ST. XAVIER'S OLD QUESTION 2075

1) The phenomenon of giving a special favour to one's kith and kin:
a) Pantheism   b) Nepotism
c) Favourism   d) Solecism

2) The word dissimilar to "savage" is :
a) hilarious   b) grotesque
c) cheap   d) civilized

3) He is not sitting……...his desk but …… his armchair.
a) with, on   b) on, on   c) at, in   d) at, on

4) The passive form of "One should keep one's promise" is:
a) Let the promises be kept   b) Let one's promises kept by one.
c) Promise should be kept.   d) Let one's promise be kept.

5) Which of the following sentence is correct?
a) The woman, who is wearing red sari, is my teacher.
b) The woman, who is wearing red sari is my teacher.
c) The woman is wearing red saris is my teacher.
d) None of the above.

6) The prime minister as well as his entire cabinet …… there.
a) were   b) was
c) are   d) was/were

7) The sentence having same meaning as "This old man is too weak to walk."
a) This old man is so weak that he cannot walk.
b) This old man is weak enough to walk.
c) This old man is enough weak to walk.
d) This old man is such weak that he cannot walk

8) …… UNDP member …… day break was elected …… director of the board.
a) a, in, the   b) an, at, a   c) a, on, ×   d) a, at, ×

9) Which of the following sentence is correct?
a) Either the chief minister or his cabinet colleages have submitted his resignation.
b) Neither the officier nor the clerks could get their salary.
c) Neither the officier nor the clerks could get his salary.
d) None of them.

10) You must dispense …… his service.
a) of   b) with   c) at   d) in

11) He is declared …… in the first division.
a) to have passed   b) to pass
c) to have been passed   d) to passed

12) A …… of monkeys.
a) troop   b) school
c) swarm   d) shoal

13) "The curtain of night fell upon us" is a:
a) metaphor   b) simile
c) paradox   d) proverb

14) She dares to love, …… ?
a) dare she   b) daren't she
c) don't she   d) doesn't she

15) Obama prefers …… German to Spanish.
a) the   b) nothing
c) a   d) an

16) Although they are not rich, they always wear …… clothes.
a) respectful   b) respective
c) respectable   d) respected

17) I said to my brother, "Let us go to some hill station for a change.". The indirect form is
a) I suggested to my brother that we should go to some hill station for a change.
b) I asked my brother if he would go to some hill station for a change.
c) I asked my brother to go to some hill station for a change.
d) I permitted by brother to go to some hill station for a change.

18) Rearrange to make suitable sentencce.

"At top voice, the man his the of demanded shouting admission."

a) At the top of his voice, the man demanded admission.

b) Shouting at the top of his voice, the man demanded the admission.

c) The man demanded admission at the top of his voice, shouting.

d) None of the above is suitable.

19) "To beat the air" means

a) to act foolishly　　　　　　　　　b) to move vigrorously

c) to move sluggishly　　　　　　　　d) to make efforts that are useless or vain

20) "This is the beginning og the end" is a :

a) Paradox　　　　　　　　　　　　b) Simile

c) Idiom　　　　　　　　　　　　　d) Metaphor

21) If $3\cot x - \tan x = 2$ then $x = ?$

a) 30°　　　　　　　　　　　　b) 45°

c) 60°　　　　　　　　　　　　d) 90°

22) Which of the following is correct?

a) $\log(10)-\log(5) = \log(2)$　　　　b) $\log(10)-\log(5) = \log(5)$

c) $\log(10)-\log(5) = \log(15)$　　　d) $\log(10)-\log(5) = \log(50)$

23) The angles of elevation of the top of a tower form two points 121m and 144m away from it on the same side of a straight line to be complementary. Find the hieght of tower.

a) 139m　　　　　　　　　　　　b) 131m

c) 132m　　　　　　　　　　　　d) 135m

24) The answer if you simplify: $\left(1-\dfrac{2}{m}\right)\left(1-\dfrac{1}{m-2}\right)\left(1+\dfrac{2}{m-3}\right)$

a) $\left(\dfrac{m}{m-1}\right)$　　　　　　　b) $\left(\dfrac{m-1}{m}\right)$

c) 0

d) $\left(\dfrac{m-2}{m-3}\right)$

25) The population of a village is 12000. If the population is increased by 1000 due to birth and 2000 due to immigration, what will be the population of the village?

a) 15000　　　　　　　　　　　b) 10000

c) 19000　　　　　　　　　　　d) 14000

26) A girl saves Rs. 32 during one month, Rs. 36 in the next month, Rs. 40 in the third month. If she continues her savings in this sequence, in how many months will she save Rs. 2000?

a) 25　　　　　　　　　　　　b) 20

c) 30　　　　　　　　　　　　d) 15

27) If $\vec{a}$ and $\vec{b}$ are unit vectors such that $(-2\vec{a} + 4\vec{b})$ and $(10\vec{a} + 8\vec{b})$ are perpendicular to each other. Find the angle between $\vec{a}$ and $\vec{b}$.

a) 180°　　　　　　　　　　b) 90°

c) 120°　　　　　　　　　　d) 270°

28) The king, queen and jack are removed from a deck of 52 playing cards and then well suffled. One Card is selected from the remaining card. Find the probability of getting numbered 10 or ace.

a) $\dfrac{2}{5}$　　　　　　　　　　b) $\dfrac{3}{5}$

c) $\dfrac{9}{5}$　　　　　　　　　　d) $\dfrac{1}{5}$

29) The length of the tangent is 15 cm drawn form a point whose distance from the centre of a circle is 17cm. The radius of circle is:

a) 3cm　　　　　　　　　　　b) 10cm

c) 15cm　　　　　　　　　　d) 5cm

30) If $\sin\theta + \cos\theta = \sqrt{2}$ then for 'θ' which of the following is correct?

a) 45°　　　　　　　　　　b) 60°

c) 30°　　　　　　　　　　d) 120°

31) 250 bananas were divided equally among a certain number of students. If there were 25 more students, each would have revieveid half banana less. Find the total number of students.

a) 120

b) 100

c) 150

d) 95

32) The third and sixth terms of a geometric series are in the ratio of 1:8. If the eighth term of the series is 384 then find the fifth term.
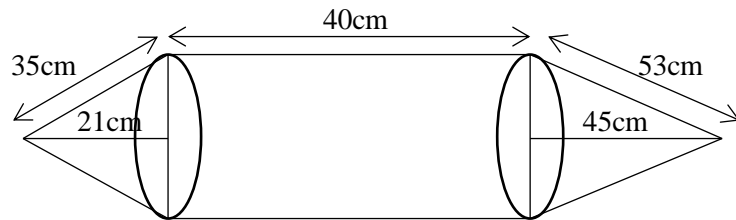
a) 48

b) 42

c) 50

d) 43

33) $ab(x^2 + 1) + x(a^2 + b^2), ab(x^2 - 1) + x(a^2 - b^2)$. The HCF is

a) $(ax + b)$

b) $(bx + a)$

c) $(b + bx)$

d) $a + ax$

34) A combined solid made up of a cylinder of radius of 3cm and length 'h' cm and a hemisphere with the same radius has volume of 792cm², find 'h'.

a) 24cm

b) 25cm

c) 26cm

d) 27cm

35) Find TSA of figure:

a) 14478cm²

b) 18744 cm²

c) 14484 cm²

d) 14784 cm²

36) Among 110 students, 70 students drink tea, 30 students drink coffee and 15 students drink none of them. How many take only one drink?

a) 90

b) 80

c) 70

d) 60

37) Determine standard deviation and the coefficient of variations.

Profits(in Rs.)	0 − 10	10 − 20	20 − 30	30 - 40	40 − 50
No. of shops	8	13	16	8	5

a) 10.76, 76.48%

b) 11.88, 52.1%

c) 9.89, 53.4%

d) 9.67, 55.3%

38) Two dices are rolled once. What is the probability of getting total of 8.

a) $\left(\dfrac{5}{36}\right)$

b) $\left(\dfrac{6}{36}\right)$

c) $\left(\dfrac{4}{36}\right)$

d) $\left(\dfrac{7}{36}\right)$

39) Solve for a, b, c.

$$3a - b + c = 2, \qquad -15a + 6b - 5c = 5, \qquad 5a - 2b + 2c = 1$$

a) 2, 1, −3

b) 3, 15, 8

c) − 4, 6, 0

d) 9, 2, 3

40) The sum of annual compound interest and semi-annual compound interest on a sum of money for 2 years at the rate 20% per annum is Rs 18082. Find the differences.

a) Rs.422

b) Rs.442

c) Rs. 462

d) Rs. 482

41) First organic compound prepared in labaoratory:

a) glucose

b) methane

c) alchohol

d) urea

42) Pyrex glass is

a) lead crystal

b) Borosilicate

c) general glass

d) both (a) & (b)

43) Which of the following is calcium super phosphate?

a) $Ca(H_2PO_4)_2 2CaSO_4$

b) $Ca_2(H_2PO_4)_2$

c) $Ca(H_2PO_4)4CaSO_4$

d) $3Ca(H_2PO_4)_2$

44) Which of the following are of lead?

a) Native

b) Galena

c) Horn lead

d) Cinnabar

45) Which one of the following configuration represents Argon?

a) ns^2

b) ns^2np^6

c) ns^2np^5

d) ns^2np^4

46) Molecular formula of green vitrol is:

a) $FeSO_4.7H_2O$

b) $FeSO_4(NH_4)SO_4.7H_2O$

c) $Fe_2(SO_4).6H_2O$

d) $FeSO_4.5H_2O$

47) Which of the following is metalloid?

a) Germanium

b) Arsenic

c) Antimony

d) All

48) Which of the following oxide reacts with both acid and base?

a) FeO

b) Ca_2O

c) ZnO

d) Na_2O

49) Laboratory preparation of ammonia is following by the reaction.

a) $CaCl_2+NH_4Cl$

b) $Ca(OH)_2+2NH_6Cl$

c) $Ca(OH)_2+2NH_4Cl$

d) $CaCl_2+2NH_4OH$

50) Name of gas that is used to obtain blue print of map

a) Ammonia

b) Carbogen

c) Carbondioxide

d) Carbonmonoxide

51) Which of the following is water gas?

a) O_2+CO_2

b) $H_2O+O_2+CO_2$

c) $CO+H_2O$

d) H_2+CO

52) Boiling point of copper is

a) $1100°C$

b) $1750°C$

c) $2350°C$

d) $2530°C$

53) Molecular formula of calverite is:

a) AuTe

b) $AuTe_2$

c) $Au(Cv)_3$

d) $AuTe_3$

54) Specific gravity of aluminium is:

a) 2.7

b) 19.3

c) 7.5

d) 1.95

55) Which of the following is violet?

a) Cobalt oxide

b) Chromium (II) oxide

c) Manganese oxide

d) Chromium (III) oxide

56) Which of the following reaction gives water glass?

a) $Si+Al_2O_2+H_2O$

b) $SiO_2+Na_2CO_3$

c) $SiO+NaCO_3+H_2O$

d) $SiO_2+Na_2CO_3+O_2+H_2O$

57) Who discovered electron?

a) JJ Thomson

b) Millikan

c) Avogardo

d) Max Planck

58) Molecular formula of bleaching powder:

a) $CaOCl_2$

b) $CaCl_2H_2O$

c) $Ca(Cl)O$

d) $CaCl_2+H_2O+O_2$

59) Example of saturated Hydrocarbon is:

a) C_2H_4

b) C_2H_6

c) C_2H_2

d) None of the above

60) IUPAC name of Glycerol is

a) TriPropane-1,2,3-ol

b) Propane-3-ol

c) Propane-1,2,3-triol

d) Propane triol

61) Eri-silkworm feed on ……

a) Castor leaves

b) Mulberry leaves

c) Ecalyptus

d) both (a) and (b)

62) The name of honey bee that formed form the unferilized egg is

a) Queen

b) Worker

c) Drone

d) King

63) An example of exocrine gland is

a) Sebaccous gland

b) Adreenal gland

c) Pituitary gland

d) both (a) and (c)

64) There are …… pair of carnial nerves in human beings.

a) 10

b) 12

c) 11

d) 14

65) Insufficient secreation of thyroxin may lead to:

a) Exophthalmic goitre

b) Peretinism

c) Endophthalmic goitre

d) Myxoedema

66) Number of lumbar is spinal chord is ……

a) 7

b) 12

c) 5

d) 4 or 3

67) Due to decrease in number of platelets …… is caused.

a) Thromnocytosis

b) Thrombopenia

c) Polycythemia

d) Leukopenia

68) The chemical substance that is found in cherries to contain high uric acid is ......
a) Anthyocyanins
b) Antepolynins
c) Acrathicyanins
d) Para thyocyanins

69) Percentage composition of plasma in blood is
a) 45%
b) 35%
c) 55%
d) 65%

70) ...... chromosome pairs are in solanum
a) 24
b) 8
c) 6
d) 12

71) Reproduction in ...... takes place by sporulation.
a) Mucor
b) Yeast
c) Chlamydomonas
d) Hydra

72) Pistil is present in
a) Androecium
b) Gynaecium
c) Corolla
d) Spore

73) Ovary at last changes to ......
a) Seed
b) Leaves
c) Zygote
d) Spore

74) ...... can reproduce by tip layering
a) Rasbberry
b) Pears
c) Litchi
d) Orchids

75) Auxin helps in ......
a) Shoot growth
b) root growth
c) Transpiration
d) Green coloration of steam and leaves

76) ...... is father of Biology.
a) Theophrastos
b) Aristotle
c) Gregor Mendel
d) None of the above.

77) Palynology is study of ......
a) Flowering and fruiting
b) Plant evolution
c) Fossil plants
d) Pllens and spores

78) Average life of WBC is:
a) 2 weeks
b) 5-7 days
c) 1 - 2 month
d) 1 - 2 days

79) Which of the following works as relay stations
a) Cerebrum
b) Cerebellum
c) Medulla Oblongata
d) Spinal cord

80) RBCs is destroyed in
a) Spleen
b) Bone marrow
c) Liver
d) Pancreas

81) The most devieated colour of light after passing through a prism is
a) Violet
b) Red
c) Green
d) Yellow

82) Universal gravitational constant (G) is not related to:
a) $Kg^{-1}m^3s^{-2}$
b) $Kg^{-1}m^{-3}s^{-2}$
c) Nm^2kg^{-2}
d) $M^{-1}L^3T^{-2}$

83) Value of 'g' at polar region is
a) 9.83 m/s^2
b) 9.78 m/s^2
c) 9.38 m/s^2
d) 9.87 m/s^2

84) How much energy is remiited by son in per second
a) 2×10^{24} J/s
b) 14×10^{24} J/s
c) 4×10^{26} J/s
d) 4×10^{28} J/s

85) Specific heat capacity of iron is
a) $910 \text{ J/kg}^o\text{C}$
b) $380 \text{ J/kg}^o\text{C}$
c) $993 \text{ J/kg}^o\text{C}$
d) $470 \text{ J/kg}^o\text{C}$

86) When cold water of mass 100 gm is mixed with hot water of mass 50 gm at 100ºC, the resultant temperature is 50ºC, what is the temperature of the cold water?
a) 25ºC
b) 16ºC
c) 30ºC
d) 17ºC

87) A convex lens has a focal length of 2cm. An object kept at a distance of 6cm from the lens forms an imaage 3cm from it. What is the power of the lens?
a) 20D
b) 10D
c) 50D
d) -30D

88) Which of the following is used as heating element?
a) Tungsten wire
b) Nichrome wire
c) Filament
d) both a and b

89) 1 kilowatt hour = ? Joules
a) 1.6×10^6 J
b) 2.2×10^8 J
c) 1.6×10^8 J
d) 3.6×10^6 J

90) How long a 250W lamp to use 1kWh energy when connected to 230 volt mains?
a) 3hrs
b) 4hrs
c) 2hrs
d) 1hrs

91) One second is defined as …… period of krypton clock
a) 1650763.73
b) 652189.6
c) 1650736.75
d) 9192631770

92) Focal length of plane mirror is
a) zero
b) infinite
c) negative
d) positive

93) If the speed of sound in air is 332m/s and frequency is 10Hz, then what is its wave length?
a) 42.2m
b) 22.2 m
c) 3320m
d) 33.2 m

94) Refractive index of flass is 1.5 while that of water is:
a) 1.33
b) 1.11
c) 1.31
d) 1.44

95) The value of 1 amu in kg is:
a) 1.49×10^{-24} kg
b) 1.65×10^{-22} kg
c) 1.2×10^{-11} kg
d) 1.66×10^{-27} kg

96) During the free fall, the weight is
a) increased
b) decreased
c) remains the same
d) zero

97) Which of the following is the rest mass of electron?
a) 1.6×10^{-19} kg
b) 9.1×10^{-31} kg
c) 1.6×10^{-27} kg
d) 6.6×10^{-31} kg

98) Transformer works on the priciple of
a) Faraday's law of electromagnetic induction
b) Self Induction
c) Mutual Induction
d) Conservation of energy

99) A stone is allowed to fall from the top of tower 100 m height and at the same time another stone is projected vertical upwards from the ground with velocity 25ms^{-1}. Calculate when they meet each other (g = 10m/s^2)
a) After 6s
b) After 8s
c) After 3s
d) After 4s

100)   …… is scalar quantity.
a) Power
b) Dispalcement
c) Momentum
d) Torque

Answer Keys:

1.b	2.d	3.c	4.c	5.a	6.b	7.a	8.d	9.b	10.b
11.a	12.a	13.a	14.d	15.b	16.c	17.a	18.b	19.d	20.a
21.b	22.a	23.c	24.b	25.a	26.a	27.c	28.d	29.c	20.a
31.b	32.a	33.b	34.c	35.d	36.a	37.b	38.a	39.b	40.a
41.d	42.b	43.a	44.b	45.b	46.a	47.d	48.c	49.c	50.a
51.d	52.c	53.b	54.a	55.c	56.b	57.a	58.a	59.b	60.c
61.a	62.c	63.a	64.c	65.d	66.c	67.b	68.a	69.c	70.b
71.a	72.b	73.d	74.a	75.b	76.c	77.d	78.a	79.c	80.a
81.a	82.b	83.a	84.c	85.d	86.a	87.c	88.b	89.d	90.b
91.a	92.b	93.d	94.a	95.d	96.d	97.b	98.c	99.d	100.a