## MIZORAM PUBLIC SERVICE COMMISSION

# AGRICULTURE & ALLIED SERVICES (COMBINED TECHNICAL) EXAMINATION, 2024 FOR RECRUITMENT OF JR. GRADE OF MIZORAM ANIMAL HUSBANDRY & VETERINARY SERVICE UNDER ANIMAL HUSBANDRY & VETERINARY DEPARTMENT, GOVERNMENT OF MIZORAM, DECEMBER-2024.

### AH & VETY PAPER-I

Time Allowed: 3 hours

FM: 200

# SECTION - A (Multiple Choice Questions) (100 Marks)

All questions carry equal mark of 2 each. Attempt all questions.

This Section should be answered only on the **OMR Response Sheet** provided.

1. Act of parturition in dog is called-					
(a) Kidding	(b)	Whelping			
(c) Foaling	(d)	Kindling			
2. The average gestation period of buffalo is-	2. The average gestation period of buffalo is-				
(a) 310 days	(b)	360 days			
(c) 400 days	(d)	460 days			
3. Castrated male cattle is known as-					
(a) Bull	(b)	Buller			
(c) Bullock	(d)	Bovine			
4. Colostrums provide-					
(a) Passive immunity	(b)	Active immunity			
(c) Cell-mediated immunity	(d)	Protective immunity			
5. Dental pad is found in-					
(a) Pig	(b)	Cattle			
(c) Horse	(d)	Dog			
6. The typical incubation period for duck eggs is-					
(a) 18 days	(b)	21 days			
(c) 25 days	(d)	28 days			
7. Origin of Landrace breed is-					
(a) England	(b)	USA			
(c) Denmark	(d)	Germany			

8.	Hot b	Hot branding rod should be applied on the animal's body for not more than-			
	(a)	3 seconds	(b)	12 seconds	
	(c)	3 minutes	(d)	1 hour	
9.	The	native place of Jersey breed of cattle is-			
	(a)	Scotland	(b)	Switzerland	
	(c)	USA	(d)	English Channel Islands	
10.	A cas	strated male domestic fowl is known as-			
	(a)	Cock	(b)	Cockerel	
	(c)	Capon	(d)	Chicken	
11.	Yello	ow colouration of milk fat or yellow tinge of co	w mi	lk is attributed to-	
	(a)	Tocopherol	(b)	Sterol	
	(c)	eta - carotene	(d)	Vitamin A	
12.	FSSA	AI stands for-			
	(a)	Food Safety and Standards Authority of India	a		
	(b)	Food Standards and Safety Act of India			
	(c)	Food Safety and Standards Act of India			
	(d)	Food  Security  and  Supply  Authority  of  India			
13.	Almo	ost all food poisoning bacteria are-		•	
	(a)	Mesophilic	(b)	Thermophilic	
	(c)	Anaerobic	(d)	Psychrophilic	
14.	Effic	ficiency of pasteurization can be determined by estimating the enzyme-			
	(a)	Oxidoreductase	(b)	Lactoperoxidase	
	(c)	Xanthine oxidase	(d)	Alkaline phosphatase	
15.	A hai	nk of wool measures-			
	(a)	560 yards	(b)	580 meters	
	(c)	360 yards	(d)	380 meters	
16.	As pe	er IUCN Red list the greater one-horned rhino	cero	s is listed as-	
	(a)	Vulnerable	(b)	Endangered	
	(c)	Critically Endangered	(d)	Near Threatened	
17.	A qui	ick test to determine the developed acidity and	the s	uitability of milk for heat processing-	
	(a)	Sediment test	(b)	Organoleptic tests	
	(c)	MBRT	(d)	Clot-on-Boiling (COB) test	
18.	Exud	ation of water from frozen meat is known as-			
	(a)	Weep	(b)	Shrink	
	(c)	Drip	(d)	Sweat	

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19.	Whic	ch layer of intestine of animals is used as casing	<b>3</b> ?			
	(a)	Mucosal layer	(b)	Sub mucosal layer		
	(c)	Muscular layer	(d)	Serous layer		
20.	Mea	t of deer is called as-				
	(a)	Chevon	(b)	Deer Mutton		
	(c)	Menison	(d)	Venison		
21.	Inar	a multiple allele system with alleles, the number of possible genotype is-				
	(a)	45	(b)	55		
	(c)	42	(d)	56		
22.	The	most accurate aid to selection is-				
	(a)	Progeny testing	(b)	Individual selection		
	(c)	Pedigree selection	(d)	Herd selection		
23.	The	liploid chromosome number of Swamp buffalo	o is-			
	(a)	60	(b)	78		
	(c)	50	(d)	48		
24.	Hinn	y is obtained by crossing-				
	(a)	Zebra X Horse	(b)	Jack X Zebra		
	` ′	Jack X Mare	` '	Jennet X Stallion		
25.	Muta	ation in which new codon specify the same am	ino a	cid is called as-		
		Synonymous mutation		Non-Synonymous mutation		
	` ′	Nonsense mutation	` ´	Neutral mutation		
26.	The	causal components of phenotypic variance (V <sub>1</sub>	) are	<del>)-</del>		
		$V_G$ and $V_E$		$V_D$ and $V_E$		
		$V_A$ and $V_E$		$V_I$ and $V_E$		
27.		ability estimate in an inbred population will be-		_		
		High	` `	Low		
	` ′	One	` ′	Negative		
28.		ch of the following is not the result of inbreedin	_			
		Prepotency		Change in genotype frequency		
•		Increase in homozygosity	(d)	Increase in heterozygosity		
29.		eny testing is done to select-	<i>a</i> >	a.		
	` ,	Dam	` ′	Sire		
	` ′	Full sib	(d)	Half sib		
<i>5</i> 0.		oreeding efficiency of cows may be improved by	-	T		
	• •	Increasing the dry period		Increasing age at first calving		
	(C)	Increasing the service period	(a)	Decreasing calving interval		

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31.	One	example of NPN is-		
	(a)	Urea	(b)	Soyabean
	(c)	Fishmeal	(d)	Fat
32.	Whic	ch feed has highest protein content -		
	(a)	Mustard cake	(b)	Soyabean
	(c)	Fishmeal	(d)	Cottonseed cake
33.	'Para	keratosis' in pigs occur due to-		
	(a)	Iron	(b)	Zine
	(c)	Copper	(d)	Menganese
34.	Mois	ture contain in hays should not be more than-		
	(a)	20-23%	(b)	15-17%
	(c)	12-14%	(d)	25-27%
35.	As po	er BIS standard the minimum crude protein co	nten	t of pig starter feed is-
	(a)	16%	(b)	18%
	(c)	20%	(d)	22%
36.	Whic	ch of the following is a saturated fatty acid?		
	(a)	Linoleic acid	(b)	Linolenic acid
	(c)	Archidonic acid	(d)	Stearic acid
37.	Urea	can be added in the diets of ruminants at-		
	(a)	1%	(b)	2%
	(c)	3%	(d)	4%
38.	Gros	s energy value is highest in -		
	(a)	Protein	(b)	Carbohydrate
	(c)	Fat	(d)	Mineral
39.	Craz	y chick disease is caused by deficiency of-		
	• • •	Vitamin A	(b)	Vitamin B
		Vitamin D	` ,	Vitamin E
40.	The c	rude protein requirement in broiler finisher fee	d is-	
	(a)	12%	(b)	20%
	` ′	23%	(d)	32%
41.	The b	pasic unit of extension work is-		
	(a)	Individual	(b)	Society
	(c)	Family	(d)	Community
42.		concept of extension education process was gi		•
		Paul Leagana		Curt Lewin
	(c)	Ensminger	(d)	Wilson and Gallup

43.	Meth	od demonstration works on the principle of-							
	(a)	Learning is believing	(b)	Learning is teaching					
	(c)	Seeing and doing	(d)	Learning by doing					
44.	ATIC	C stands for-							
	(a)	Agricultural Technology Information Centre							
	(b)	Agricultural Technology Information Council							
	(c)	Agricultural Technology Information Committee							
	(d)	(d) Agricultural Transformation and Information Centre							
<b>45.</b>	MSM	IE stands for-							
	(a)	Micro Small and Medium Enterprises	(b)	Micro Small and Marginal Enterprises					
	(c)	Micro Small and Mega Enterprises	(d)	Medium Small and Micro Enterprises					
46.	Whic	th adopter category is a role model for potential	al ado	opters in a social system -					
	(a)	Innovator	(b)	Late majority					
	(c)	Early Adopter	(d)	Laggards					
47.	Coop	perative society is an example for-							
	(a)	Formal group	(b)	Informal group					
	(c)	Primary group	(d)	Territory group					
48.	India	n Institute of Entrepreneurship (IIE) is located	at-						
	(a)	Shillong	(b)	Agartala					
	(c)	Dibrugarh	(d)	Guwahati					
49.	Whic	h of the following reflects the financial position	n of a	business organisation -					
	(a)	Journal	(b)	Balance Sheet					
	(c)	Trial Balance	(d)	Profit and Loss account					
50.	Who	is the Father of the White Revolution in India?	•						
	(a)	M. S. Swaminathan	(b)	Durgesh Patel					
	(c)	B.V. Rao	(d)	Verghese Kurien					

# SECTION - B (Conventional Type) (100 Marks)

This Section should be answered only on the <u>Answer Sheet</u> provided.

Marks for each question is indicated against it.

Attempt all questions.

- 1. Define entrepreneur. What are the important traits of an entrepreneur? Enlist the steps involved in entrepreneurship development programme. (1+6+3=10)
- 2. Define Integrated Farming System (IFS). Classify farming systems on the basis of income.

(2+8=10)

- 3. What do you mean by forage conservation? How is silage prepared? Write in detail the steps for making silage and the chemical changes that takes place during ensilage. (2+10+8=20)
- 4. Define heritability. What are the different methods of estimation of heritability? Write the practical uses of heritability in animal breeding programme. (1+6+3=10)
- What do you understand by nucleus breeding system? Discuss how ONBS can be used in livestock improvement.

  (2+8=10)
- 6. What is weaning? Discuss the advantages and disadvantages of early weaning of piglets? (1+4=5)
- 7. Describe briefly the dehorning methods of calf.

(5)

8. Write short notes on:

 $(6 \times 5 = 30)$ 

- (a) Carcass disposal
- (b) Gaushala
- (c) Ageing/Conditioning of meat
- (d) Nutritive value of egg
- (e) Functional food
- (f) Steps involved in slaughter and dressing of Pig

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