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

SI	EXPECTED ANSWERS	Mk/U/Pg
No.		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.	1mk/U1/Pg10-
	b) Equal pay for equal work for men and women.	11
3.	(For others refer to the given page no) The short trail is normally carried out when getting on parade with rifle and when	1mk/U2/Da24
5.	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	3mk/U1/Pg 7
	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 26 <sup>th</sup> January	
	as Independence Day all over the country.	
	OR	
		2
	(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	3mk/U1/Pg30- 31
	regional interests rather than national interests.	31
	(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)	
15.	The following targets are generally used by female cadets:	3mk/U3/Pg 49
	(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.	

16.		2 1/11/2
±0.	Must Have in an Interpersonal Relationship.	3mk/U4/Pg
	(a) Individuals in an interpersonal relationship must share common goals and	no335
	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)	
17.	(a) Telephone. Learn to control the telephone, or it will control you. Regard your	3mk/U4/Pg363-
	telephone as a business tool, not a social one. Practice having quick, to the point	364
		304
	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)	
10		A
18.	a. Calibre 7.62 mm.	4mk/U3/Pg104-
	b. Weight of rifle 4.4 kg.	105
	c. Normal rate of fire 5 rds per min.	
	d. Effective range 275 m (300 yds).	
19.	While assembling the bolt of the Deluxe .22 rifle, the following have to be borne in	4mk/U3/Pg 45
	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.	
20.	(a) Cancellation / permanent termination of the doctor's license who participates in	
		4mk/U6/Pg 142
	fulfilling a client's demand to do away with her girl child.	4mk/U6/Pg 142
		4mk/U6/Pg 142
	fulfilling a client's demand to do away with her girl child.	4mk/U6/Pg 142
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27.	<ul> <li>Armour.</li> <li>a. Armour by virtue of its mobility, fire power protection and shock action is most aptly suited for present day battle field environment.</li> <li>b. The basic role of amour is to destroy the enemy by relentless, mobile offensive action, both in offensive and defensive operation.</li> <li>c. An Armd Regt has 45 tanks. In India we have TK T-72,TK T-90 &amp; MBT Arjun tanks.</li> <li>(Any two of these)</li> </ul>	2mk/U1/Pg8
	(Any other relevant point)	
26.	Identifies a unit.Identifies a radio link.Issued down to unit level.Issued to all radio stations.Cannot be abbreviated.Can be abbreviated.Can be changed to link sign.Cannot be changed to code sign.Not issued to branches of a HQIssued to branches of a HQa. thumb ring b. Prism c. Notch d. Lubber line d. Hinge e. Window	2mk/U2/Pg82
25.	Code SignLink SignIdentifies a unit.Identifies a radio link.	2mk/U6/Pg212
24.	The procedure is laid out to communicate on the Radio so as to make the conversation secure and successful, which is referred to as "Radio Telephony".	1mk/U6/Pg210
23.	The Corps Head Quarters handles 03 to 05 Divisions.	1mk/U1/Pg3
	SPECIAL SECTION - ARMY	21 Marks
	<ul> <li>(ii) An anchor around a tree or rock or an anchor extension or equalization.</li> <li>(iii) Makeshift harnesses.</li> <li>(iv) Carrying equipment (clipped to a sling worn over the shoulder).</li> <li>(v) Protecting a rope that hangs over a sharp edge (tubular webbing).</li> </ul>	6mk/U8/Pg293
	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.	
	<ul> <li>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.</li> <li>(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.</li> <li>(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.</li> <li>(d) Visibility. Never go up in rain fog or an approaching storm.</li> <li>(e) Passenger Age And Weight Restrictions. Parasailing is not recommend for individuals under the age of 16 or who's exceeds 300 lbs.</li> <li>(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.</li> <li>(Any other relevant point)</li> </ul>	
22.	<ul> <li>(e) The Guard Mounting NCO then reports to the Orderly Officer (who has taken position 6 paces behind the guard mounting NCO).</li> <li>(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.</li> <li>Safety. Safety tips advised by the Parasail Safety Council are as follows:-</li> <li>(a) Licensing. Make sure you parasail with a fully licensed (state &amp; local) company</li> </ul>	6mk/U8/Pg288

20		5.56mm	2 m l / l / D = 1 E Z
28.	a. Accuracy b. Normal Rate of fire	60 rds/min.	3mk/U4/Pg157-
	c. Muzzle velocity	900m/s.	158
		OR	
	Items required for clea		
	(a) Oil bottle with oil.		3mk/U4/Pg160-
	(b) Brush cleaning bore		161
	(c) Brush cleaning char	nber.	
	(d) Pull through		
	(e) Road cleaning barrel.		
	(f) Tool adjusting for sight/rear sight.		
	(g) Tool removing repa	ir case.	
	(h) Chindi.		
	(j) Drift.		
	(Any six of these)		
29.	For the conventional sign	ns refer to the given page.	3mk/U2/Pg59-
			60
30.	plans/moves led to victo the history to develop m (b) In addition, history ha our home front prior to s (c) We must also unders mind set and thought pr	s Learnt to Future. History can also show how certain ry or defeat. Military and Civil leaders can strategize based on ore concrete techniques to win the battles in future. as also taught us that it is important to have the support of sending our soldiers to war, especially for extended periods. tand the ideology of our enemy. Taking the time to learn the occess of an enemy does provide us with the adequate tools to	3mk/U5/Pg 175
	(d) Soldiers can learn str	ves for current and future wars. ategy, operational art, tactics, techniques, battle c and management aspects, leadership qualities and styles	
31.	Types of Ground :		4mk/U3/Pg 105
51.	,,,	t is uneven and is generally interspersed with nullahs,	4110,0371 8 103
		ne ground. It is suitable for move of infantry and hinders	
	observation of activitie	•	
		und. It is even ground with little cover e.g. bushes, hedges	
	-	s not suitable for move of Infantry by day.	
		und far above the general level of the area e.g. hill. It	
		of area around it by observation or fire or both.	
		ind that is hidden from an observer's view. It cannot be	
	covered by flat traject		
		SPECIAL SECTION - NAVY	21 Marks
23.	(a) Swim suit (b) Swim ( Kick Board	cap (c) Goggles 190 (d) Swim fins (e) Drag Suit (f) Paddlers (g)	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)		2mk/U1/Pg9
25.	· · ·	nanning requirement of the Navy.	21110/01/182
		ecruitment, training, welfare and discipline of naval personnel	
26.	Parts of Cable		2mk/U5/ Pg118
20.		kle (b) Lugless Joining Shackle (c) Securing to Buoy Shackle (d)	2111,03/18110
		e Slip (f) Cup Swivel (g) Box Swivel (h) Adoptor Piece	
	(Any four of these)		
27.		ng course to bring the boat's head closer to the wind.	2mk/U6/Pg138
		irons when she fails to go about from one tack to the	, 50, 1 8150
		wind unable to pay off on either tack	
1	other and lies head to	wind drivble to pay on on citiler tack	

28.	Fleets. Fleet is a group of various types of warships and aircraft organized in a unit to	3mk/U1/Pg11
	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).	
29.	(a)True North. True North is the Northerly direction of the meridian and is the reference	3mk/U4/ Pg
25.	from which true bearings and courses are measured. The Geographical North is True	Pg100-01
	North.	1 8100 01
	(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	
	<ul><li>(a) Navigational Chart</li><li>(b) Ship`s boat charts</li></ul>	
	(c) Routing charts	3mk/U4/Pg105
	(d) Magnetic charts (e) Ocean sounding charts	
	(f) LD charts (lattice Decca)	
20	(g) Astronomical charts and diagrams XE – Slant B – More to follow WA – Word After MIM – Comma DU – Hyphen	2001/112/0000
30.	KN – (Open Brackets	3mk/U3/ Pg86
31.	A (a) Cooling. This is done by bringing down the temperature or removing the heat. The	4 mk
51.	best agent of cooling is water, which is freely available in ships for fighting the fire.	2mk/U6/ Pg148
	Water must be applied to burning materials and not to the flames.	21111,00,19110
	(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>B</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)	2mk/U8/ Pg160
	Mortise and tendon joints. (d) Bridle joints. (e) Tongue and groves 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	2mk/U6/ Pg155
	(Any other relevant point) B jigsaw Machine,	
	drilling,	2mk/U8/ Pg173
	grinding,	
	buffing set,	
	lathe set,	
	wood turning set,	
	saw and groover set,	
	sanding and polishing set etc.	
	(Any four of these)	
	SPECIAL SECTION – AIR FORCE	21 Marks
23.	South Western Air Command, at Gandhinagar, is responsible for air operations	1mk/U1/Pg17
	in most of Rajasthan, southwards through Gujarat to Saurashtra and the Kutch	
	area.	
24.	Wing Commander Rakesh Sharma	1mk/U2/Pg40
25.	a)Max Speed 902 Mph Range 1365 Miles	2mk/U3/pg65
	b) Manufactured by Russia	

26.	Air Traffic Control Centre. An organisation established to provide:	2mk/U5/pg108
_0.	(a) Air traffic control within a control area (where established).	2111() 00) 98200
	(b) Flight information service within a flight information region.	
	(c) Alerting service for search and rescue within its flight information region.	
27.	(a)Engine cylinder. It provides the housing for the piston to move up and down	2mk/U8/pg190
_··	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.	
28.	a)Lift is a positive force caused by the difference in air pressure under and above	3mk/U4/pg91
	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 edgethis is called streamlining.	
20	(Any three of these)	2
29.	REQUIREMENTS OF NAVIGATION	3mk/U6/Pg150
	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)	
	(Any one of these)	
	(a) Equator: It is a great circle whose plane is perpendicular to axis of rotation of	3mk/U6/Pg153
	the earth. The equator lies in a east-west direction and divides the earth into	2, 00,1 8100
	northern and southern hemispheres.	
	(b) Earth Axis: It is a vertical line joining the two poles of the earth. Iving	
	(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.	
	(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	
	perpendicular to the equator and passing through the centre of the earth.	
	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	
	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	

30.	(a) The following aircrafts can be prepared as static models.	3mk/U11/Pg241
	i. Fighter aircraft models	5111,15211
	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)	
31.	(a) International civil Aviation Organization	4mk(1+1+2)U7,9
		10/Pg164,202,2
	(b) Slats are aerodynamic surfaces on the leading edge of the wings of fixed-	22
	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)	
		4mk(1+1+2)U7,9
	OR	10/Pg164,213,2
		19
	(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.	