

A.P.J Abdul Kalam Welfare Society All India Bright Student Award Test 2016

Time:11 am to 1 p.m.

Mathematics

1) Find th	he least number which w	when divided by	9,18,24,15,30 and 42	will leave the reminder 1 in
a) 252	1 b) 5221	c) 2512	d)2251	
2) Find th	e least number when di	vided by 24,32	, and 36 leaves the remain	ainder 19,27,31 respectively?
a) 258	b) 453	c) 283	d)253	
3) Find the	greatest number that w	ill exactly divid	le by 200 and 320	
a)120	b) 60	c)30	d)40	
4) Find the	e least number which is a	a perfect square	e and that contains 540	as a factor?
a) 3600	b) 4900	c) 8100	d) 625	
5) The prod	luct of two nos. is 3624	and HCF is 24	find the LCM?	
a) 48	b) 106	c) 126	d) 151	
6) Find the grespectively?	greatest number that wil	l divides by 72	and 120 and will leave	the remainder 3 and 5
a) 20	b)23	c)53	d)33	
7) Find the r remainder?	number between 200 an	d 300 such that	when they are divided	by 6,8, and 9 leaves no
a) 221,293	b) 224,296	c) 221,122	d) 216,288	
8) The lowe	st decimal number whic	ch is exactly div	visible by .3, .006, .002	4, .00081 is?
a) 0.24	b) 0.36	c) 0.18	d) None o	f these
9) The com	mon highest factor of 1.	284, 22.47, and	17.334 is?	

a) 0.624 b) 0.321 c) 0.171 d) 0.212

10) Five bells first begin to toll together and then at intervals of 3,5,7 and 8 seconds. Find after what intervals they will toll together?

a) 480 sec b) 14 mins c) 814 sec d) never

11) There are two electrical wires where one is 9m 60 cm long wire and other is 5m 12cm long wire, Find maximum length, that can be equally cut from each wire in such a way that the total legth of each wire is exactly divisible by it?

a) 46m b) 64 c) 49 d) 94

12) Among how many boys 175 breads and 105 ice creams can be equally divided?

a) 105 b) 45 c) 49 d) 35

13) Find two nos that lie between 100 and 200 such that their HCF is 48?

a) 144,129 b) 192,144 c) 219,140 d) 124,149

14) The HCF and LCM of two numbers are 21 and 4641 respectively if one of the number lie between 200 and 300 find out that numbers?

a) 257 b) 237 c) 273 and 357 d) 253

15) Find the number of student among whom 1001 pens can be equally distributed?

a) 7 b) 13 c) 91 d) a,b and c

16) In a division the divisor is 12 times the quotient and 5 times the remainder. If the remainder is 48 then the dividend is?

a) 8484 b) 8448 c) 4848 d) 4884

17) Which of the following number is exactly divisible by 13?

a) 10626 b) 11232 c) 106601 d) 211112

18) The smallest number of 5 digits, is divided by the greatest number of two digits, what would be the

Quotient, some reminder will be there?

a) 101 b) 110 c)100 d) cannot be determined

19) The divisor is 25 times the Quotient and 5 times the remainder. If the Quotient is 16 the dividends is?

a) 12 b) 6400 c)6480 d)400

20) How many different divisors are there 224?

a) 11 b)10 c)12 d)9

21)In a division proble then the dividend is?	em divisor is 2/3	of the dividend	and 2 times the remainder. If the remainder is 5			
a)13	b)14	c)15	d)18			
22) How many divisor	rs are there for 4	84 excluding 1 a	nd itself?			
a)7	b)9	c)8	d)6			
23) A certain number divided by 21?	when divided by	441 leaves the r	emainder 37, what is the remainder if it is			
a) 15	b) 37	c) 16	d) 18			
24) How many number	ers are there betw	veen 500 to 800 v	which are divisible by 11?			
a) 72	b) 45	c) 27	d) 37			
25) Find the sum of fi	rst 30 odd count	ing numbers?				
a) 400	b) 800	c) 900	d) 750			
26) How many number	ers between 1 and	d 300 are divisib	le by 3 and 5 together?			
a) 20	b) 19	c) 18	d)			
27) How many four d	igits numbers are	e there?				
a) 9999	b) 900	c) 9000	d) 1000			
28) Two different nun when their sum was d	nbers when divid	led by a same div ne divisor, remai	visor, left remainder 11 and 21 respectively, and nder was 4. What is the divisor?			
a) 36	b) 28	c) 17	d) 18			
29) A number when d by the same divisor, re	ivided by a divis emainder was 9	sor, left the remain find the divisor?	nder 19, when twice of the number was divided			
a) 19	b) 39	c) 29	d) 27			
30) A number when su remainder when the sa	uccessively dividame number is d	led by 2 and 3 le ivided by 6?	aves remainder 1 and 2 respectively. What is the			
a) 4	b) 5	c) 7	d) 3			
31) How many digits	are required to w	rite numbers fro	m 1 to 300?			
a) 792	b) 492	c) 592	d) 692			
32) How many times does the sum of 450 and 150 contain their difference?						

a) 3	b) 2 c) 4 d) 1 5
a) 5	0)2) - u	11.5

33) The concurrent point of the altitudes of a triangle is?

a)Centroid b) Incentre c) Orthocentre d) Circumcentre

34) If the median of a triangle divides into triangle divides it into two triangles, then the ratio of their areas.....?

a) 1:1 b)2:1 c)1:2 d)3:1

35) The figure formed by joining the mid points of a rhombus in series is?

a) Rectangle b) Square c) Rhombus d) Trapezium

36) The point equidistant from all the sides of a triangle is?

a) Incentre b) Circumcentre c) Orthocentre d) Centroid

37) A triangle and a parallelogram each have the same base of 8 cm and an area of 40 sq.cm. Their height are.....?

a) 8cm,4cm b) 10cm,5cm c)18cm,14cm d) 10cm,4cm

38) The area of a rhombus is 20 sq.cm. One of its diagonal is 8 cm. The other diagonal is....?

a) 5cm b) 10 cm c) 12 cm d) 2.5 cm

39) The corresponding sides of two similar triangles are in the ratio a: b. then the ratio of their areas is?

a) $b^{2}:a^{2}$ b) $a^{2}:b^{2}$ c)b:a d) a:b

40) If R= 5cm, r = 3cm and d= 6cm, numbers of common tangents are.....?

a) 1 b) 2 c) 4 d) 3

41) The length of the tangents drawn to the circle of radius 5 cm from a point 13 cm from the centre=?

a) 15cm b) 12 cm c) 14cm d) 3cm

42) Two circles of radii 18 cm and 8 cm touch externally. The length of their direct common tangents is.....?

a) 24cm b)25cm c) 13 cm d) 14cm

43) Two circles of radii 8 cm and 2 cm have direct common tangents of length 10 cm. The distance between their centres?

a) 8cm b) 10cm c) 21 cm d) 200cm

44) The number of tangents that can be drawn to a circle from an external point is? a) 0 b) 1 c) 2 d) 4 45) The number of tangents that can be drawn to a circle from a point on it is? a) 0 b) 1 c) 4 d) 5 46) The number of circles that can be drawn through three non- collinear points is? a) 0 c) 4 b) 1 d) 5 47) The interior angle of regular hexagon is.....? b) 120[°] c) 45° d) 135⁰ a) 60° 48) The area of a parallelogram is 60sq.cm. Its base is 10 cm, then the corresponding height is? a) 6cm b) 3 cm c) 9 cm d) 10 cm 49) Angle in a semi arc is? a) 45⁰ b) 90° c) 180° d) 360⁰ 50) Ina right angled triangle the midpoint of hypotenuse is? b) Circumcentre c) Orthocentre d) Centroid a) Incentre

Science

- 51) A bud on a potato is called
 - a) Eye b) bulb c) node d) None
- 52) The air tubes are called
 - a) Globules b) Trachea c) Air sacs d) Air holes
- 53) The ______ has store food that is used by the embryo to grow out the time of germination
 - a) Monocotyledons b) Dicotyledons c) Cotyledons d) None
- 54) If all plants were to grow at the same place there would be
 - a) Over population c) causes rain
 - b) Overcrowding d) all
- 55) Most insects have ______ to crawl
 - a) 4 legs b) 12 legs c) 6 legs d) 8 legs
- 56) Some birds like ostrich, rhea, and emu are called
 - a) Strong peak b) the fast running bird c) flight less d) migrating birds
- 57) Animals like bears and chimpanzees can walk only on their
 - a) Hind limbs b) fore limbs c) mind limbs d) A & B
- 58) The bones are hold together by strong by strong and flexible tissue called
 - a) Ligaments b) Tibla c) Fibula d) None
- 59) The upper seven pairs of ribs are attached to the breath bone and are called
 - a) Floating ribs b) True ribs c) False ribs d) None
- 60) The shoulder girdle comprises a pair of collar bones called the ______ and upper of shoulder blades are the ______
 - a) Tibia and fibula b) radius and ulna c) Clavicle and scapula D) None
- 61) The lower leg is the part from the knee to the ankle. It has two bones the _____ & _____
 - a) Radius and ulna b) Tibia and fibula c) Clavicle and scapula d) None
- 62) The joints that are movable contain a fluid that enables smooth movements. There are four types of _____
 - a) Hinge joints b) movable joints c) Immovable joints d) Ligaments
- 63) It fits into the _____ or the pelvic girdle with the help of a ball and socket joints
 - a) Hinge joints b) movable joints c) Immovable joints d) None
- 64) The muscles system consist of more than _____ muscles

- a) 620 b) 650 c) 206 d) 220
- 65) _____ pair of thin flat and bow shaped bones form rib cage
 - a) 10 b)12 c)14 d)18
- 66) The hand is formed by _____ bones
 - a) 25 b) 27 c) 30 d) 32
- 67) _____ is the largest part of the brain making up almost 90% of it
 - a) Cerebellum b) Cerebrum c) Medulla d) Sensory nerve
- 68) Part of the eye where images are formed _____
 - a) Iris b) Pupil c) Retina d) Cornea
- 69) The outer part of the ear that is visible is called ______
 - a) Ear drum b) inner ear c) Pinna d) None
- 70) _____ help us to identify the taste of food items
 - a) Tongue b) Taste bud c) Nostrils d) A&B
- 71) The average weight of the brain
 - a) 1kg b)1.5kg c) 1.36kg d) None
- 72) The longest nerve in the human body is the _____
 - a) Sensory nerves b) Motor nerves c) Sciatic nerves d) None
- 73) The longest bone in the human body is
 - a) Spinal cord b) Vertebral column c) Thy bone d) A & B
- 74) The eye has transparent circular covering called _____
 - a) Cornea b) Pupil c) Eye lens d) Retina
- 75) The reflex actions are controlled by the _____
 - a) Brain b) Legs c) Eye d) Spinal cord
- 76) The central nervous system consist of _____ & _____
 - a) Hand and leg b) Brain and spinal cord d) Spinal cord and leg d) Hand and brain
- 77) Part of the brain that helps in thinking and remembering
 - a) Cerebellum b) Medulla c) Cerebrum d) ALL
- 78) Bundles of long fibres ____
 - a) Nurvus b) Motor nerve c) Brain d) Nerves
- 79) Which nerves are suggested as both motors and sensory in function
 - a) Fixed nerves b) Mixed nerves c) Combined nerves d) Both B&c

- 80) Number of taste buds present in our mouth
 - a) 2 b) 2+2 c) 4 d) Both B& C
- 81) Automatic and sudden actions that are uncontrolled is
 - a) Voluntary action b) Involuntary c) Reflex actions d) Both D & C
- 82) Which animal have powerful hearing sense
 - a) Human beings b) Snake c) Dogs d) Cat
- 83) ______ nerves connect the sense organs to the brain and the spinal cord
 - a) Motor nerves b) Sensory nerves c) Mixed nerves d) None
- 84) Name the parts of our environment
 - a) Land, air & water b) Human being s and animals c) Pollution d) ALL
- 85) Without ______ their would be no life
 - a) Water b) Air c) oxygen d) Nitrogen
- 86) _____ is very important for life on earth
 - a) Air b) Ozone layer c) Water d) A&C
- 87) Liquid pollutants from factories are known as _____
 - a) Popullation b) Pollution c) Effluents d) None
- 88) Biodegradable wastes are used to producea)Natural Gasb) Biogasc)Gasd) All of these
- 89). Diseases like typhoid,Cholera,Jaundice and diarrhea causes due to_____
 - a) Air b) Water c) Pollution d) a& b
- 90). Water is used to ______ the fields
 - a) irritate b) irrigate c) Plough d) None of these
- 91). Living things that clean the air
 - a) Human beings b) Plants and trees c) Animals d) All of these
- 92). Waste Vegetables is which type of wastes.
 - a) Non-biodegradable b) Biodegradable c) Vegetable Waste d) None of these
- 93). Which Harmful substances that cause pollution find out

a)Population b) Pollution c) Pollutants d)None of these

94). The ______ should be kept clean.

a) House b) Land c) Environment d) All of these

95). Fuel like ______ should be used for running vehicles.

a) OMG b) CNG c) LPG d) All of these

- 96). _____ and _____ should not be burned since they commit poisonous fuems.
 - a) Plastic and Rubber b) Steel and Plastic c) Wood and Rubber d) a& b
- 97). Even the water flowing out of the fields is polluted ______. Which make it and unfit for use.
 - a) Insecticides b) Pesticides c) Fertilizers d) All of these
- 98). Children have above _____ bones.
 - a) 206 b) 220 c) 380 d) 350
- 99). What kind of things emit more Pollution.
 - a) Cigarette b) Vehicles c) Trains d) None of these
- 100. The coldest layer of atmosphere
 - a) Exosphere b) Mesosphere c) Ionosphere d) Atmosphere