AGRICULTURE

CODE :- 01



Time Allowed: Two Hours		Marks: 100
Name:	Roll No.	

Read instructions given below before opening this booklet:

DO NOT OPEN THIS BOOKLET UNTIL YOU ARE TOLD TO DO SO

- 1. Use only **BLUE Ball Point** Pen.
- 2. In case of any defect Misprint, Missing Question/s Get the booklet changed. No complaint shall be entertained after the examination.
- 3. Before you mark the answer, read the instruction on the OMR Sheet (Answer Sheet) also before attempting the questions and fill the particulars in the ANSWER SHEET carefully and correctly.
- 4. There are FOUR options to each question. Darken only one to which you think is the right answer. There will be no Negative Marking.
- 5. Answer Sheets will be collected after the completion of examination and no candidate shall be allowed to leave the examination hall earlier.
- 6. The candidates are to ensure that the Answer Sheet is handed over to the room invigilator only.
- 7. Rough work, if any, can be done on space provided at the end of the Question Booklet itself. No extra sheet will be provided in any circumstances.
- 8. Write the BOOKLET SERIES in the space provided in the answer sheet, by darkening the corresponding circles.
- 9. Regarding incorrect questions or answers etc. Candidates kindly see NOTE at the last page of the Booklet.

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Series-A

1.	(A) Jute (B) Wheat (C) Cotton (D) Sugarcane	10.	nitrogenous fertilizer on sugar content in juice of sugarcane (A) Decrease (B) Increase	
2	Common harbigida usad in wheat is		(C) Constant (D) Crystallized	
2.	Common herbicide used in wheat is		(C) Constant (D) Crystantzed	
	(A) 2,4-Dichlorophenoxyacetic acid		Amongst the following which is the food	
	(B) Atrazine		Amongst the following which is the food preservative?	
	(C) Isoproturon		•	
	(D) Pendimethalin		(A) Celphos (B) Celaium experiide	
3.	Delinting of autton good may be done with		(B) Calcium cynamide(C) Sodium benzoate	
3.	Delinting of cotton seed may be done with (A) Sulphuric acid (B) Citric acid		(D) Potassium permagnate	
			(D) I otassium permagnate	
	(C) Sodium hydroxide		An apple tree gives the fruits after	
	(D) Ammonium chloride	12.	(A) 5 years of planting	
	(D) Animonium emoride		(B) 3 years of planting	
4.	Mixed farming is referred only to		(C) 2 years of planting	
⊣.	(A) Growing of crops together by mixing the		(D) 8 years of planting	
	seeds		(D) o years or planting	
	(B) Growing of cash crops and food grains	13.	Botanical name of carnation is	
	together		(A) Celosia cristata	
	(C) Crop production combined with dairy		(B) Tagetis errecta	
	farming at farm		(C) Dianthus caryophyllus	
	(D) Growing of fruits and vegetables mixed		(D) Centuria cyanus	
5.	Name the <i>kharif</i> season fodder crop	14.	Muscat red is a variety of	
	(A) Oats (B) Lucerne		(A) Grapes (B) Pomegranate	
	(C) Sorghum (D) Berseem		(C) Plums (D) Apple	
6.	Phalaris minor is a weed found with	15.	Plant bearing male and female flowers is	
	(A) Wheat (B) Cowpea		called	
	(C) Barley (D) Oat		(A) Monoecious (B) Monophrodite	
			(C) Bisexual (D) Hermophrodite	
7.	Arhar (pigeonpea) grows well in which			
	climate	16.	Which hormone is found in ripened fruits	
	(A) Tropical and subtropical		(A) Ethylene (B) Auxin	
	(B) Temperate		(C) Gibberellins (D) IAA	
	(C) Humid and temperate			
	(D) Sub-humid and temperate	17.	A vertical section of soil body which shows	
0			different layers is known as	
8.	Causal agent of anthracnose disease in		(A) Soil horizons (B) Soil profile	
	sorghum is		(C) Regolith (D) Parent material	
	(A) Puccinia purpurea	18.	A -4i il 6 i 64 ill	
	(B) Helminthosporium turcicum (C) Colletotrichum graminicola (D) Glavyrospora sorahi		Active soil forming factors include (A) Vegetation and topography (B) Time topography and climate	
9.	(D) Gleourcospora sorghi		(B) Time, topography and climate	
9.	Which one of the following is the principal 'N' fixing algal community of blue-green		(C) Time and vegetation(D) Vegetation and climate	
	algae?		(D) vegetation and emilate	
	(A) Rhizobium (B) Anabaena			
	(C) Azotobactor (D) Azospirillum			
	(=)-1200pii maiii			

19.	soil is considered as	of less than to kg/ha of	29.	tubules as organs of	Conta	ım maipigman
	(A) Low	(B) Medium		(A) Respiration		Excretion
	(C) High	(D) Trace		(C) Digestion	(D)	Secretion
20.	Azotobacter sp. fix at (A) As symbionts on (B) As symbionts on (C) As symbionts on (D) In free soil	sugarcane rice	30.	Classification of phyl (A) Locomotory organ (B) Respiratory organ (C) Digestive organs (D) Reproductive org	ns IS	ollusca is based on
21.	Wet black soils are (A) Very hard (C) Soft	(B) Very soft(D) Hard	31.	Diacrisia obliqua is to (A) Termite (B) Top borer (C) Bihar hairy caterp		entific name of
22.	•	ity of soils varies directl	у	(D) Leaf hoper	Jiliai	
	with (A) Capillary porosity (B) Non-capillary por (C) Total porosity (D) Water holding ca	rosity	32.	Fore-gut of insects is (A) Peritrophic memb (B) Epithelial membr (C) Cuticular intima (D) Taenidia	orane	internally by
23.	Microbial population (A) Decreases with d (B) Increases with de (C) Constant through (D) No specific trend	epth epth out the profile	33.	In which order female stage but males have (A) Mallophaga (C) Epemeroptera	(B)	ects have no pupal Strepsiptera Dictyoptera
24.	Mycorrhiza-infected of absorption of the r (A) Iron (C) Potassium	plants show better abili- nutrients, especially (B) Manganese (D) Phosphorus	ty 34.	Dasineura lini is pest (A) Castor (C) Seasamum	(B)	Linseed Groundnut
25.	` '	z in high amounts makes (B) Soft (D) Acidic	a ³⁵ .	Insects feeding on within a family are ca (A) Phytophagous (C) Oligophagous	alled (B)	
26.	Red soils are found r (A) Uttar Pradesh (C) Assam	maximum in (B) Madhya Pradesh (D) Tamil Nadu	36.	Most of the inse- temperatures above (A) 29.9°C - (C) 49.9°C	(B)	annot survive the 39.9°C 59.9°C
27.	 (A) Addition of gypsum (B) Addition of lime (C) Leaching the soluble salts (D) Addition of pyrite 			7. Out of the following poisons which works an anti-coagulant for the control of rats? (A) Zinc phosphide (B) Strychmine (C) Warfarin (D) Parathion		
28.	The global average the earth is (A) 20% (C) 40%	of solar radiation reaching (B) 30% (D) 50%	ng 38	3. Piercing and sucking found in (A) Grasshopper (C) Aphids	(B)	of mouth parts are House fly Beetles

39.	queen honey bee (A) Mandibular gland (B) Maxillary gland	-	49.	(A) Osmosis (C) Photosynthesis	(B)	Respiration Trasmolysis
	(C) Labial gland (D) Pharyngeal gland		50.	Enzymes are basicall (A) Vitamins (C) Proteins	(B)	Fats Carbon
40.	The legless young of a h	_	<i>5</i> 1	A chaomagama wa	:+h	adian magitian of
	• • •	B) Maggot D) Grub	31.	A chromosome wi		edian position of
	(C) Hymph	b) Grab		(A) Metacentric		Sub metacentric
41.	The paralysis of honey b			(C) Telecentric	(D)	Acrocentric
	` '	B) Virus				
	(C) Fungus (1	D) Mycoplasma	52.	Pseudo-dominance is		
10	TP1 ' 41 1	1		(A) Translocations		Duplications
42.	The queen in the honey	B) Nectar		(C)-Deletions	(D)	Inversions
	(A) Royal jelly (I) (C) Queen substance (I)	'	53.	Monoploids which de	evelon	from a normal
	(C) Queen substance (1	D) Honey	JJ.	diploid species are re		
43.	Which insecticide is stor	red in the fat of milch		(A) Monohaploids		Polyhaploids
	animals?			(C) Dihaploids	, ,	Disomic haploids
	(A) Malathion (1	B) DDT		•	` ´	• •
	(C) Lindane (1	D) Endosulfan	54.	An individual lacking		
				the diploid set is refe		
44.	Bluc green algae are	D) 4 11 1		(A) Nullisomic	. ,	Monosomic
	` '	B) Acellular		(C) Trisomic	(D)	Tetrasomic
	(C) Prokaryotes (1	D) Eukaryotes	55	Laws of inheritance v	vere di	iscovered by
45.	Photosynthesis is a		JJ.	Mendel in 1866, while		
7 3.	(A) Catabolic process			(A) Drosophila		Maize
	(B) Anbolic process			(C) Garden pea	, ,	Neurospora
	(C) Endergonic process			1	()	1
	(D) Exergonic process		56.	Crossing over takes p	lace d	uring
				(A) Leptotene	(B)	Zygotene
46.	The real force causing en	ntry of water into a		(C) Pachytene	(D)	Diplotene
	cell from other cell is	la.Cait	57	Cov. almoma a a ma a a m	l i	lmovem on
	(A) Diffusion pressure d(B) Turgor pressure	leticit	57.	Sex chromosomes are (A) Autosomes		Allosomes
	(C) Osmotic pressure			(C) Lysosomes	• /	Ribosomes
	(D) Wall pressure			(C) Lysosomes	(D)	Ribosomes
	(=)		58.	In a DNA molecule,	thymir	ne always pairs
47.	Which one of the follo	owing will reduce the		with	,	7 1
	rate of transpiration?			(A) Adenine	(B)	Guanine
	(A) Increase in windy vo	elocity		(C) Cytosine	(D)	Uracil
	(B) Rise in temperature					
	(C) Increase in water up	- •	59.	In RNA molecule, ur		
	(D) Decrease in light int	ensity		(A) Adenine	• /	Guanine
10	Call arganalla found and	v in planta ia		(C) Thymine	(D)	Cytosine
48.	Cell organelle found onl (A) Mitochondria (I	y in plants is B) Golgi complex	60.	Self pollination refers	s to	
	• •	D) Plastids		(A) Allogamy		Autogamy
	(-)	,	٠	(C) Dichogamy	(D)	Herkogamy

61.	oligogenic characters is (A) Pedigree breeding	_	their host cells without another virus is called (A) Satellite virus (B) Provirus (C) Helper virus (D) Virusoids
	(B) Bulk breeding(C) Backcross breeding(D) Disruptive mating	71.	(C) Helper virus (D) Virusoids In India, agricultural income is calculated through
62.	Hybrid progeny from a cross between two inbreds is known as (A) Single cross hybrid (B) Double cross hybrid (C) Three way cross hybrid (D) Multiple cross hybrid		(A) Output method(B) Income method(C) Expenditure method(D) Commodity flow method
63.	In India, the crop in which a hybrid variety was the first to be developed is (A) Maize (B) Pearlmillet (C) Sorghum	72. 73.	Any parasite that cannot survive in a dead host and therefore keeps it alive is called (A) Necrotroph (B) Hemibiotroph (C) Perthotroph (D). Biotroph Wild fire toxin (tabtoxin) is released/produced
64.	 (D) Cotton In which of the following, pureline varieties are still in cultivation? (A) Maize (B) Potato (C) Sorghum (D) Pearlmillet 	;	by (A) Pseudomonas syringae (B) Fusarium oxysporum (C) Alternaria alternate (D) Pyricularia oryzae
65.	Causal organism of leaf rust in wheat is (A) Puccinia striformis (B) Puccinia graminis pv. Tritici (C) Puccinia recondita pv. Tritici (D) Puccinia maydis	74.	Which organism commonly affects tomato, cotton and banana? (A) Alternaria solani (B) Fusarium moniliforme (C) Fusarium oxysporum
66.	Sunflower originated in (A) India (B) China (C) Mexico (D) USA Centre of origin	75.	(D) Erysiphe graminicolaThe two important diseases of sugarcane(A) Little leaf and bacterial wilt(B) Red rot and grassy shoot
67.	Green leaf hopper of paddy is the primary vector of (A) Tungro disease (B) Sheath rot (C) Kresek disease (D) Ufra disease	76.	(C) Red rot and bunt(D) Bakanae disease and stem cankerThe best soil for tomato growing is(A) Sandy soil(B) Loam
68.	Erwinia amylovora causes (A) Black leg of potato (B) Black arm of cotton (C) Fire blight of pear and apple (D) Bacterial blight of bean	77.	(C) Clay (D) Loamy sand Daily mean temperature favourable for successful production of brinjal is (A) 5°C to 10° (B) 10°C to 15° (C)13°C to 21°C (D) None of the above
69.	An organism that is usually parasitic but may also live as saprophyte is called (A) Facultative parasite (B) Obligate parasite (C) Facultative saprophyte (D) Saprophyte	^y 78.	Pungency in chilli is due to (A) Capsaicin (B) Glycoprotein (C) Cucurbitacin (D) Tannins
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19.	production of caulifle (A) 6.0 and 7.0	(B) 4.5 and 5.5		(A) Orange (C) Sweet Lime	(B)	Malta Lemon
80.	(C) 5.5 and 6.6 Japanese white is a v	(D) None of the above ariety of	91.	Brix percentage of sa		
	(A) Carrot(C) Turnip	(B) Radish(D) None of the above	re	(A) 16 (C) 25	(B) (D)	
81.	2		92.	Mango belongs to the family		
	variety (A) Raplanistroides (C) Oleifera	(B) Caudatus (D) Radicula		(A) Leguminaceae(C) Poaceae	• •	Anacardiaceae Compositae
	(C) Gioriera (D) Radicula			Which of the following is the most important		
82.	Number of irrigations			pest of mango		-
	good crop of onion ra	C		(A) Mango hopper		Mealy bug
	(A) 2-4	(B) 5-10		(C) Stem borer	(D)	Fruit fly
	(C) 10-15	(D) 15-20	04	Posa species suitable	to Mc	ortharm India alimata
83.	Peas are very rich in	*	94.	Rose species suitable (A) Rosa barbantia		Rosa multiflora
05.	(A) Carbohydrates	(B) Protein		(C) Rosa indica	` '	Rosa munijiora Rosa damasina
	(C) Fats	(D) Minerals		(C) Robu marea	(D)	nosa aamasma
			95.	Blanching is common	ıly pra	acticed in the
84.	Nitrogen fixation from air through symbiosis		is	cultivation of		
	is brought about by the			(A) Chinese cabbage		_
	(A) Rhizobium japon			(C) Broccoli	(D)	Cauliflower
	(B) Rhizobium legum	inosarum	0.0	Th. 1 1 1. C	. 1.	,. ,
	(C) Xanthomonas (D) Mesorhizobium		96.	The best soil for potat (A) Sandy loam		
•	(D) Mesor nizobium			(C) Clay loam		Loamy sand Silty loam
85.	Seed rate per acre for	growing cucumber is		(C) Clay loani	(D)	Shty loani
	(A) 250 g	(B) 500 g	97.	Urea contains		
	(C) 1 kg	(D) 1.5kg		(A) 40% Nitrogen	(B)	46% Nitrogen
				(C) 52% Nitrogen	(D)	56% Nitrogen
86.	For controlling weeds					
	Stomp one day after s	•	98.	Which of the following	_	
	(A) 500 ml/acre	(B) 750 ml/acre		(A) Alfalfa		Maize
	(C) One litre/acre	(D) 1.5litre/acre		(C) Bajra	(D)	Cowpea
87.	What is the botanical	~	99.	The law of diminishin	o reti	irns is annlicable to
	(A) Allium cepa	(B) Allium sativum	,,,	(A) Agriculture	_	Mining
	(C) Allium capitata	(D) Allium garlic		(C) Manufacturing	(D)	•
88.	Which pest is not harm (A) Red pumpkin bee		100		` ′	
	(B) Epilachna beatle		100.	. Which committee recommended introduction		
	(C) Fruit fly			of an agricultural tax?		
	(D) Red mite			(A) Jha	(B)	·
				(C) Chelliah	(D)	Lakadwala
89.	Which is not a pest of	•				
	(A) Sweet potato wee					
	(B) Sweet potato sphi(C) Hairy caterpillar	nx				
	(D) Aphid					
	(D) Apind					

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Note with reference to instructions No. 9 at first page of Question Booklet.

In view of the orders dated 04.09.2012 passed by the Hon'ble Punjab and Haryana High Court in LPA No. 1338 of 2012, the Commission has decided to display the Answer Keys of all the 20 subjects (one compulsory and 19 optional subjects) of HCS (Ex. Br.) & Other Allied Services Preliminary Examination – 2014 on the next day of Exam i.e. on 04.08.2014 on the Commission's website i.e. http://hpsc.gov.in. The candidates who appeared in the aforesaid Pre. Exam are advised to submit their representation regarding incorrect question / answers, if any, upto 06.08.2014 (upto 05.00 PM) personally or through online (not by post / courier). Candidates must write their Name, Roll No. and name of the subject. Representations received after 06.08.2014 (upto 05.00 PM) will not be entertained by the Commission. Representations received within stipulated period will be placed before the Committee of subject Experts and the report submitted by the Committee of Experts will be final. The result will be prepared proportionately after giving the benefit of incorrect question / answers on the basis of the report of the Members of subject Expert Committee.

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