various parts of the superstructure. This ensures that the model is built to scale and matches the intended design.</p>	2 (Kn)
17.	<p>Ans- Cooling is a principle of firefighting that involves bringing down the temperature or removing the heat from the fire. Water is the most effective agent for cooling and is readily available on ships for extinguishing fires. In this method, water is applied directly to the burning materials, not to the flames, to lower their temperature and suppress the fire.</p> <p>(OR)</p> <p>Ans- Smothering is a principle of firefighting that aims to cut off the air supply to the fire, thereby depriving it of oxygen. This is achieved using various firefighting equipment such as CO2 smothering systems and foam appliances. Additionally, closing all port holes, hatches, and ventilation fans helps in restrict the airflow to the fire. By eliminating the oxygen supply, smothering extinguishes the fire effectively.</p>	2 (Kn)
18.	<p>Ans- The International Nautical Mile (nm) is preferred over other units of measurement in maritime navigation because it provides a standard and fixed length of 1852 meters. This uniformity simplifies navigation calculations and ensures consistency in maritime communications and operations. Distances given in admiralty distance tables and ocean passage charts are typically in international nautical miles (nm), facilitating easy interpretation and navigation for sailors.</p>	2 (App)
19.	<p>Ans-The primary aim of Search & Rescue (SAR) operations is to locate individuals who are in distress during disasters or in imminent danger and provide them with all possible help and aid. Those who typically benefit from these operations are individuals affected by disasters or in imminent danger.</p> <p>(OR)</p> <p>Ans- The Butterfly swimming style is performed face down in water. The legs perform a dolphin kick, while the arms move in a forward circle simultaneously. This style requires synchronous movement of both the arms and legs, resembling the motion of a butterfly's wings.</p>	2 (U)
20.	<p>Ans- The sinking of INS Khukri occurred when a Pakistani submarine, Hangor, successfully torpedoed and sank the frigate Khukri. The incident occurred on the evening of December 9th while Khukri and another frigate, Kirpan, were deployed to flush away the detected submarine off the Saurashtra coast near Bombay.</p> <p>(OR)</p> <p>Ans- Operation Chutney, initiated by Naval Headquarters on December 1, aimed to establish surveillance and patrolling activities off the Goan coast. The objective was to monitor all ingress and egress of shipping, aircraft, and personnel into and out of the Portuguese enclaves. Additionally, it involved retaliating with necessary force if engaged by Portuguese units in the air or on the surface. The operation utilized two anti-aircraft frigates, Betwa and Beas, which commenced a linear patrol 13 kilometers from the coast.</p>	4 (U)

	SECTION-F	
21.*	<p>1. What was the primary objective of Operation Chutney?</p> <p>b) To secure the maritime approaches</p>	4 (Case)
	<p>2. Which ships were deployed for the patrol along the Goa coast?</p> <p>a) Rajput and Kirpan b) Delhi and Mysore c) Betwa and Beas d) Trishul and Marmagao</p> <p>3. How far were the ships positioned from the shore during the patrol?</p> <p>a) 5 kilometers b) 10 kilometers c) 13 kilometers d) 20 kilometers</p> <p>4- What action were the ships authorized to take if engaged by Portuguese units?</p> <p>a) Retreat to a safe distance b) Ignore the engagement c) Retaliate with necessary force d) Request assistance from Indian Navy</p>	
	PART-II: SPECIAL SUBJECTS (AIR WING) (Total Marks: 21)	
	SECTION-D	
15.		5
i)	Ans: (d)	(Kn)
ii)	(d) stars	(Kn)
iii)	Answer: a) Mirage-2000	(Kn)
iv)	Ans: (a)	(Kn)
v)	Ans: Both A & R are true and R is the correct explanation of A	(Appl)

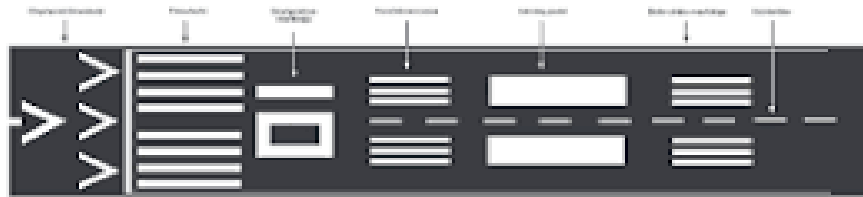
SECTION-E

16.

Ans 16: Aerodrome markings shall consist of the following:

- (a) Runway markings
- (b) Taxiway markings
- (c) Unserviceability markings

**2
(App)**



17.

- a) MI-25/MI-35
 - b) MI-26
 - c) MI-17 V5
 - d) CHETAK
 - e) CHEETAH
- (OR)

Ans17:

- a) LIGHT COMBAT AIRCRAFT (LCA)

Role. Single Seater Multi Role Combat. World's smallest light weight and highly maneuverable combat aircraft with seven hard-points.

- b) HAL LIGHT COMBAT HELICOPTER (LCH)

Role

The HAL Light Combat Helicopter (LCH) is a multirole combat helicopter being developed in India by Hindustan Aeronautics Limited (HAL) for use by the Indian Air Force and the Indian Army.

- c) HAL Dhruv

Role

The HAL Dhruv is a utility helicopter developed and manufactured by India's Hindustan Aeronautics Limited (HAL).

2 (Kn)

18.

Ans 18:

- a) Navigation
- b) Weather Monitoring
- c) By Air Traffic Control
- d) Collision Avoidance
- e) Search and Rescue
- f)

2 (U)

	<p>(OR)</p> <ul style="list-style-type: none"> a) Primary Surveillance Radar (PSR) b) Secondary Surveillance Radar (SSR) c) Weather Radar d) Airborne Radar e) Ground Penetrating Radar (GPR) f) Synthetic Aperture Radar (SAR) g) Marine Radar 	
19.	<p>Ans 19: Functional Commands and their head quarters are:</p> <ul style="list-style-type: none"> a) Training Command (TC) Bangalore, Karnataka b) Maintenance Command (MC) Nagpur, Maharashtra. 	2 (Kn)
20.	<ul style="list-style-type: none"> a) Ans: Newton's First Law: "An object will remain at rest or continue in uniform motion in a straight line unless acted upon by an external force." Example: An aircraft maintains its speed and direction unless engines change thrust, as no external force acts to alter its motion. b) Newton's Second Law: "The acceleration of an object is directly proportional to the net force acting on it and inversely proportional to its mass. The direction of the acceleration is the same as the direction of the net force." Example: During takeoff, the aircraft accelerates due to thrust overcoming drag, with acceleration proportional to thrust and inversely proportional to mass. c) Newton's Third Law: "For every action, there is an equal and opposite reaction." Example: Engines produce thrust by pushing air backward; as a reaction, the air exerts an equal and opposite force (drag) on the aircraft. <p style="text-align: center;">(OR)</p> <p>Ans20:</p> <ul style="list-style-type: none"> a) Lift : The vertical component of the Total Reaction, resolved at right angles to the relative airflow. b) Drag is the horizontal component of the Total Reaction acting at angles and in the same direction as the relative airflow. c) Aerofoil: This is a body designed to produce more lift than drag. A typical aerofoil section is cambered on the top surface and more or less straight at the bottom. d) Angle of attack: It is the angle between the chord line and the relative air flow undisturbed by the presence of aerofoil. 	4 (an)

	SECTION-F	
21	Ans 21: 1) b) Construction plan 2) b) False 3) c) Thrice 4) b) Blueprint	4 (Case)

