## Serial No.

Codes: AAO123-2015

Time Allowed: Three Hours Maximum Marks: 300

## INSTRUCTIONS

## DO NOT OPEN THIS QUESTION BOOKLET SEAL UNTIL YOU ARE TOLD TO DO SO

- 1. The OMR Sheet is separately supplied to you. Fill in all the entries in the OMR Sheet correctly, failing which your OMR Sheet shall not be evaluated.
- 2. This Question Booklet contains **200** questions. Each question comprises four responses (answers). You have to select ONLY ONE response which you consider the best and mark it on the OMR Sheet.
- 3. You must check the Question Booklet and ensure that it contains all the questions and see that no page is missing or repeated. Discrepancies, if any in the Question Booklet or in the OMR Sheet, you must be reported to the invigilator immediately and Question Booklet/OMR Sheet shall be replaced.
- 4. All questions carry equal marks. Attempt ALL questions. Your total marks will depend only on the number of correct responses marked by you in the OMR Sheet.
- 5. Rough work must not be done on the OMR Sheet. Use the blank space at the last page of the Question Booklet for rough work.
- 6. Once you have completed filling in all your responses on the OMR Sheet and the examination has concluded, you should hand over the OMR Sheet to the Invigilator. In no case you should leave the Examination Hall without returning the OMR Sheet. Candidates are allowed to take away their Question Booklets. The duplicate OMR Sheet may also be taken away by the candidates.
- 7. There is no penalty for wrong answers.

- 1. Which one of the following is a selective herbicide?
  - a. Paraquat
- b. Glyphosate
- c. Atrazine
- d. Diquat
- 2. Zygogramma bicolorata insect is used to control:
  - a. Parthenium hysterophorus
  - b. Echinochloa colonum
  - c. Lantana camara
  - d. Orobanche cernua
- 3. How is Fluchloralin applied?
  - a. Pre-emergence
  - b. Post-emergence
  - c. Pre-plant incorporation
  - d. Late post emergence
- 4. Which of the following is parasitic weed of lucerne?
  - a. Cuscuta spp.
  - b. Avena fatua
  - c. Cichorium intybus
  - d. Cyperus rotundus
- 5. Mulching is an example of:
  - a. Chemical weed control method
  - b. Biological weed control method
  - c. Mechanical weed control method
  - d. None of the above

- 6. Maximum number of seeds per plant are produced by the weed plant:
  - a. Amarnathus spp.
  - b. Argemone mexicana
  - c. Cuscuta spp.
  - d. Chenopodium album
- 7. Which of the following is contact, non-selective and zero persistent herbicide?
  - a. Fluchloralin
- b. 2, 4-D
- c. Atrazine
- d. Paraquat
- 8. Effective weed control measure of crop associated and crop bound weeds is?
  - a. Intercropping
  - b. Mulching
  - c. Hoeing & Weeding
  - d. Crop rotation
- 9. Example of aquatic weed is?
  - a. Eichhornia crassipes
  - b. Eleusine indica
  - c. Circium arvense
  - d. Amaranthus viridis
- 10. Example of biennial weed is?
  - a. Cynodon dactyton
  - b. Chenopodium spp.
  - c. Cyperus esculentus
  - d. Cirsium vulgare

11.	soil water availability to plants.					
	a. Lower b. Middle		a. 0.3-1.0 ppm b. 1.0-3.0 ppm			
	c. Upper d. All		c. 2.0-4.0 ppm d. 4.0-6.0 ppm			
12.	<ul> <li>Available Water Holding Capacity is:</li> <li>a. Field Capacity-Permanent Wilting Point</li> <li>b. Permanent Wilting Point-Hygroscopic Water</li> <li>c. Field Capacity-Hygroscopic Water</li> <li>d. Field Capacity-Ultimate Wilting Point</li> </ul>	16.	of wheat for irrigation is:  a. Crown root initiation  b. Tillering  c. Jointing  d. Grain filling			
13.	Which criterion of irrigation scheduling is more suitable and convenient to farmers?  a. Soil moisture tension  b. Pan evaporation  c. Water potential of plant  d. Critical growth stages	17.	a. 100 to 500 mm b. 500 to 800 mm c. 800 to 1500 mm d. 1500 to 1800 mm Single Super Phosphate containsper cent sulphur:			
14.	<ul> <li>Irrigation Requirement (IR) can be obtained by:</li> <li>a. IR = Water requirement</li> <li>b. IR = Water requirement + Effective rainfall</li> <li>c. IR = Water requirement - (Effective rainfall + Contribution from ground water table)</li> <li>d. IR = Effective rainfall - (Water requirement + Contribution from ground water table)</li> </ul>	19.	a. 16 b. 18 c. 12 d. 20  Which one fertilizer contains secondary nutrient other than primary nutrients? a. Ammonium nitrate b. Urea c. DAP d. Ammonium sulphate			

20.	Which nutrient is essential to increase protein content in cereals?					
	a. Phosphorus	b. Nitrogen				
	c. Potassium	d. Calcium				
21.		e following nutrient wering and seed				

- formation?
  - a. Nitrogen
- b. Phosphorus
- c. Sulphur
- d. Calcium
- 22. Khaira disease in rice is caused by deficiency of:
  - a. Nitrogen
- b. Sulphur
- c. Iron
- d. Zinc
- 23. Which nutrient is not a constituent of chlorophyll but helps in chlorophyll?
  - a. Phosphorus
- b. Magnesium
- c. Sulphur
- d. Nitrogen
- 24. Which nutrient is essential for symbiotic and non-symbiotic nitrogen fixation?
  - a. Boron
- b. Zinc
- c. Iron
- d. Molybdenum
- 25. Iron chlorosis in calcareous soils can be corrected by application of:
  - a. Elemental sulphur
  - b. Lime
  - c. Murate of potash
  - d. Calcium ammonium nitrate

- 26. For foliar spray the biuret content in urea should be:
  - a. 1.0 1.5 per cent
  - b. 1.5 2.0 per cent
  - c. 2.0-2.5 per cent
  - d. Less than 0.5 percent
- 27. Whiptail disease of cauliflower is caused by deficiency of:
  - a. Zinc
- b. Molybdenum
- c. Boron
- d. Manganese
- 28. Which one of the following oilcakes contains maximum nitrogen content?
  - a. Castor cake
- b. Groundnut cake
- c. Neem cake
- d. Coconut cake
- 29. Which one of the following is concentrated organic manure?
  - a. FYM
  - b. Super Compost
  - c. Rock Compost
  - d. Castor cake
- 30. Phosphorus fixation is more in:
  - a. Neutral soils
  - b. Acid soils
  - c. Submerged soils
  - d. None of the above

31.	Zinc sulphate should not be mixed with:			37.	Cytoplasmic-genetic male sterility is controlled by the genes of:			
	a. SSP				a. Chloropl	ast	b. Cytoplasm	
	b. Urea				c. Nucleus		d. Both b and	d c
	c. Ammonium ch	c. Ammonium chloride		20	To maintai	+la.a	iotion in	04477
	d. FYM			38.			variation in vision	•
32.	Which one of the following strain of <i>Rhizobium</i> is used in soybean for seed treatment?  a. <i>R. meliloti</i> b. <i>R. trifolii</i> c. <i>R. japonicum</i>				essential:			
					a. Mitosis		b. Meiosis	
					c. Both a a	nd b	d. None of th	nese
			39.	39.	High inbreeding depression is			
					observed in:			
	d. R. leguminoser	um			a. Self poll	inated	crops	
33.	Neem cake contains:				b. Often cro	oss po	llinated crops	
55.	a. Dhurin	b. Azadirachtin			c. Cross pollinated crops			
	c. Saponin	d. None of these			d. Not depe	nd on 1	nature of pollina	ation
34.	In case of trees and vines the Certificate of Registration shall be			40.	As a result of one meiosis, number of female gametes are formed:			
	valid for:	gistration shall be			a. 1		b. 2	
	a. 6 years	b. 9 years			c. 3		d. 4	
	c. 15 years	d. 18 years		41.	The heteros	is can	be fixed by:	
35.	Desired seed replacement rate for varieties of self and cross pollinated				a. Apomixe	es		
					b. Male sterility			
	crops are: a. 20% and 25%	b. 60% and 50%			c. Self incompatibility			
	c. 20% and 10%	d. 25% and 35%			d. None of	these		
36.	A major re-structuring of the seed			42.	Seed is a ma	ture:		
30.	industry by Government of India through the National Seed Project Phase-III was done in the year:				a. Ovary		b. Embryosec	;
					c. Ovule		d. Embryo	
	a. 1970-71	b. 1977-78						
	c. 1990-91	d. 2007-08						
			5				(Cor	ntd.)

- 43. With 'n' heterozygous gene pairs, the proportion of completely homozygous plants after 'm' generations of selffertilization:
  - a.  $[(3^m-1)/2^m]^n$  b.  $[(2^m-1)/3^m]^n$

  - c.  $[(2^m-1)/2^m]^n$  d. None of these
- 44. After 'm' generations of selffertilization of a complete heterozygous genotype the proportion of homozygosity is:
  - a.  $(1/2)^{m}$
- b.  $1-(1/2)^{m}$
- c.  $(1/2)^{m} 1$
- d.  $1-(1/4)^{m}$
- 45. Collins (1927) observed albino barley at below 45°F it became normal at above 65°F he called it:
  - a. Environment dependent character
  - b. Threshold effect
  - c. G × E interaction
  - d. Effect of environment
- 46. Stratified mass selection is advantageous if:
  - a. Environmental effect is high
  - b. Inter strata variation is high
  - c. Environmental effect is low
  - d. Intra strata variation is high
- 47. For GCA testing the tester should be:
  - a. Narrow genetic base
  - b. Broad genetic base
  - c. Inbred line
  - d. With dominant genes

- 48. In back crossing the line to be improved should be used as:
  - a. Male recurrent parent
  - b. Male donor parent
  - c. Female recurrent parent
  - d. Female donor parent
- 49. Time saving and most effective method for identification of transgressive segregants is:
  - a. Back cross method
  - b. Pure line selection
  - c. Doubled heploidy
  - d. Single seed descent method
- 50. Pure line selection is applicable in:
  - a. Hybrids
- b. Composites
- c. Synthetics
- d. Varieties
- 51. For seed germination which activity is essential:
  - a. Imbibition of water
  - b. Cell elongation
  - c. Increase in cell number
  - d. All of the above
- 52. The seeds able to tolerate moisture loss:
  - a. Recalcitrant

- b. Orthodox
- c. Both a and b
- d. None of these

- 53. Inbred line can be improved by:
  - a. Pedigree method
  - b. Convergent improvement method
  - c. Back crossing
  - d. All of the above
- 54. To develop heterotic pools those inbred lines are selected which are:
  - a. Good combiner with  $P_1$  or  $P_2$
  - b. Good combiner with  $P_1$  and  $P_2$
  - c. Poor combiners with both parents
  - d. Not depend on combining ability
- 55. In transversion:
  - a. Purine replaced by another purine
  - b. Pyrimidine replaced by another pyrimidine
  - c. Purine replaced by pyrimidine or vice versa
  - d. None of these
- 56. Who described the mutagenic effects of X-rays in barley?
  - a. Muller (1927)
  - b. Stadler (1928)
  - c. McClintock (1929)
  - d. None of these
- 57. Superiority of F<sub>1</sub> over better parent is known as:
  - a. Heterosis
  - b. Heterobeltiosis
  - c. Economic heterosis
  - d. Luxuriance

- 58. In dominance hypothesis heterosis will be higher if:
  - a. Disperse dominance
  - b. Unidirectional dominance
  - c. The 'h' and 'l' having same sign
  - d. All of the above
- 59. Preponderance of non additive gene action can be exploited by:
  - a. Varieties
- b. Composites
- c. Synthetics
- d. Hybrids
- 60. Germination is suspended by active endogenous inhibitors in:
  - a. Sterility
- b. Incompatibility
- c. In viability
- d. Dormancy
- 61. Which of the following seeds can germinate in anaerobic conditions?
  - a. Wheat
- b. Maize
- c. Paddy
- d. Green gram
- 62. Testa is governed by the genotype of:
  - a. Male
  - b. Female
  - c. Both by a and b
  - d. Interaction of egg and sperm genotype
- 63. The tag colour of the foundation seed is:
  - a. Golden yellow b. Blue
  - c. White

d. Not required

64.	Plants grown in the field from previous crops:			c. Meteorology d. None of above			
	a. Volunteer plants b. Off-type		71.	The lowermost layer of atmosphere is:			
	c. Weeds	d. All of the above		a. Troposhere b. Stratosphere			
65.	In maiza isolation	distance for inbred		c. Mesosphere d. Thermosphere			
03.	In maize isolation distance for inbred line from same seed colour plants is:		72	For wheat optimal range of temperature for proper germination			
	a. 200 m	b. 400 m		and vegetative growth is:			
	c. 600 m	d. 800 m		a. 21 to 25°C b. 15 to 20°C			
66.	Time isolation is	permissible in:		c. 10 to 14°C d. 26 to 30°C			
	a. Maize	b. Pearl millet	73	According to Land Capability			
	c. Sorghum	d. Black gram		Classification, use of Class VI land is restricted to:			
67.	The moisture content for seed storage in wheat should not be more than:			a. Field crops			
				b. Orchards			
	a. 9%	b. 10%		c. Field crops and orchards			
	c. 11%	d. 12%		d. Pastures and siviculture			
68.	The genetic purity of a variety is tested by:  a. Progeny testing b. DUS Testing c. Grow out test d. All of the above		74.	4. Water in soil above field capacity is termed as:			
				a. Gravitational water			
				b. Capillary water			
69.	Based on physiography and climate, the Planning Commission (1985-90) divided the country into broad			c. Hygroscopic water			
				d. None of the above			
	agroclimatic zones	-		According to USDA system, particle diameter of silt is:			
	c. 6	d. 9		a. 0.002 to 0.020 mm			
<b>-</b> 0	The summation of weather conditions over a given region during a comparatively longer period is termed			b. 0.02 to 0.20 mm			
70.				c. 0.20 to 2.00 mm			
				d. > 2.00 mm			
	as:						
	a. Weather	b. Climate					
			8	(Contd.)			

76.	In most mineral soils the particle density varies between:		82.	Infiltration of soils having hard pan can be increased by:		
	a. $1.4 - 1.8 \text{mg/m}^3$	$^{3}$ b. $2.5-2.7 \text{ mg/m}^{3}$		a. Mulching	b. Sub soiling	
	c. $2.0-2.2 \text{mg/m}^3$ d. $1.8-2.0 \text{mg/m}^3$		0.2		d. None of the above	
77.	How much area affected by wind a. 57.16 million ha		83.		ırma b. America	
	c. 10.46 million ha d. 6.32 million ha		84.	Boro crop of rice is sown in the month of:		
78.	The major portion of the soil carried by the wind moves in a series of short bounces is called:  a. Saltation b. Suspension c. Surface creep d. None of the above			<ul><li>a. May-June</li><li>b. June-July</li></ul>		
				c. November-December		
				d. March-April		
79.	Which is a correct sequence of soil erosion?  a. Sheet-Rill-Gully  b. Rill-Gully-Sheet  c. Gully-Sheet-Rill  d. Rill-Sheet-Gully		85.	•		
				a. Pearlmillet		
				c. Sorghum	d. Rice	
			86.	In nursery raised by "Dapog Method" seedlings becomes ready for transplanting at the age of?		
80.	If the velocity of water is doubled, its erosive power increasestimes:			a. 14 days	b. 21 days	
				c. 25 days	d. 30 days	
	a. 2	b. 4	87.	Six rowed barley is:		
	c. 6 d. 8			a. Hordeum distichon		
81.	Saltation occurs when particle size is:			b. Hordeum vulgare		
	a. 0.1-0.5 mm b. 0.5-1.0 mm			c. Hordeum irregulare		
	c. 1.5-2.0 mm	d. 1.0-1.5 mm		d. All of the ab	oove	

88.	Sweet corn is:  a. Zea mays indentata  b. Zea mays indurata	94.	The recommended type groundnut is: a. 40-50 kg/ha	seed rate for bunch b. 50-60 kg/ha
	c. Zea mays saccharata		c. 60-70 kg/ha	d. 80-100 kg/ha
89.	d. Zea mays amylacea  Maize protein 'Zein' is deficient in:	95.		an be used to control at 15-20 days after
	a. Tryptophan and Lysine		a. Alachlor	b. Imazethapyr
	b. Vitamin A		c. Fluchloralin	d. Metalachlor
	<ul><li>c. Riboflavin</li><li>d. Vitamin E</li></ul>	96.	Recommended de soybean is:	pth of sowing for
90.	Sorghum is considered as camel crop because of:		<ul><li>a. 2 to 3 cm</li><li>c. 5 to 6 cm</li></ul>	b. 3 to 4 cm d. 6 to 8 cm
	a. Deep root system	97.	The center of origin	n of sesame is:
	b. Resistance to drought		a. America	b. India
	<ul><li>c. Shallow root system</li><li>d. Nutrient exhaustiveness</li></ul>		c. South Africa	d. Indonesia
	u. Nument exhaustiveness	98.	The fruit of musta	ard is:

99. Delinting of cotton seed can be done with:

b. Receme

d. Ear

a. Hydrochloric acid

b. Nitric acid

a. Siliqua

c. Caryopsis

c. Sulphuric acid

d. Citric acid

93. Which of the following is ideal temperature for tillering in wheat?

91. Phalaris minor in wheat can be

92. Norin-10 gene is responsible for

controlled by herbicide:

a. 10-15°C

a. 2,4-D

c. Paraquat

dwarfism in:

c. Black gram

a. Wheat

b. 16-20°C

b. Rice

b. Atrazine

d. Isoproturon

d. Pearl millet

c. 20-23°C

d. 23-25°C

- 100. In sugarcane setts hot water treatment is done to:
  - a. Control seed borne diseases
  - b. Control soil borne diseases
  - c. Break dormancy
  - d. Convert sucrose into glucose
- 101. *Cuscuta* is a parasitic weed of:
  - a. Berseem
- b. Lucerne
- c. Oat
- d. Fodder sorghum
- 102. The metamorphic rock, marble is formed from:
  - a. Limestone
- b. Sandstone
- c. Shale
- d. Coal
- 103. Minerals formed during the early stage of weathering are:
  - a. Muscovite and Illite
  - b. Calcite and Hornblende
  - c. Kaolinite and Gibbsite
  - d. Hematite and Goethite
- 104. Science which deals with soils genesis and classification:
  - a. Petrology
- b. Pedagogy
- c. Pedology
- d. Petrography
- 105. Which is the soil order of deep black soil?
  - a. Vertisols
- b. Entisols
- c. Inceptisols
- d. Ultisols

- 106. Arrangements of soil particles is referred as:
  - a. Soil texture
  - b. Soil structure
  - c. Soil organization
  - d. None of the above
- 107. First 15 cm layer of land which is ploughed for cultivation of crop is called:
  - a. Soil profile
- b. Rhizosphere soil
- c. Furrow slice d. Sub-soil
- 108. Soil particles get deflocculated due to presence of:
  - a. Sulphur
- b. Sodium
- c. Calcium
- d. Magnesium
- 109. Which of the following crop has been approved for commercial cultivation in India?
  - a. Bt. Brinjal
- b. Bt. Tomato
- c. Bt. Cotton
- d. None of the above
- 110. Which of the following does not apply to SRI method of rice cultivation?
  - a. Reduced water application
  - b. Reduced plant density
  - c. Reduced age of seedlings
  - d. Increased application of fertilizers
- 111. Cotton belongs to the family:
  - a. Cruciferae

- b. Malvaceae
- c. Anacardiaceae d. Solanaceae

112.	In mango squash 0.2%), how mu Potassium Metabis added in 1.0 kg fr	sulphite (KMS) is	118	;	"Pusa Delicion a. DatePalm c. Banana		s a variety of: b. Papaya d. Mango	
	a. 2.43 g c. 4.43 g	b. 3.43 g d. 5.43 g	119	9. ]			, mandarins a	ıre
113.	"Arka Mridula" is a. Tamarind	a variety of: b. Mango			a. Mrig Bahar c. Hast Bahar		Ambe Bahar None of the abo	ve
114.	c. Guava  Parentage of "An	d. Apple	120	]	Pomegranate i	s kn		
	mango are:  a. Neelum x Dash				a. Mrig Bahar c. Hasta Baha		<ul><li>b. Ambe Bahar</li><li>d. None of thes</li></ul>	
	b. Dashehari x Ne c. Neelum x Alphon	onso	121	(	"NA 6" variety of: a. Chakaiya		Aonla is a selecti b. Francis	on
115.	d. Ratna x Alphonso  Grape is mostly propagated by:		122		c. Banarasi 'Seb' is a pop	ular	d. NA7 variety of:	
	<ul><li>a. Inarching</li><li>b. Budding</li><li>c. Soft wood graft</li></ul>	ing		(	a. Coconut c. Ber		<ul><li>b. Date palm</li><li>d. Cashew nut</li></ul>	
116.	d. Hard wood stem cutting  is propagated by off-shoots (suckers) emerging from the base of		123	3	with variety Pu spacing is:	isaNa	charding of papa anha, suitable pla	•
	the plant?  a. Mandarin	b. Guava		(	a. 1.2m×1.2n c. 1.8m×1.8n	1	b. 1.6m × 1.6m d. 1.0m × 1.0m	
117.	<ul><li>c. Date Palm</li><li>Ideal planting distatis:</li></ul>	d. Pomegranate	124	(	Panama wilt caused by:  a. <i>M. phaseoli</i>		ase in Banana	is
	<ul><li>a. 5m × 5m</li><li>c. 7m × 7m</li></ul>	b. 6m × 6m d. 8m × 8m		(	b. Fusarium o. c. G. musae d. V. theobron		orum	
			12				(Conto	d.)

- 125. Powdery mildew in Ber is caused by:
  - a. *I. zizyphi*
  - b. Alternaria spp.
  - c. Phytophthora spp.
  - d. Oidium zizyphi
- 126. Causal organism for Gummosis in Citrus is:
  - a. Phytophthora spp.
  - b. Xanthomonas spp.
  - c. Alternaria citri
  - d. Glomerella cingulata
- 127. Ideal time for T-budding in roses in northern plains is:
  - a. February April
  - b. January-March
  - c. December-February
  - d. October-November
- 128. 'Pusa Uttam' is a variety of:
  - a. Tomato
- b. Potato
- c. Bottle gourd
- d. Brinjal
- 129. Average seed rate of cabbage is:
  - a. 500-750 g
- b. 200-350 g
- c. 1000-1250 g
- d. 350-450 g
- 130. Which one is a rich source of carotene?
  - a. Brinjal
- b. Cauliflower
- c. Carrot
- d. Capsicum
- 131. Scientific name of cauliflower is:
  - a. Brassica oleracea var. botrytis
  - b. Brassica oleracea var. capitata

- c. Brassica oleracea var. gemmifera
- d. Brassica oleracea var. italica
- 132. Crop geometry of spring-summer season okra is:
  - a.  $60 \,\mathrm{cm} \times 30 \,\mathrm{cm}$
- b.  $45 \text{cm} \times 30 \text{cm}$
- c.  $60 \,\mathrm{cm} \times 60 \,\mathrm{cm}$  d.  $60 \,\mathrm{cm} \times 45 \,\mathrm{cm}$
- 133. Pusa Chetki is a variety of:
  - a. Radish
- b. Carrot
- c. Cauliflower
- d. Cabbage
- 134. How much area is required for raising seedlings of tomato for one hectare?
  - a.  $1000 \,\mathrm{m}^2$
- b. 750 m<sup>2</sup>
- c. 500 m<sup>2</sup>
- d. 250 m<sup>2</sup>
- 135. Optimum seed rate of small seeded water melon is:

  - a. 3.0-3.5 kg/ha b. 2.0-2.5 kg/ha
  - c. 4.0-4.5 kg/ha d. 1.0-1.5 kg/ha
- 136. Damping off in chilli is caused by:
  - a. Pythium spp.
- b. Erysiphe spp.
- c. Peronospora spp. d. Albugo spp.
- 137. Causal organism of powdery mildew in pea:
  - a. Septoria lycopersici
  - b. *Uromyces pisi*
  - c. Erysiphe polygoni
  - d. Fusarium spp.

- 138. Radical cracks at the stem end of the tomato fruit are caused by:
  - a. Phosphorus deficiency
  - b. Phytophthora infestans
  - c. Fruit borer
  - d. Wide fluctuations in soil moisture
- 139. In cabbage, cauliflower and broccoli hollow stems with darkened interiors are most often caused by:
  - a. Boron deficiency
  - b. Magnesium deficiency
  - c. Calcium deficiency
  - d. Chilling temperature
- 140. Thread like white lines on the vegetable leaf that gradually widen are symptom of:
  - a. Aphids
  - b. Flea beetles
  - c. Army worm feeding
  - d. Leaf miner
- 141. Soft wood grafting is successful in:
  - a. Grapes
- b. Aonla
- c. Pomegrnate
- d. Mango
- 142. Processing temperature for canning in vegetables except more acidic is:
  - a. 85-101°C
- b. 115-121°C
- c. 125-131°C
- d. 134-151°C

- 143. Which of the following is not an auxin?
  - a. IAA
- b. NAA
- c. 2,4-D
- d. GA<sub>3</sub>
- 144. If heritability is high which method is most suitable:
  - a. Mass selection
  - b. Half sib selection
  - c. Full sib selection
  - d. Reciprocal recurrent selection
- 145. The natural selection can play the role in:
  - a. Pure line selection
  - b. Pedigree selection
  - c. Bulk method
  - d. Single seed descent method
- 146. Proportion of individuals having the expected phenotype determined by particular gene is called:
  - a. Expressivity
- b. Heritability
- c. Segregation
- d. Penetrance
- 147. A, B, AB and O blood groups are the example of:
  - a. Pleiotropy
- b. Heritability
- c. Dominance
- d. Codominance

- 148. In a diallel cross difference between marginal totals of a parent is due to:
  - a. Reciprocal effect
  - b. Maternal effect
  - c. Environmental effect
  - d. Interaction of nuclear and cytoplasmic genes
- 149. Effect of linkage is visible in:
  - a. P<sub>1</sub>
- b. P<sub>2</sub>
- c.  $F_1$
- d. F<sub>2</sub>
- 150. 9:3:4 Ratio is obtained in:
  - a. Recessive epistasis
  - b. Dominant epistasis
  - c. Duplicate epistasis
  - d. Complementary epistasis
- 151. Household refrigerators are generally operated at:
  - a. 7-10°C
- b. 4.5-7 °C
- c. 10-12 °C
- d. 10-15 °C
- 152. Which of the following is an example of Perishable food?
  - a. Wheat
- b. Milk
- c. Paddy
- d. Bajra
- 153. Elephant's Foot Yam is a rich source of Vitamin:
  - a. A & B
- b. B & C
- c. C & D
- d. Only B

- 154. What is the term used to describe organism which thrive in the cold?
  - a. Mesophillic
- b. Aerophillic
- c. Psychrophillic d. Halophillic
- 155. A food with a pH value of 3.5 is considered as:
  - a. Neutral
- b. Low acid
- c. High acid
- d. Non-acid
- 156. Who had designed National Flag of India?
  - a. Pingali Venkayya
  - b. V. Aiyangar
  - c. Subhash Chandra Bose
  - d. Lala Lajpat Rai
- 157. The first Adaptation Gap Report on Climate Change was recently released
  - a. International Maritime Organisation
  - b. United Nations Environment Programme
  - c. United Nations Development Organisation
  - d. United Nations Framework Convention on Climate Change

- 158. Who has been appointed as first Deputy Chairperson of recently constituted NITI Aayog?
  - a. Bimal Jalan
  - b. Arvind Pangaria
  - c. Amartya Sen
  - d. Suresh Tendulkar
- 159. What was the venue for Blue Economy-International Workshop on Sustainable Growth held in September 2014?
  - a. Dhaka, Bangladesh
  - b. Melbourne, Australia
  - c. New Delhi, India
  - d. Beijing, China
- 160. Recently the major tribal bodies of which State rejected the demand for a separate State called Twipraland?
  - a. Meghalaya
- b. Tripura
- c. Chhattishgarh d. Jharkhand
- 161. The China-Pakistan Economic Corridor which was inaugurated by Pakistan Prime Minister, Nawaz Sharif on 29 November 2014 will connect:
  - a. Lahore in Pakistan and Xinjiang in China
  - b. Gwadar Port in Pakistan and Xinjiang in China
  - c. Xinjiang in China and Gilgit in Pakistan-occupied Kashmir
  - d. Lahore in Pakistan with Shanghai in China

- 162. Air India on 4 December 2014 signed an MoU for implementation of the monetisation of its assets at various locations on joint venture basis with:
  - a. Reliance Industries Ltd.
  - b. Star Alliance
  - c. National Buildings Construction Corporation Limited
  - d. Air Asia
- 163. Who will head the Social Justice Bench recently constituted by the Supreme Court for speedy delivery of justice in a range of social issues?
  - a. Justice Madan B. Lokur
  - b. Justice P. Sathasiyam
  - c. Justice K.N. Katju
  - d. Justice Anil R. Dave
- 164. Who among the following was recently appointed as the new Director of Central Bureau of Investigation (CBI)?
  - a. Acharya Shivpoojan Sahay
  - b. Vijay Kumar
  - c. Anil Kumar Sinha
  - d. Omendra Bhardwaj
- 165. Who of the following was named as the TIME's Person of the Year 2014?
  - a. Ebola fighters
  - b. Mark Zuckerberg
  - c. Malala Yosufzai
  - d. Pope Francis

- 166. Where is Mangva cave located?
  - a. Ukhrul
- b. Churachandpur
- c. Tamenglong
- d. Chandel
- 167. In December 2014, Nyaborongo Hydro Electric Project was commissioned by Bharat Heavy Electricals Limited in which of the following African countries?
  - a. Rwanda
- b. Sudan
- c. Kenya
- d. South Africa
- 168. Which of the following is the oldest text in world?
  - a. Sama Veda
- b. Atharva Veda
- c. Rig Veda
- d. Yajur Veda
- 169. Which of the following organisations looks at standard for representation of data on the internet?
  - a. IEEE
- b. ISOC
- c. W3C
- d. IETE
- 170. Which of the following pairs (Place: event) is incorrectly matched with regards to Gautam Buddha's life?
  - a. Lumbini: Birth
  - b. Bodh Gaya: Attained Enlightenment
  - c. Sravasti: First Sermon
  - d. Kusinara: Death

- 171. Which of the following is not true of the Cabinet Mission plan?
  - a. It rejected the creation of a separate State of Pakistan
  - b. It gave scope to the communal representation
  - c. It recognized India's right to secede from the Commonwealth
  - d. All members of the Indian Cabinet are to be Indians
- 172. Who was the Author of Rajtarangini:
  - a. Kalhan
- b. Jaydev
- c. Banbhatt
- d. Vishnugupt
- 173. The social ideals of Mahatma Gandhi were first put forth in:
  - a. Harijan
  - b. Hind Swaraj
  - c. History of Satyagrah in South Africa
  - d. My Experiments with Truth
- 174. Which of the following trophies is not associated with cricket?
  - a. Charminar Challenge Cup
  - b. Devdhar Trophy
  - c. Beighton Cup
  - d. Rohinton Baria Trophy

- 175. The banks are required to maintain a certain ratio between their cash in the hand and totals assets. This is called:
  - a. Cash Reserve Ratio (CRR)
  - b. Statutory Liquidity Ratio (SLR)
  - c. Central Bank Reserve (CBR)
  - d. Asset Liability Ratio (ALR)
- 176. Ozone layer in the upper atmosphere is due to the reactions of:
  - a. CO<sub>2</sub> & O<sub>2</sub>
  - b. O2 & UV rays
  - c. Infrared rays and UV rays
  - d. CO<sub>2</sub> & Water Vapour
- 177. The speed of light will be minimum while passing through:
  - a. Air
- b. Glass
- c. Water
- d. Vacuum
- 178. Galvanising of sheet iron is done by dipping the sheet metal into molten:
  - a. Copper
- b. Cadmium
- c. Lead
- d. Zinc
- 179. Enzymes are:
  - a. Protein
- b. Fatty acids
- c. Nucleic acids
- d. Sugars
- 180. The molten rocks called magma spewed out in volcanic eruptions during the earth's early life and solidified into hard rocks called:
  - a. Sedimentary rocks
  - b. Igneous rocks

- c. Granite
- d. Basalt
- 181. The President can dismiss a Member of the Council of Ministers:
  - a. With the consent of the speaker
  - b. On his own
  - c. On the recommendation of the Prime Minister
  - d. Only under emergency conditions
- 182. The Members of the Parliamentary Committee:
  - a. Are appointed by the President in consultation with the Prime Minister
  - b. Are taken from various groups and parties in Parliament in proportion to their respective strength
  - c. Are appointed by the President on the recommendation of the Speaker
  - d. Both b and c
- 183. Tansen, a great musician of his time, was in the Court of:
  - a. Jahangir
- b. Shahjahan
- c. Humayun
- d. Akbar
- 184. The words 'Satyameva Jayate' inscribed below the base plate of the emblem of India are taken from:
  - a. Satpath Brahmana
  - b. Rigved
  - c. Mundak Upanishad
  - d. Tripitak

- 185. Who is the Author of the book "Superstar India: From Incredible to Unstoppable"?
  - a. Vikram Seth b. Sobha De
  - c. Arvind Adiga d. Arundhati Roy
- 186. Solar energy is due to:
  - a. Fission reactions
  - b. Fusion reactions
  - c. Chemical reactions
  - d. Combustion reactions
- 187. Oxytocin is secreted by:
  - a. Adrenal gland b. Testes
  - c. Pituitary gland d. Pancreas
- 188. Autotrophs in an ecosystems are called:
  - a. Consumers
  - b. Producers
  - c. Decomposers
  - d. Abiotic constituents
- 189. Joint Parliamentary Sessions are chaired by the:
  - a. Speaker of the Lok Sabha
  - b. President of India
  - c. Vice President of India who is the Chairman of the Rajya Sabha
  - d. Prime Minister of India

- 190. A man walks 3 km. northwards and then turns left and goes 2 km. He again turns left and goes 3 km. He turns right and walks straight. In which direction he is walking now?
  - a. East
- b. West
- c. North
- d. South
- 191. Kamal ranked 16th from the top and 29th from the bottom among those who passed an examination. 6 boys did not participate in the competition and 5 failed in the examination. How many boys were there in that class?
  - a. 44
- b. 40
- c. 50
- d. 55
- 192. What will be the missing number in the series:
  - 0, 7, 26, 65, 124, 215, ?
  - a. 295
- b. 305
- c. 323
- d. 342
- 193. A lady pointing to a man in photograph says, "The father of his brother is the only son of my maternal grandfather." How is the man related to that lady?
  - a. Husband
  - b. Son
  - c. Maternal uncle
  - d. None of these

- 194. What is 'Oolaobi'?
  - a. An outdoor game mainly played by females
  - b. Ritual performed during Yaosang
  - c. Type of religious procession
  - d. Costume used in Manipuri dance
- 195. Gaan-Ngai is the festival of which tribe?
  - a. Zeliangrong
- b. Thadou
- c. Poumai
- d. Tangkhul
- 196. What is the capital of Albania?
  - a. Yerevan
- b. Tirana
- c. Skopje
- d. Dodoma
- 197. The Northern Part of Western Ghats is known as:
  - a. Sahyadris Range
  - b. Neelgiri Range
  - c. Satpura Range
  - d. Vindhyan Range

- 198. Anshi National Park is located in:
  - a. Maharashtra
  - b. Odisha
  - c. Karnataka
  - d. Telangana
- 199. Aphelion takes place on:
  - a. 9<sup>th</sup> May
  - b. 4<sup>th</sup> July
  - c. 15<sup>th</sup> September
  - d. 21<sup>st</sup> November
- 200. The instrument used to detect and record earthquakes is called:
  - a. Seismograph
  - b. Barometer
  - c. Hygrometer
  - d. Altimeter