MARKING SCHEME
NATIONAL CADET CORPS
CLASS X – 2019-20

	COMMON SECTION	49 Marks
1.	Centrally Organised Camps (COC).	1mk/U1/pg 7
2.	Any drill related movements are commenced in Savadhan position. When speaking to or addressed by a senior officer a cadet has to stand in Savadhan,	1mk/U4/Pg 53
3.	Length is 43" of .22 Deluxe Rifle	1mk/U5/Pg 72
4.	Ureters. Ureters are two tubes, which carry the urine from kidney to Urinary bladder.	1mk/U9/Pg 161
5.	A natural resource is any useful product which is produced by nature and is essential for our survival.	1mk/U10/Pg 193
6.	200 kms	1mk/U6/Pg218
7.	30 degree	1mk/U4/Pg53
8.	2 groups	1mk/U5/Pg 86
9.	(b) 1'X1' Target	1mk/U5/Pg82
10.	(b) loudness	1mk/U4/Pg51
11.	(c) ambiguous words	1mk/U7/Pg261
12.	(d) 1999	1mk/U8/Pg121
13.	(c) Threats	1mk/U7/Pg244
14.	a) Bhagat Singh b) On April 8 1929 Bhagat Singh and Batukeshwar Dutt threw a bomb onto the corridors of the assembly and shouted 'Inquilab Zindabad! c) On 23 March 1931, Bhagat Singh was hanged in Lahore with his fellow comrades Rajguru and Sukhdev	3mk/U2/Pg 37
15.	NCC cadets can effectively assist the state system in disaster management, which could take shape in the form of:- (a) Traffic Management under supervision. (b) Search and Rescue. (c) First Aid and evacuation of rescued people. (d) Helping in setting up and administration of Relief Camps. (e) Collection, loading and dispatch of medical aid, material, food and other articles of relief. (f) Conduct of cultural and recreational activities for victims to boost their morale at later / rehabilitation stages.	3mk/U3/Pg 98-99
16.	i) Heels are kept together feet forming an angle of 30 degree ii) Body is erect and resting equally on hip. iii) Head heels erect and square to the front, chin vertical and eyes parallel to ground. iv) Weight of the body rests equally on the heels and the toes of the feet.	3mk/U4/Pg53-54
17.	There are many ways to manage negative stress. Everyone needs to find ways that work best for them. (a) Take Deep Breath. Stress often causes us to breathe quickly and this almost always causes more stress. Try to take deep slow breaths. Breathe in through your nose and count as you breathe out through mouth. Inhale enough so your lower abdomen rises and falls. (b) Talk It Out. When you feel stressed, try to express your feelings. Bottling of feelings can increase stress. Share your feelings. Perhaps a friend, family members, teacher can help you see your problem in a new way. Talking with someone else can help clear your mind of confusion so that you can focus on problem solving. Even if it is slightly embarrassing, asking for help after a problem occurs may avoid serious problems later. Writing down thoughts and feeling can help clarify the situation and give a new perspective.	3mk/U7/Pg 292

	(c) Take A Break. Recognize when you are most stressed and allow yourself some reasonable break. When things seem especially difficult, take a walk or otherwise change your scenery. (For other points refer to the given pg no) OR Classification of Bones. Bones can be classified according to their shape as under:- (a) Long Bones. These bones are long and tubular and are confirmed to upper / lower limbs. (b) Short Bones. These bones are short and tubular and are found in the ankle / wrists. (c)Fat Bones. These bones are flat like plates, e.g. bones of cranium (Skull), shoulder or hips. (d) Irregular Bones. Irregular or mixed shape, eg. Vertebral column. (e) Sesamoid Bones. They develop in the tendons of the muscles around the joint eg. patella (Any three of these)	3mk/U9/Pg161-162
18.	Documents. (i) Firing point register. (ii) Butt register. (iii) Range course SAO 12/S/85 (new RANGE course) (iv) No damage certificate (v) Lead deposit certificate (vi) Ammunition aur fired case ka detail	4mk/U5/pg86
19.	TV's, Refrigerators, Telephones, Air Conditioners, Computers, Mobile Phones etc.	4mk/U10/pg202
20.	(a) Keep toilet items handy. This will ensure that no germs/infection enters the body through consumption of water or food. (b) Carry all possible essentials in the ruck-sack with the expedition. Heavy items could be ferried by road. (c) Carry sleeping mattress or durries for night halts. (d) Carry adequate woollens for the period of the trek. (Any other relevant point)	4mk/U6/Pg216
21.	A) Stripping – i) Removal of the bolt is done by raising the leaf back sight and pushing forward the safety catch. The bolt is withdrawn to the rear, the bolt head upwards turned and the back sight folded back. ii) The magazine catch is pressed upwards and the magazine is taken out B) Assembling- assembling of the rifle is always done in the reverse order. i) Bolt head should be fully tight. ii) Bolt head and guide rib as well as cocking piece and steel lug should be in a line. C) Sightseeing- i) The sight should be set by pressing the thumb spring. ii) Range increases towards the muzzle side by adjusting the thumb spring accordingly. OR Use the following tips to keep safe when you're out rock climbing:- (a) Always Check Harnesses. After you've geared up, always check that both the climber's and belayer's harness buckles are doubled back. (b) Always Check Knots. Before you start climbing, always double check that leader's tie-in knot (usually a Figure-8 Follow-Through) is tied right and finished with a backup knot. Also check that the rope is threaded through both the harness waist loop and the leg loops. (c) Always Wear a Helmet. A climbing helmet is essential if you want to live long and prosper. Always wear one when climbing or belaying. Helmets protect your head from falling rocks and from the impact of falling. (d) Always Check the Rope and Belay Device. Before you lead a route, always double check that the rope is properly threaded through the belay device. Also, always make sure the rope and belay device are attached with a locking carabineer to the belayer's harness.	6mk/U5/pg74-75 6mk/U6/Pg225-226

	(e) Always Use a Long Rope. Make sure your climbing rope is long enough to reach the anchors and lower back down on a sport route or to reach a belay ledge on multi-pitch routes. When sport climbing, if you have any doubt that the rope is too short, always tie a stopper knot in the tail end to avoid being dropped to the ground. (f) Always Pay Attention. When you're belaying, always pay attention to the leader above. He's the one taking the risks of a fall. Don't visit with other climbers at the base, talk on a cell phone, or discipline your dog or kids. Never take the leader off belay unless you are absolutely certain he is tied in and safe and he communicates that to you. (Any other relevant point)	
22.	The need to develop rural areas can be summarized as under:- (a) To bridge the urban – rural divide. (b) To bridge the economic gap between incomes of rural – urban population. (c) To control or reduce mass migration of population from rural to urban areas. (d) To have equitable distribution of resources and development activities. (e) To create more job opportunities. (g) To empower the rural population. (Explain with the)	6mk/U8/pg 120
	SPECIAL SECTION - ARMY	**21 marks**
23.	Indian Air Force is the youngest of the three Services. It was in 1932 that an Act was passed in Indian Legislature for establishing the Indian Air Force on the recommendations of Skeen Committee.	1mk/U1/Pg 4
24.	The whole country is divided into seven Commands. The Command HQ is commanded by an officer of the rank of Lt General who is called Army Commander.	1mk/U1/Pg3
25.	a) He did his schooling at Sherwood College, Nainital b) Major Somnath Sharma's company (D Company of 4 Kumaon) was ordered to go to Badgam Village in the Kashmir Valley.	2mk/U2/Pg 109
26.	Appearance Method . The distance can be judged by noting the detailed appearance of man at various ranges. This is the best method under service conditions. The following is a guide to distance:- (a) At 200 yards, all parts of the body are distinct. (b) At 250 yards, blade of the foresight covers a kneeling man. (c) At 300 yards the face becomes blurred. (Any two of these or any other relevant point)	2mk/U4/Pg90-91
27.	(a) Can transmit speech as well as colour video. (b) Conduct of video conferences. (c) Called subscriber is seen on the monitor. (d) High quality of voice. (e) Speed of sending/ receiving can be adjusted by the user. (f) Map over-lays can be transmitted. (Any two of these)	2mk/U5/Pg 143-144 Refer to Training Handbook Specialised Subject Army By Harjeet Sidhu
28.	(a) Contours accurately show height, shape and slope of the ground. (b) Contours are shown generally in brown. (c) Height is marked on every fifth contour. (d) Contour lines vary in appearance. (e) These lines never touch or cross each other.	3mk/U3/Pg53

29.	Field Craft includes the following subjects:- (a) Recognition and description of targets. (b) Personal camouflage and concealment. (c) Judging distance. (d) Movement with and without arms. **OR** Battle Craft includes the following subjects :- (a) Field Signals. (b) Fire and move. (c) Section Formations. (d) Section battle drills.	3mk/U4/Pg70
30.	**Advantages**. (a) Vulnerable only at terminal and is therefore reasonably protected from enemy action except by a direct hit. (b) Flexible as it involves no lying & wires/cables. Any radio set can speak to any troops/commander by putting his frequency. (c) Fast in establishing communication	3mk/U5/Pg130-31
31.	Global Positioning System Global Positioning System (GPS) refers to a system of satellites and receivers that allows people and devices to pin point their precise location on the earth. GPS is funded and controlled by the United States, Department of Defence. OR (a) The enemy has opened Small Arm fire which is effective. (b) When own troops have seen the enemy first. (c) When the enemy is known or suspected to be in a certain area. (d) To cross obstacles.	4mk/U3/Pg61 4mk/ U4/ pg 87
	SPEICAL SECTION - NAVY	**21 MARKS**
23.	Indian Naval Ships were deployed for action for the first time in the liberation of Goa in Dec 1961	1mk(1/2mk each)/U1/Pg 5
24.	Western Naval Command Mumbai Southern Naval Command Kochi	1mk(1/2mk each)/U1/Pg 9-10
25.	Answering Sign : By making 'C' Answering Sign : By making 'C'	2mk/U2/Pg 76
26.	(a) Reef knot used to join two ropes of equal size. (b) Timber hitch this hitch is used to secure a rope's end to a spar or bale	2mk/U3/Pg55
27.	The successful model maker has to be observant, patient, painstaking and careful.	2mk/U4/Pg94

28.	(a) To make the desired model he has patience and some aptitude for this sort of work. It is possible for any reasonably handy person to produce a good model, provided he is prepared to give time and follows the instructions carefully. (b) Elementary solid models for which the parts are provided in the kit and they are only to assemble them, with the help of sequential drawing supplied with the kit. (c) In the second stage cadets are required to build powered models and sailing yachts out of kits which contains pre-cut parts, marine fittings and construction plan. These steps are followed to enable the ship modeller to finally construct advanced models from full scale plans using only readily available materials.	3mk /U5/Pg 94-95
29.	Navigational Charts: - i) They are used for marine navigation ii) There Are mainly three scales of navigational charts used for different purposes. iii) They are mainly are large scale, Medium scale, Small scale charts. OR Various information shown on charts are (a) Number of chart (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 (k) Scale of the chart (l) Abbreviations & symbol (m) Heights (n) Drying heights (p)Tidal stream information (Any six of these)	3mk/U4/Pg 84 3mk/U4/Pg 86-87
30.	Semaphore is a visual means of communication which provides a rapid means for passing messages over short distances during daylight. (a)The different semaphore signs are made by moving one or two hand flags so that they form Various angles with the perpendicular. (b) It is essential that each angle be formed correctly, as good communication depends upon accuracy in this respect	3mk/U4/Pg75-76
31.	Global positioning system (GPS) is one of the most important modern Navigational Aid. These help us to locate our position to the accuracy of a few hundred meters. All sea going vessels are suppose to have GPS fitted onboard for navigation. Modern navies even use GPS for accurate launching of ballistic and continental missiles. GPS functions using 14 satellites located at different places in the space. An user gets feed from the various satellites in his range and then gives the position after inter relating all the feeds. This is not fully accurate and must not be fully dependant for navigation. We must also do plotting to cross check the position given to us by GPS for errors. OR a) Sailing free - A boat is sailing free whenever her sails are filled and she is not sailing close-hauled, i.e. when sailing so that she is free top manoeuvre on either side of her course without having to go about (see tacking) b) To luff - This is altering course to bring the boat's head closer to the wind c) Reaching - A boat is reaching when she is sailing free with the wind abeam or before the beam d) Beating - When the destination of sailing boat lies directly up wind she beats to windward by sailing close-hauled in a series of alternate tacks	4mk/U4/Pg 91 4mk/U3/Pg 64
	SPECIAL SECTION - AIR FORCE	**21 MARKS**
23.	8th October	1mk/U1/Pg14
24.	Fuselage is the main body of the aircraft to which all the other components like wings, ailerons, rudders, elevators and undercarriage are attached.	1mk/U2/Pg60
25.	Basic tools i. Screw driver ii. Hand drill iii. Sand paper and pins iv. Pliers v. Knives with different blades vi. Different kind of saw (Any four of these OR Any other relevant point)	2mk/U3/ Pg100

26.	The two basic elements required in a map are: (a) Areas will be shown correctly (b) Bearing measurement anywhere on the reduced earth will be identical to the measurement on the earth. (c) Shapes will be correct (d) Distances will be measured accurately by use of a graduated scale which is provided at the bottom of each map. The distances are given in (1) Kilometers (2) Nautical miles (3) Statute miles (Any two of these)	2mk/U5/ Pg85
27.	Troposphere: a. The troposphere is the region nearest to the earth and is generally the region of weather. b. It has a more or less uniform decrease of temperature with height. The lapse rate is roughly 6.5°c /km (1.98°c /1000feet). c. The upper boundary of the troposphere is called the tropopause whose height varies from equator to the poles, being highest at the equator (16-18 km) and lowest over poles (8-10 km). (Any two of these)	2mk/U4/ pg 81
28.	a) On 30 May, the Indian Air Force called into operation the Mirage 2000 b) The choppers used were Mi-8 and the Mi-17. c) Initial indications from the government to the IAF was to operate only Attack helicopters.	3mk/U1/Pg32
29.	Wing shape: (i) Rectangular (ii) Elliptical (iii) Forward taper (iv) Backward taper (v) Equitaper (vi) Delta (vii) Crescent (viii) Swept back (ix) Swept forward (for others refer to the given pg no) OR a) Role: Heavy Lift Helicopter. b) Range 800 Km c) Special Features • Main rotor has eight blades and tail rotor has five blades. • Normal crew of five consisting of pilot, co-pilot, flight engineer, navigator and load master. (Any one of these)	3mk/ U2/ Pg40 3mk/ U2/ Pg71
30.	Scales on a map is represented commonly by (1) Representative fraction (2) graduated scale line or by (3) statement in words.	3mk/U5/Pg86
31.	Static Modes:-These are the miniature replicas of original aircrafts. The following aircrafts can be prepared as static models. i. Fighter aircraft models ii. Transport aircraft models iii. Helicopter models OR Basic tools i. Screw driver ii. Hand drill iii. Sand paper and pins iv. Pliers v. Knives with different blades vi. Different kind of saw vii. Files viii. Soldering irons ix. RC set (Transmitter, Receiver, Servos) etc.	4mk/U3/Pg102 4mk/U3/Pg100