

**MARKING SCHEME
NATIONAL CADET CORPS
CLASS XII – 2019-20**

SI No.	EXPECTED ANSWERS	Mk/U/Pg Refer to E-book and DG NCC website
1.	Cabinet Mission was sent to India in March 1946.	1mk/U1/Pg 8
2.	a) Education for all. b) Equal pay for equal work for men and women. (For others refer to the given page no)	1mk/U1/Pg10-11
3.	The short trail is normally carried out when getting on parade with rifle and when stepping forward and to the flanks and during dressing	1mk/U2/Pg24
4.	30 degree.	1mk/U2/Pg54
5.	90 degree.	1mk/U2/Pg 55
6.	110 steps.	1mk/U2/Pg63
7.	gold, time	1mk/U4/Pg362
8.	Operation Meghdoot	1mk/ U4/Pg 373
9.	(B) 1941	1mk/U5/Pg124
10.	(C) Prime Minister	1mk/U5/Pg127
11.	(B) National Disaster Response Force	1mk/U5/Pg128
12.	False	1mk/U5/Pg193
13.	True	1mk/U5/Pg206
14.	a. Mahatma Gandhi led the Civil Disobedience Movement that was launched in the Congress Session of December 1929. b. The aim of this movement was a complete disobedience of the orders of the British Government. c. During this movement it was decided that India would celebrate 26th January as Independence Day all over the country. OR (a) Regionalism. Regionalism gives more importance to one's own region than to one's nation. When regionalism is linked with language and religion it creates regional interests rather than national interests. (b) Casteism. Casteism is a divisive force. One section considers another section as inferior. They are exploited. Positions and opportunities are monopolized by a particular section. It creates enmity among the other castes. Caste organizations interfere in politics.. (c) Communalism. Communalism is not believing in any particular religion or observing its rites. Excessive affinity to one's own religion transforms into hatred towards other religions. Thus religious fanaticism arises. When religion, caste and race are used to make social and political gains, it is called communalism. (Any other relevant point)	3mk/U1/Pg 7 3mk/U1/Pg30-31
15.	The following targets are generally used by female cadets: (a) For application firing 1" x 1" target is used b) For grouping, 1" x 1" target with a white patch in the centre of the bull is used. (c) For rapid firing, 6 inches figure target is used.	3mk/U3/Pg 49

16.	Must Have in an Interpersonal Relationship. (a) Individuals in an interpersonal relationship must share common goals and objectives. They should have more or less similar interests and think on the same lines. It is always better if individuals come from similar backgrounds. (b) Individuals in an interpersonal relationship must respect each other's views and opinions. A sense of trust is important. (c) Individuals must be attached to each other for a healthy interpersonal relationship. (d) Transparency plays a pivotal role in interpersonal relationship. It is important for an individual to be honest and transparent. (Any three of these)	3mk/U4/Pg no335
17.	(a) Telephone. Learn to control the telephone, or it will control you. Regard your telephone as a business tool, not a social one. Practice having quick, to the point conversations. (b) Visitors. Meet visitors outside. When faced with the question: Have you got a minute?' don't fall into the courtesy trap of saying yes when you really want to say no. Learn to give a polite no, and then tell them when they can see you. A complete open-door policy, which has been a popular management technique for some years, is not conducive to good time management. (c) Socializing. Avoid extended tea-breaks, regular social lunch-hours, and lots of chats in the corridors. Do it outside of work time. (Any other relevant point)	3mk/U4/Pg363-364
18.	a. Calibre 7.62 mm. b. Weight of rifle 4.4 kg. c. Normal rate of fire 5 rds per min. d. Effective range 275 m (300 yds).	4mk/U3/Pg104-105
19.	While assembling the bolt of the Deluxe .22 rifle, the following have to be borne in mind: a) The bolt head should be fully tight. b) The bolt head and guide rib as well as cocking piece and steel lug should be in a line. c) The number of the bolt should tally with that of the rifle. d) The safety catch should be applied.	4mk/U3/Pg 45
20.	(a) Cancellation / permanent termination of the doctor's license who participates in fulfilling a client's demand to do away with her girl child. (b) Heavy penalty imposed on companies like GE that specialize in marketing medical equipment used for illegal sex determination and abortion in unlicensed clinics and hospitals. (c) High fines and judicial action against parents', who knowingly try to kill their unborn baby. (d) Widespread campaigns and seminars for young adults and potential parents to enlighten them about the ill effects of female feticide. Ignorance is one of the major causes for the increase in the selective sex abortion cases. Spreading awareness can go a long way in saving our future sisters, mothers, friends and wives. (e) High incentives for the education of the girl child, employment etc. (f) Equal rights for women in the property of the parents / husband	4mk/U6/Pg 142
21.	(a) 'Guard-Parade Par' (Guard get on parade): The guard comes to attention, steps off and falls in the open order, twelve paces away from the guard mounting NCO and stands at ease in succession from the right. (b) „Guard Savdhan': Guard comes to attention. (c) „Guard DahineSaj': The Guard commander turns to his/her right and marches out five paces, halt, turnabout, dress the front rank. He/she then dresses the rear rank and gives the command „Samne-Dekh' and returns to his original position. d) „Guard-BagalShast(r)': Guard does the shoulder arms.	6mk/U2/Pg30

	(e) The Guard Mounting NCO then reports to the Orderly Officer (who has taken position 6 paces behind the guard mounting NCO). (f) „Guard nirikshanke lie hazirhai’: The guard mounting NCO then falls in on the right of the guard, six paces away from the guard commander.	
22.	Safety. Safety tips advised by the Parasail Safety Council are as follows:- (a) Licensing. Make sure you parasail with a fully licensed (state & local) company operating from a well established location insured by a licensed insurance company. Don’t pay for your ride on the boat This operator may not have a licensed or be insured. (b) Established Operators. Only parasail with established business operators. Don’t be afraid to ask how long they ve been in business if there business permits are current with the City and if the operator onboard is a US Coast Guard Licensed Captain. (c) High Winds. You should avoid parasailing in high wind conditions (over 15 knots at sea level) due to an increased difficulty and complications during emergency water landings update 09/201. (d) Visibility. Never go up in rain fog or an approaching storm. (e) Passenger Age And Weight Restrictions. Parasailing is not recommend for individuals under the age of 16 or who’s exceeds 300 lbs. (f) Types of Equipment. Make certain that you get adequate safety briefing prior to your flight This safety briefing should include, a) a description of the activity itself, b) safety procedures in the event of an unexpected emergencies, C)the porper use signals while landing fire or capsizing e) precluding any participant who appears to be afraid or intimidated prior to their aerial excursion. (Any other relevant point) OR Webbing Or "Tape" Made Of Nylon. When webbing is sewn or tied together at the ends, it becomes a sling or runner. Webbing has many uses such as:- (i) Extending the distance between protection and a tie-in point. (ii) An anchor around a tree or rock or an anchor extension or equalization. (iii) Makeshift harnesses. (iv) Carrying equipment (clipped to a sling worn over the shoulder). (v) Protecting a rope that hangs over a sharp edge (tubular webbing).	6mk/U8/Pg288

28.	a. Accuracy 5.56mm b. Normal Rate of fire 60 rds/min. c. Muzzle velocity 900m/s. OR Items required for cleaning are: - (a) Oil bottle with oil. (b) Brush cleaning bore. (c) Brush cleaning chamber. (d) Pull through (e) Road cleaning barrel. (f) Tool adjusting for sight/rear sight. (g) Tool removing repair case. (h) Chindi. (i) Drift. (j) Drift. (Any six of these)	3mk/U4/Pg157-158 3mk/U4/Pg160-161
29.	For the conventional signs refer to the given page.	3mk/U2/Pg59-60
30.	(a) Applying Past Lessons Learnt to Future. History can also show how certain plans/moves led to victory or defeat. Military and Civil leaders can strategize based on the history to develop more concrete techniques to win the battles in future. (b) In addition, history has also taught us that it is important to have the support of our home front prior to sending our soldiers to war, especially for extended periods. (c) We must also understand the ideology of our enemy. Taking the time to learn the mind set and thought process of an enemy does provide us with the adequate tools to properly prepare ourselves for current and future wars. (d) Soldiers can learn strategy, operational art, tactics, techniques, battle procedures/drills, logistic and management aspects, leadership qualities and styles from military history. (Any three of these)	3mk/U5/Pg 175
31.	Types of Ground : (a) Broken Ground. It is uneven and is generally interspersed with nullahs, bumps and fields in the ground. It is suitable for move of infantry and hinders observation of activities. (b) Flat and Open Ground. It is even ground with little cover e.g. bushes, hedges and similar foliage. It is not suitable for move of Infantry by day. (c) High Ground. Ground far above the general level of the area e.g. hill. It facilitates domination of area around it by observation or fire or both. (d) Dead Ground. Ground that is hidden from an observer's view. It cannot be covered by flat trajectory weapons.	4mk/U3/Pg 105
	SPECIAL SECTION - NAVY	21 Marks
23.	(a) Swim suit (b) Swim cap (c) Goggles 190 (d) Swim fins (e) Drag Suit (f) Paddlers (g) Kick Board	1mk/U9/pg189-90
24.	The Air Craft carrier INS Vikrant was commissioned in February 1961 in Indian Navy.	1mk/U1/Pg6
25.	Chief of Personnel (COP). a. The COP controls the manning requirement of the Navy. b. He is responsible for recruitment, training, welfare and discipline of naval personnel	2mk/U1/Pg9
26.	Parts of Cable (a) Lugged Anchor Shackle (b) Lugless Joining Shackle (c) Securing to Buoy Shackle (d) Bottle Screw Slip (e) Blake Slip (f) Cup Swivel (g) Box Swivel (h) Adopter Piece (Any four of these)	2mk/U5/ Pg118
27.	a. To luff. This is altering course to bring the boat's head closer to the wind. b. In irons. A boat is in irons when she fails to go about from one tack to the other and lies head to wind unable to pay off on either tack	2mk/U6/Pg138

28.	Fleets. Fleet is a group of various types of warships and aircraft organized in a unit to fight a war. The IN has two Fleets:- (a) Western Fleet. It is based at Mumbai and commanded by a Rear Admiral designated as the Flag Officer Commanding Western Fleet (FOCWF) (b) Eastern Fleet. It is based at Visakhapatnam and commanded by a Rear Admiral designated as the Flag Officer Commanding Eastern Fleet (FOCEF).	3mk/U1/Pg11
29.	(a) True North. True North is the Northerly direction of the meridian and is the reference from which true bearings and courses are measured. The Geographical North is True North. (b) Gyro North. The direction north indicated by Gyro compass is known as Gyro North which is also the true north. (c) Variation. The angle between the true meridian and the magnetic meridian at any place is called the variation at that place. It is expressed in degrees and minutes. On ordinary charts the variation is given for a certain year, 101 together with a note of any annual change, which it is undergoing. The navigator must always allow for this change. OR (a) Navigational Chart (b) Ship's boat charts (c) Routing charts (d) Magnetic charts (e) Ocean sounding charts (f) LD charts (lattice Decca) (g) Astronomical charts and diagrams	3mk/U4/ Pg Pg100-01 3mk/U4/Pg105
30.	XE – Slant B – More to follow WA – Word After MIM – Comma DU – Hyphen KN – (Open Brackets)	3mk/U3/ Pg86
31.	A (a) Cooling. This is done by bringing down the temperature or removing the heat. The best agent of cooling is water, which is freely available in ships for fighting the fire. Water must be applied to burning materials and not to the flames. (b) Starving. It is to remove all inflammable materials in the vicinity of fire so that fire does not spread further and is automatically put off. B Types of joints used in Carpentry. The following joints are generally used in carpentry:- (a) Lap joint. (full lap and half lap) (b) Halving joint. (angle halving joint. Dovetail halving joint and cross halving joint). (c) Mortise and tendon joints. (d) Bridle joints. (e) Tongue and grooves joints. OR A (a) Wooden shores (b) Wooden plugs (c) Wooden wedges (d) Splinter Box (e) Stopper plates (f) Pad pieces (g) Quick hardening cement (h) Oakum (Any other relevant point) B jigsaw Machine, drilling, grinding, buffing set, lathe set, wood turning set, saw and groover set, sanding and polishing set etc. (Any four of these)	4 mk 2mk/U6/ Pg148 2mk/U8/ Pg160 2mk/U6/ Pg155 2mk/U8/ Pg173
SPECIAL SECTION – AIR FORCE		21 Marks
23.	South Western Air Command, at Gandhinagar, is responsible for air operations in most of Rajasthan, southwards through Gujarat to Saurashtra and the Kutch area.	1mk/U1/Pg17
24.	Wing Commander Rakesh Sharma	1mk/U2/Pg40
25.	a) Max Speed-- 902 Mph Range-- 1365 Miles b) Manufactured by Russia	2mk/U3/pg65

26.	Air Traffic Control Centre. An organisation established to provide: (a) Air traffic control within a control area (where established). (b) Flight information service within a flight information region. (c) Alerting service for search and rescue within its flight information region.	2mk/U5/pg108
27.	(a) Engine cylinder. It provides the housing for the piston to move up and down during various strokes. (b) Spark plug. It is fitted on the cylinder head to give spark at the plug points to ignite the mixture in the cylinder.	2mk/U8/pg190
28.	a) Lift is a positive force caused by the difference in air pressure under and above a wing. The higher air pressure beneath a wing creates lift, and is affected by the shape of the wing. Changing a wing's angle of attack affects the speed of the air flowing over the wing and the amount of lift that the wing creates. b) Weight is the force that causes objects to fall downwards. In flight, the force of weight is countered by the forces of lift and thrust. c) Thrust is the force that propels an object forward. An engine spinning a propeller or a jet engine expelling hot air out the tailpipe are examples of thrust. In bats, thrust is created by muscles making the wings flap. d) Drag is the resistance of the air to anything moving through it. Different wing shapes greatly affect drag. Air divides smoothly around a wing's rounded leading edge, and flows neatly off its tapered trailing edge...this is called streamlining. (Any three of these)	3mk/U4/pg91
29.	REQUIREMENTS OF NAVIGATION a. A number of times Pilot may be called upon to navigate the aircraft himself especially in the aircraft types where no navigation is provided or in a single seat aircraft, hence a thorough knowledge of the art of navigation is a must for a pilot. b. Since the pilot has the primary duty of flying the aircraft, it would not be possible for him to carry out the detailed task of a professional navigator in usage of plotting tables, computers, charts etc. He however has to be skilled in map reading and mental DR in order to navigate accurately. Techniques used for air navigation in the air can be broadly classified into two groups. (a) Visual Flight Rules (VFR):- The pilot largely navigates using dead reckoning combined with Visual observations with reference to appropriate maps. This may be supplemented by radio navigation aids. (b) Instrument Flight Rules (IFR):- Under these rules the pilot will navigate exclusively using instruments and radio nav aids such as beacons, or as directed under radar control by a controlling air traffic controller. (Any one of these) OR (a) Equator: It is a great circle whose plane is perpendicular to axis of rotation of the earth. The equator lies in a east-west direction and divides the earth into northern and southern hemispheres. (b) Earth Axis: It is a vertical line joining the two poles of the earth, lying perpendicular to the equator and passing through the centre of the earth. (c) Meridian: A meridian is a half great circle joining the two poles. Every great circle joining the two poles is a meridian and its ante-meridian indicates the North-South direction. A meridian together with its ante meridian is a great circle.	3mk/U6/Pg150 3mk/U6/Pg153

30.	(a) The following aircrafts can be prepared as static models. i. Fighter aircraft models ii. Transport aircraft models iii. Helicopter models (b) These are the different types of gliders:- (i) Chuck Glider (ii) Catapult Glider (iii) Towline Glider (iv) Free flight Glider(any 3 of these)	3mk/U11/Pg241
31.	(a) International civil Aviation Organization (b) Slats are aerodynamic surfaces on the leading edge of the wings of fixed-wing aircraft which, when deployed, allow the wing to operate at a higher angle of attack. (c) The modern uses of radar are highly diverse, including air traffic control, radar astronomy, air-defence systems, antimissile systems; marine radars to locate landmarks and other ships; aircraft anti-collision systems; ocean surveillance systems, outer space surveillance systems; meteorological precipitation monitoring; and guided missile target locating systems.(any 4 of these) OR (a) The World Meteorological Organization (WMO) (b) The undercarriage or landing gear in aviation is the structure that supports an aircraft on the ground and allows it to taxi, take-off and land. c) (i)An altimeter is an instrument used to measure the altitude of an object above a fixed level usually the sea level. (ii)The altimeter shows the aircraft's altitude above mean sea-level.	4mk(1+1+2)U7,9 10/Pg164,202,2 22 4mk(1+1+2)U7,9 10/Pg164,213,2 19