

**MARKING SCHEME**  
**NATIONAL CADET CORPS (076)**  
**CLASS X – 2022-23**

Q. No	EXPECTED ANSWERS	Mk/U/Pg
1	Answers of part I to xiii are as under	
	i) c) 1950	1 MK
	ii) d) Gujrat OR b) 1949	1 MK
	iii) a) 1857	1 MK
	iv) c) District Collector	1 MK
	v) b) Electrical circuit is overloaded	1 MK
	vi) d) ceremonial drills	1 MK
	vii) a) Tone and pitch	1 MK
	viii) b) 45	1 MK
	ix) c) Human Immuno Deficiency Virus	1 MK
	x) b) Both A and R are true and R is not the correct explanation of A.	1 MK
	xi) c) Rural areas OR c) Pradhan Mantri Gram Sadak Yojna	1 MK
	xii) a) Both A and R are true and R is the correct explanation of A	1 MK
	xiii) c) 4	1 MK
2	I) b) Reverse ii) c) Number iii) c) Number iv) d) Safety Catch	1 Mk for each correct answer
3.	i) b) Genes ii) c) Parents iii) d) All of them iv) b) Psychologists OR i) b) 3 ii) c) Types iii) a) Language iv) b) Stress	1Mk for each right answer
4.	These camps are being held at all India level and are planned by HQ DGNCC in consultation with the Directorates nominated to conduct them. (i) Leadership Camps (Basic and Advance). (ii) Thal Sainik Camp (TSC).	1mk for each

	(iii) Vayu Sainik Camp (VSC). (iv) Nau Sainik Camps (NSC). (v) Rock Climbing Camp. (vi) National Integration Camps (NIC) & Special NIC (vii) RDC and PM's Rally( Any two)	
5.	Major Religions of India are Hinduism, Islam, Christianity, Jainism, Buddhism and Sikhism. OR Indian Constitution was adopted by the constituent assembly on 26 November 1949 and came into effect on 26 January 1950.	1/2 mk for each  1/2 Mk for each
6.	Length-43" Effective range- 25 yards  OR The process of aiming a properly aligned sequence at the point of aim is called a sight picture.	1 mk for each  2 mk for correct definition
7.	Indicators of a good leadership are morale, discipline, team spirit and competence.	½ mk for each point
8.	Civic Sense is that sense in an individual which makes him/her a civilized citizen of a country. It's about respecting one another, abiding by the law and maintaining discipline in public places. OR The protection of Children from Sexual Offences Act, 2012, is an important milestone, provides precise definitions for different forms of sexual abuse including penetrative and non-penetrative sexual assault, sexual harassment and pornography.	2Mk  1 mk for each point
9.	Fire Fighting Equipment can be divided into the following four categories:- (a) Fire Extinguishers. (b) Stirrup Pumps. (c) Buckets. (d) Fire Beaters and Hooks.  OR Wind related: Storms, cyclones. Tornados, Tidal waves and blizzards etc. Water related: Floods/Flash floods, Cloud bursts, excessive rains, Droughts etc. Earth related: Earth quakes, Tsunamis, Avalanches, Landslides, Volcanic eruptions etc.	1MK for each equipment with short explanation  4 mk




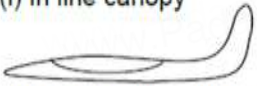
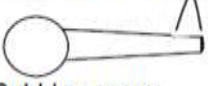
10	<p>Words of Command Drill men nimlikhit words of command diye jaten hain (Byan ke sath Namuna):-</p> <p>(a) Savdhan aur Vishram. (b) Dahine Mud ya Baen Mud. (c) Piche Mud ya Age Mud. (d) Dahine Dekh ya Baen Dekh. (e) Tez Chal, Dhire Chal aur Tham. (f) Khuli Line Chal ya Nikat Line Chal. (g) Line Ban, Sajja, Visarjan ya Line Tod. (h) Dahine Salute, Baen Salute ya Samne Salute.</p> <p style="text-align: center;">OR</p> <p>a) Visarjan (dismiss): The cadet should turn to the right, salute (if an officer/JCO is present on parade) pause and then step off (ensure squad is in close order).When marching independently, the cadet keeps in step until clear off the parade ground. Line tor (fall out): On command 'Line tor' (Fall out) the squad should turn right; break off in quick time (or in double time as ordered) counting a regulation pause between each movement. The difference between dismiss and falling out are as follows:-</p> <p>a) Falling out i) To leave the ranks temporarily ii) A word of command, to close the drill temporarily is given to a body of cadets required to fall in again after a stipulated period</p> <p>b) Dismiss i) A word of command is given for closing drill. ii) Denotes parade is completely terminated.</p>	<p>½ MK for each point</p> <p>1 mk for each and 2 mk for difference</p>
11	<p>(a) Ensures physical fitness. (b) Ensures flexibility. (c) Ensures mental strength. (d) Coordination and balance of mind and body. (e) Improves risk taking ability. (f) Evaluating problem solving skills. (g) Over all team spirit.</p>	4 Mk
12	<p>Articles Required for Dressing of Wounds. (a) Anti septic (A/S) lotion. (b) Cotton / Gauze piece (c) Scissors. (d) Bandages of different size and band aid. (e) A/S ointment or powder.</p> <p>Aim. The aim of dressing a wound is as under:- (a) To protect the wound from infection. (b) To reduce swelling and early healing. (c) To support the effected part. (d) To enable the individual to carry out his day to day routine. (e) To stop the bleeding.</p>	3 marks for each 3x2=6
<b>(ARMY SPECIAL)</b>		
13.	<p>i) a) Mechanized Infantry</p> <p style="text-align: center;">OR</p> <p>i) b –Bharat ratna</p>	1 MK for each right answer

	<p>ii) c) Relief Maps          iii) d) Church          iv) b) Large          v) b) Both A and R are true and R is not the correct explanation of A.</p>	
14.	<p>i) c-Indira Gandhi          ii) b-offered resignation          iii) c-Monsoon          iv) a-13</p>	1 MK for each right answer
15.	<p>Indian Armed Forces Honours and Awards can be divided into two categories :          (a) Gallantry Awards          (b) Non- Gallantry Awards</p> <p style="text-align: center;"><b>OR</b></p> <p>Age between          16 1/2 to 19 &amp; 1/2 yrs. as of first day of the month in which course is due to commence          Qualification          12th Class of 10+2 System of Education /Equivalent for Army and with Physics and Maths for AF/Navy</p>	<p>1 mk for each correct answer</p> <p>½ mk for each</p>
16.	<p>(a) Reliable and practically free from electrical interference.          (b) Relatively secure.          (c) Number of circuits and message carrying capacity is more but limited only by availability of material and manpower. ( or any other relevant point )any two</p>	1 mk for each
17.	<p>North, South, East and West are known as the cardinal points.          Types of North          There are three types of North :-          (a) True North. The direction of North pole from the observer.          (b) Magnetic North. It is the point to which a magnetic needle points, when freely suspended.          (c) Grid North. It is the direction to which the North South grid lines on a map point.</p>	4Mk (1+3)
18.	<p>Various factors responsible for things to be seen are as follows :-          (a) Shape          (b) Shine          (c) Shadow          (d) Silhouette          (e) Surface          (f) Spacing          (g) Smoke          (h) Sound          (j) Movement</p> <p style="text-align: center;"><b>OR</b></p> <p>Section Formation          A Section is the smallest sub unit of an Infantry Battalion and is capable of undertaking independent task. It consists of ten persons who are organized in Rifle group and Support Group.          There are 6 type of section formations in Army.          Diamond.          Advantage: (i) Good for all round observation.2. Good for command and control.          Disadvantage: 1.Presents an easy target to frontal fire.2. Vulnerable          Terrain conditions: 1. While negotiating open areas.2. When enemy threat is imminent but the direction is not clear</p>	<p>1/2 marks for each explanation</p> <p>1mk for definition +1 mk for types + 2 mk for diamond section formation</p>

<b>Section-B Naval Wing</b>		
13	i) C ii) D iii) B iv) B v) A OR v) D	1 MK for each right answer
14	(i): Rainwater harvesting means capturing the runoff of the rainwater in our own house, village, town, or city. It basically means the accumulation and storage of rainwater for reuse, before it reaches the aquifer. (ii): Utilization includes water for gardens, livestock, irrigation, great backup water supply for an emergency, the harvested water can be used for drinking water also, etc. (iii): Surface runoff harvesting and rooftop rainwater harvesting. In many places, the water collected is just redirected to a deep pit with percolation. (iv): <ul style="list-style-type: none"> <li>• Protect your local watershed;</li> <li>• Make your garden more resilient in the face of droughts, floods, and fire;</li> <li>• Restore the hydrologic cycle;</li> <li>• Recharge groundwater, Reduce groundwater use</li> <li>• Reduce your carbon footprint;</li> <li>• Reduced pressure on mains water</li> <li>• Maintain healthy soils;</li> <li>• Keep your garden lush and healthy (which, in turn, enriches habitat and helps to regulate local temperatures and precipitation);</li> <li>• Positive impact on gardens and local wildlife</li> <li>• Lessen the effects of wet and dry spells;</li> <li>• Mitigate impacts of climate change;</li> <li>• Utilize recycled materials</li> </ul>	1 MK for each right answer
15	1947-1948	2MK
16	Full Stop OR Tango & Charlie	2MK
17	(a) Number of charts. (b) Title of the chart. (c) Survey data. (d) A source data diagram. (e) Date of publication. (f) New edition. (g) Date of printing. (h) Chart dimension. (i) Scale of the chart. (j) Abbreviations & symbol. (k) Heights. (l) Drying heights. (m) Tidal stream information. OR Chart Projections.	1/2MKx8=4MK

	<p><b>(a) Mercator Projection.</b> The main properties of a Mercator Chart are:-</p> <p>(i) A Rhumb line on the Earth appears as straight line on the chart.</p> <p>(ii) The Equator appears as a straight line.</p> <p>(iii) The parallel of latitudes appears as a straight line.</p> <p>(iv) All Meridians appear as a straight line perpendicular to the equator.</p> <p><b>(b) Gnomonic Projection.</b> In order to assist the navigator in finding the great circle track between two places, charts are constructed so that any straight line drawn on them shall represent a great circle. These charts are known as Gnomonic charts and they are formed by projecting the Earth's surface from the Earth's center onto the tangent plane at any convenient point. It is so constructed that:-</p> <p>(i) Great circles appear as a straight line and rhomb line appears curved.</p> <p>(ii) Meridian is curved converging to the poles.</p> <p>(iii) Parallel of latitude is also curved.</p>	2 Mk for each part
18	Apron, Backboard, Badge block, Benches, Bilge, Bilge rails, Bottom board, Bow, Canopy, Capping, Drop keel, Cleats, Crutches, Deck Eyes, Floors, Floorboard, Garboard strake, Grating, Gudgeon & pintails, Gunwale, Hog, Keel, Keelson, Mast step & clamp, Pillars, Planking, Plug, Ringbolts, Rowlocks, Rubbers, Rudder, Stem, Stern post, Stern sheet, Stretcher, Tabernacle, Thwarts, Timbers, Wash strake.	4 MK
<b>Section-B AIR WING</b>		
13	<p>i) (b) Up to about 50 km above the troposphere</p> <p>ii) (c) Top wing</p> <p>iii) (a) Identify the aircraft as friend or foe.</p> <p style="text-align: center;">OR</p> <p>(d) All of the above</p> <p><b>iv) (b) Both A and R are true, but R is not the correct explanation of A.</b></p> <p><b>v) (a) Both A and R are true, and R is the correct explanation of A.</b></p>	1MK for each right answer
14	<p>i) On 11<sup>th</sup> May with the use of helicopters.</p> <p>ii) Srinagar, Avantipur, and Adampur.</p> <p>iii) MiG-21s, MiG-23s, MiG-27s, Jaguars, and the Mirage 2000.</p> <p>iv) Safed Sagar.</p>	
15	<p>(a) Troposphere - Up to about 11-16 km</p> <p>(b) Stratosphere - Up to about 50 km above the troposphere</p> <p>(c) Mesosphere - 50 to 85 km</p> <p>(d) Thermosphere - Above 85 km</p>	2MK
16	Role:	2 Marks



	<p>Single Seater Multi-Role Combat.</p> <p>Particulars:</p> <p>Length/Span/Height-- 13.2 / 8.2/ 4.4 Meters</p> <p>Max Take-Off Weight-- 8,500 Kgs</p> <p>Pay Load:</p> <p>4000 Kgs (Beyond-Visual-Range missiles, Reconnaissance/Electronic Warfare pods, and 23 mm GSH gun.</p> <p style="text-align: center;">OR</p> <p>(ii) Ans: Shape of canopy:</p> <p>a) In-line canopy</p> <p>b) Submerged canopy</p> <p>c) Tear-drop canopy</p> <p>d) Glasshouses canopy</p> <p>e) Bubble canopy</p> <div style="display: flex; justify-content: space-around; align-items: flex-end;"> <div style="text-align: center;">  <p>(i) In line canopy</p> </div> <div style="text-align: center;">  <p>(ii) Submerged canopy</p> </div> <div style="text-align: center;">  <p>(iii) Tear drop canopy</p> </div> </div> <div style="display: flex; justify-content: space-around; align-items: flex-end; margin-top: 10px;"> <div style="text-align: center;">  <p>(v) Glass house canopy</p> </div> <div style="text-align: center;">  <p>(iv) Bubble canopy</p> </div> </div>	
<p>17</p>	<p>The following are the different types of Aero models.</p> <p>a) Static Modes: -These are the miniature replicas of original aircraft. The following aircraft can be prepared as static models.</p> <p>(i) Fighter aircraft models</p> <p>(ii) Transport aircraft models</p> <p>(iii) Helicopter models</p> <p>b) Gliders: - These are the different types of gliders: -</p> <p>(i) Chuck Glider</p> <p>(ii) Catapult Glider</p> <p>(iii) Towline Glider</p> <p>(iv) Free flight Glider</p> <p>c) Control Line Models: -The following are the different types of Control Line models: -</p> <p>(i) Control Line Aerobatic Model</p> <p>(ii) Control Line Speed Model</p> <p>d) Radio control Models: -The following are the different types of Control Line models: -</p> <p>(i) Radio Control Power</p> <p>(ii) Radio Control Glider</p> <p>(iii) Radio control Helicopter</p> <p>(iv) Jet Powered Model</p>	<p>4 Marks</p>

	<p style="text-align: center;">OR</p> <p>The following are the main substances from which the Aero models can be made:</p> <ul style="list-style-type: none"><li>a) Balsa Wood</li><li>b) Spruce</li><li>c) Japonica Wood</li><li>d) Plywood</li><li>e) Cement</li><li>f) Fast Setting Epoxy</li><li>g) Cyanoacrylate Glue (Cyano)</li><li>h) Putty</li><li>i) Metal paste</li><li>j) Dope</li><li>k) Paint</li><li>l) Sandpaper</li><li>m) Fiberglass</li><li>n) Carbon Fiber</li><li>o) Silver Foil</li><li>p) Monokote &amp; etc.</li></ul> <p>Basic tools</p> <ul style="list-style-type: none"><li>a) Screwdriver</li><li>b) Hand drill</li><li>c) Sand paper and pins</li><li>d) Pliers</li><li>e) Knives with different blades</li><li>f) Different kinds of saw</li><li>g) Files</li><li>h) Soldering irons</li><li>i) RC set (Transmitter, Receiver, Servos), etc.</li></ul>	
18	<p>The four essential elements needed for a map are:</p> <ul style="list-style-type: none"><li>a. Areas will be shown correctly</li><li>b. Bearing measurement anywhere on the reduced earth will be identical to the measurement on the earth.</li><li>c. Shapes will be correct</li><li>d. Distances will be measured accurately by using a graduated scale provided at the bottom of each map. The distances are given in<ul style="list-style-type: none"><li>i. Kilometers</li><li>ii. Nautical miles</li><li>iii. Statute miles</li></ul></li></ul>	4 Marks