

MODEL ANSWER
DR. PANJABRAO DESHMUKH KRISHI VIDYAPEETH, AKOLA
SEMESTER END THEORY EXAMINATION

B.Sc. (Hons.) Agriculture

Semester	:	I (New)	Term	:	I	Academic Year	:	2020-21
Course No.	:	AGRO-111	Title	:	Fundamentals of Agronomy-I			
Credits	:	2 (1+1)						
Day & Date	:	Monday, 18-01-2021	Time	:	9-10 am	Total Marks	:	40

Note:	1) Solve ANY FOUR questions from SECTION-A . 2) Solve ANY SIX questions from SECTION-B . 3) All questions from SECTION-C are compulsory. 4) Send the PDF file of answer sheet to the email id of respective course teacher.
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SECTION-A	
(Write the answers in 4-5 sentences only. Each question carries 4 marks)	
Q. 1	State the objectives of seed treatment. i. Convenience in sowing. ii. Disease/pest control and protection against insects. iii. Quicker germination, better yield and increasing nitrogen fixation. iv. Inducing earliness and variation.
Q. 2	Give the advantages of crop rotation. i. Crop rotation maintains/ improves soil fertility, prevent the build-up of pests, weeds and soil borne diseases. ii. Control the soil erosion, insect, pest and diseases; conserve moisture from one season to next. iii. Proper distribution of labour and their work, proper utilization of all farm resources, family person and labour get work all over the year. iv. Diversification of cropping reduces the risk of financial loss due to unfavourable condition, family needs of feed; food, fuel fibre, spices, sugar etc. are fulfilled and also fulfil needs of livestock.
Q. 3	Enlist the methods of application of fertilizers and describe fertigation. Fertilizers are applied by following methods i. Broadcasting ii. Drilling iii. Top dressing iv. Band placement v. Point placement vi. Injection into soil vii. Fertigation viii. Root dipping ix. Foliar application <u>Fertigation</u> : It is an application of fertilizer with irrigation water. N and S fertilizers are applied with this method. It is followed with sprinkler or drip system.
Q. 4	State the objectives of tillage. i. To make soil loose, porous and aerated. ii. To have repeated exchange of air/gases and increase the soil temperature. iii. To control weeds, remove stubbles and destroy insect pests. iv. To break hard pan, invert soil to improve fertility, incorporate organic manures.
Q. 5	Write about the losses caused by weeds on farm. i. Weeds reduce crop yield and quality of produce. ii. Weeds increases cost of cultivation. iii. Harm to animal and human being health. iv. Harbour insects and diseases. v. Depreciation of land value.

SECTION-B	
(Write the answers in one sentence only. Each question carries 2 marks)	
Q. 6	Do as directed
	a) Bone meal, Fish meal, Blood meal, Meat meal (Any two).
	b) Soybean, Green gram, Black gram, Pigeon pea (Any two).
	c) FYM, Compost, Night soil, Vermicompost, Green manure, Sheep manure, Sewage, Sludge (Any two).
	d) Groundnut, Potato, Sugarcane (Any two).
	e) MOP, Sulphate of potash, Potassium nitrate (Any two).
	f) Sunhemp, Dhaincha, Glyricidia (Any two).
	g) 2, 4-D, Atrazine, EPTC, Trifluralin, Alachlor (Any two).

SECTION-C	
(Choose the correct option. Each question carry 1 mark)	
Q. 7	1) Puddling operation is done in <u>Rice</u> crop.
	2) <u>All of these</u> implements are used for hoeing.
	3) <u>All of these</u> are preparatory tillage operations.
	4) <u>All of these</u> implements are used for drilling of seed.
	5) <u>All of these</u> are the examples of biofertilizer.
	6) <u>Neem cake</u> is not the edible oil cake.
	7) <u>Urea</u> is a nitrogenous fertilizer.
	8) <u>Harrow</u> is a multipurpose implement.
	9) Harvesting of cotton bolls is done by <u>Picking</u> method.
	10) <u>All of these</u> are the factors affecting crop growth.
	11) Cotton sowing is done by <u>Dibbling</u> method.
	12) <u>All of these</u> are primary plant nutrients.
