

# KNEUS SCHOLASTIC APTITUDE TEST 

( KSAT - II)

Syllabus

## and

## Sample Questions

With a Model Question Paper

CLASS - X

## KNEUS SCHOLASTIC APTITUDE TEST

Students kindly go through the syllabus given and prepare accordingly.
The questions given in this booklet are sample questions. These questions need not appear in the test.
The answer key is given at the end
Both Part A and B are to be attempted compulsorily
SYLLABUS OUTLINE
PART - A Objective Type (General Studies)

- English
- Mathematics
- $\quad$ Science - Physics, Chemistry, Biology
- Social Studies
- General Knowledge

PART - B (Subjective Type)

- Essay Writing

PART A
ENGLISH

## SYLLABUS

1. Comprehension
2. Active Passive Voice
3. Give one word for the statements
4. Tenses
5. Conjunctions
6. Prepositions
7. Phrasal Verbs
8. Modals

Read the passage given below carefully. Read the questions given below and write the option you consider the most appropriate
The idea of euthanasia, of hastening the death of someone from motives of compassion, covers two main situations. The first is where someone is close to death and can be kept alive briefly, with intensive medical care. The official reason for the use of every possible technique on pa tients, for whom there seems no hope, is that we never know that there is no hope of at least a brief recovery.
The second situation, in which it is proposed to end the life of someone who is not expected to die at once from natural causes, is more morally doubtful. In so far as the suggestion may be based on the notion of the 'quality of life' experienced by the patient, this is an inadequate approach to human beings. At one extreme we may be dealing with a birth that cannot be called 'human' at all: such a being likely to live at the most for only a few hours. Many feel that during
this time it ought to be given ordinary nursing care. Bringing to an end of the life of say, a spastic child, by the deliberate refusal of the fullest medical care seems morally indefensible.

1. Euthanasia means
a) a place in Asia
b) bringing about gentle and easy death
c) enthusiasm
d) the youth in Asia
2. One reason for trying all possible measures to save a person is
a) death is horrifying
b) there is possibility of recovery
c) doctors need to be compassionate
d) science may invent more sophisticated machines later
3. The people who argue for euthanasia advocate it saying
a) the patient is not living a qualitative life
b) we must not spend quality resources on a sick person
c) we should not bother about the ailing
d) it can be defended morally
4. The words '.................dealing with a birth that cannot be called 'human' at all' implies
a) humans have no control over birth and death
b) the person may survive only for a very brief period
c) doctors are incapable of saving people
d) the patient may want to die
5. The writer finds it unpardonable to
a) end the life of someone who is not expected to die at once from natural causes.
b) end the life of a spastic child
c) end the life of an infant who is likely to live only for a few hours
d) end the life of a human being

Read the passage given below carefully. Read the questions given below and write the option you consider the most appropriate

## Cricket is a game

From which players get fame.
Some people watching are tense,
When they see the opposition hit the ball to the fence.
Some people buy tickets,
To watch the bowlers take wickets.

There is a batsman who works hard to concentrate, While the bowler tries hard to frustrate him.
There is an umpire, who always makes the right decision,
To help the players who are out to accomplish a mission.
But these days there is a lot of chaos in cricket,
Because the players play badly deliberately on the wicket.
I hope cricket is played sincerely,
So that everyone can enjoy it happily.
6. The word 'concentrate' in the passage can be replaced by which of the following ?
a) assemble
b) gather
c) focus
d) attentive
7. By saying "While the bowler tries hard to frustrate him", the poet means that
a) the bowler is a mean person.
b) the bowler is a frustrated person.
c) the bowler tries to bowl well making it difficult to score runs.
d) the batsman does not like the bowler.
8. The poet feels that there is chaos in cricket because
a) the wickets are of a poor quality.
b) the players intentionally play a bad game.
c) the players are troubled by the spectators.
d) the players run into the pitch and break the wickets.
9. Which word given below does not have a rhyming word in the poem?
a) tense
b) wickets
c) mission
d) fielders
10. The poem ends with
a) a request to restore fame to the game by playing with loyalty.
b) anger at the stupidity of the game.
c) happiness at the change in the people towards cricket.
d) a feeling of indifference to the game.

Choose the correct word for the following statements (one word substitutes)
11. One who does not make mistakes
a) Gullible
b) Bibliophile
c) Anarchist
d) Infallible
12. One who loves mankind
a) Optimist
b) Philanthropist
c) Stoic
d) Egoist
13. A government by officials
a) Democracy
b) Aristocracy
c) Bureaucracy
d) Monarchy
14. A life history written by oneself.
a) Autobiography
b) Biography
c) Neophyte
d) Immigrant
15. One who works for free
a) Pauper
b) Mercenary
c) Volunteer
d) Pessimist

## Choose the correct word for the following statements

16. Medicine to prevent fever
a) Antifungal
b) Antipyretic
c) Antibiotic
d) Antimicrobial
17. One who eats too much
a) Mutton
b) Bomoo
c) Glutton
d) Alien
18. Not able to pay one's debt
a) Solvent
b) Insolvent
c) Creditor
d) Insane
19. Deep sorrow or regret
a) Crank
b) Grief
c) Dotage
d) Abdicate
20. That which cannot be avoided
a) Agnostic
b) Cynic
c) Inevitable
d) Misanthrope

Fill in the blanks with the proper tense or form of the verb given in brackets :-
21. Raj and his family -------------------- here since May 1980 .[ live ]
a) is living
b) have been living
c) are living
d) has been living
22. Our examination ---------------------- on 4th March .[ begin ]
a) has begun
b) is beginning
c) begins
d) began
23. After he ---------------- the roof ------------- [ leave , collapse ]
a) left, collapsed
b) has left, collapsed
c) left, had collapsed
d) had left, collapsed
24. They $\qquad$ when the thief entered the bedroom . [sleep ]
a) sleep
b) were sleeping
c) slept
d) are sleeping
25.
a) finished
b) had finished
c) finish
d) have finished

Fill in the blanks with the proper tense or form of the verb given in brackets :-
26. Look there, the man $\qquad$ the child . [beat ]
a) is beating
b) beats
c) beat
d) has beaten
27. When I visited him in Mumbai, he $\qquad$ there for five years . [teach ]
a) teaches
b) is teaching
c) had been teaching
d) has been teaching
28. He ------------- to my house to tell me what ---------------- . [ come, happen ]
a) came, happened
b) comes, happens
c) came, had happened
d) had come, happened
29. Have you my instructions ?[ carry out ]
a) carry out
b) carried out
c) carrying out
d) had carried out
30. Delhi $\qquad$ on the Yamuna .[ stand]
a) stood
b) is standing
c) stands
d) has stood

## Choose the correct forms of passive / active to complete the sentences.

31. The painting that ---- by Picasso ---- worth one million dollars.
a) was made / was
b) would have been made / will be considered
c) made / considered
d) was making / being considered
32. All the songs on this new album ---- by Lisa herself, and the album ---- live during her recent successful concert tour.
a) written / recorded
b) wrote / recorded
c) were written / was recorded
d) was written / was recorded
33. It ---- that the victim ---- with poison.
a) was thought / had been killed
b) thought / had been killed
c) is thought / has killed
d) is thought / must killed
34. It ---- that too little money ---- by the government on roads.
a) is said / spends
b) has said / is spent
c) was said / spent
d) is being said / has been spent
35. Mary ---- the mechanic ---- her car yesterday.
a) had / to repair
b) got / to repair
c) will have / repair
d) got / repair
[5]

## Choose the correct forms of passive / active to complete the sentences.

36. My bike which ---- was brought back only when a 20 -pound-reward ---- .
a) was stolen / was offered
b) has been stolen / has been offered
c) stole / offered
d) was stolen / has offered
37. The criminal ---- for further questioning but as he had a heart attack during the first questioning he ---- to hospital for a week.
a) has held / was sent
b) has been held / has been sent
c) was to have been held / was sent
d) is to hold / be sent
38. Look at Susan's fair hair. She has had it ---- .
a) dyed
b) to be dyed
c) to dye
d) being dyed
39. Epilepsy ---- to be caused by poor air, which ---- to be carried by the veins to the brain.
a) is believed / thought
b) believes / is thought
c) was believed / was thought
d) is believing / is thinking
40. The Wii, which is a video game console ---- by Nintendo ---- on November 19, 2006.
a) made / was released
b) is made / was released
c) was made / will release
d) makes / released

## Fill in the blanks with correct conjunctions

41. ---- oil was discovered in Alberta as early as 1914, the oil and gas industry really took off in the late 1960s when large deposits were discovered.
a) By contrast
b) As a result
c) Therefore
d) In spite of the fact
42. ---- museums, libraries and archives are cultural institutions, they should ensure that their collections are built up in accordance with universally recognized moral principles.
a) In view of
b) In order to
c) As if
d) Considering that
43. Smallpox was eventually declared eradicated in 1980, ---- a vigorous campaign of immunization by the World Health Organization.
a) nevertheless
b) thanks to
c) now that
d) in spite of
44. During the war of 1812, the Royal Navy had more ships than the U.S. Navy; ----, they were able to maintain a tight blockade on American waters and transport British Army troops to American shores.
a) nonetheless
b) otherwise
c) by contrast
d) therefore
45. Telecare is a telephone support service in the US which provides contact with people who are alone and isolated ---- they are aged or have disabilities.
a) in contrast to
b) because
c) on the other hand
d) on grounds of

## Fill in the blanks with correct conjunctions

46. Though Cholera is spread ---- directly or through flies and waste, water is the chief medium for spread of this disease and hence it is termed as water-borne disease.
a) either
b) neither
c) both
d) not only
47. ---- offering the most essential services to mankind, the coastal wetlands and marine life of the Asian countries generate income for millions of people.
a) However
b) Considering that
c) Apart from
d) No matter
48. Businesses are failing ---- a lack of trained workers and people to buy products.
a) that's why
b) in addition
c) because of
d) in spite of
49. The coconut palm is ---- highly valued by the Pacific Islanders as both a source of food and medicine that it is called The Tree of Life.
50. such
51. much
52. too
53. so
54. The research in biotechnology will provide ---- dramatic medical breakthroughs but also millions of dollars in new investment, and new opportunities for many people.
a) both
b) either
c) whether
d) not only

## Choose the appropriate preposition to complete the sentences

51. They live ---- Atlantic Avenue.
a) at
b) in
c) on
d) to
52. Tokyo is the most crowded city ---- the world.
a) on
b) at
c) in
d) over
53. Don't walk ---- the street! Walk here ---- the sidewalk.
a) in / on
b) on / at
c) at / on
d) in / to
54. I'm going to meet my friends, ---- Times Square tonight.
a) on
b) at
c) in
d) over
55. He tried to open the tin ---- a knife.
a) with
b) by
c) to
d) of

## Choose the appropriate preposition to complete the sentences

56. Mike is sitting ---- the desk ---- front of the door.
a) at / in
b) in / on
c) on / on
d) at / at
57. Listen! I think there is someone ---- the front door.
a) on
b) at
c) in
d) with
58. There's paper ---- the floor. Please put it ---- the wastebasket.
a) at / into
b) on / at
c) on / in
d) over / at
59. See you ---- Monday morning.
a) under
b) at
c) in
d) on
60. We are giving him a surprise party ---- his birthday.
a) in
b) at
c) with
d) on

## Complete the sentences with the most appropriate phrasal verbs.

61. As I have just had a tooth ----, I am not allowed to eat or drink anything for three hours.
a) run out
b) tried on
c) crossed out
d) taken out
62. You need to ---- your essay for spell-check before you hand in your exam paper.
a) hang out
b) point out
c) cut off
d) go over
63. It is not easy for many civil servants to ---- on their salaries as the inflation rates are extremely high.
a) get by
b) turn up
c) wear out
d) run over
64. You'd better ---- your cigarette as it is extremely dangerous to smoke in a petrol station.
a) pull through
b) get through
d) hang up
d) put out
65. Jane found it hard to get up from the bed after the alarm clock ---- at seven.
a) broke in
b) took out
d) sent out
d) went off

## Complete the sentences with the most appropriate phrasal verbs.

66. There is an easy way to ---- four species of wild cats living in this region by their tail patterns.
a) tell apart
b) see to
c) clear up
d) back up
67. I thought the party was going to be boring, but it ---- to be the most unforgettable evening of my life.
a) turned out
b) looked around c) passed away
d) fell back on
68. I find it hard to ---- with the other students in the Italian class as they have been attending the classes more regularly than I do.
a) fall through
b) call in
c) do away
d) catch up
69. The first National Food and Nutrition Survey was ---- in 1980 and the most recent one in 1992.
a) carried out
b) figured out
c) brought about
d) checked in
70. The summit was earlier to be held in March but was ---- due to the tsunami disaster that hit India, Sri Lanka and the Maldives.
a) paid off
b) crossed out
c) put off
d) dropped in

## Choose the appropriate modal verbs to complete the sentences

71. Fortunately, I ....working alone otherwise I would have got really bored at the night shift.
a) was supposed to
b) was to
c) was used to
d) would
72. I don't think it was a good idea to, intervene, instead, you ....your child to abandon the habit of thumb-sucking gradually, all by himself.
a) have allowed
b) could have allowed
c) must have allowed
d) were able to allow
73. After a ship was wrecked during a storm at sea, unfortunately, only two of the men on board ....swim to the small, desert like island nearby.
a) might
b) were supposed to
c) could
d) were able to
[8]
74. I don't know why she didn't ask me how to do it as I ---- her.
a) must have helped
b) could have helped
c) might help
d) should have helped
75. Martin really ---- my tennis racket without asking first; I got really angry with him.
a) needn't have borrowed
b) must not have borrowed
c) shouldn't have borrowed
d) didn't need to borrow

## Choose the appropriate modal verbs to complete the sentences

76. I don't know why Peter is so late; do you think he ---- lost coming here?
a) may get
b) could get
c) must have got
d) might have got
77. What ---- to Phil? He said he ---- here at eight o'clock.
a) should have happened / has been
b) may happen / will have been
c) would happen / is
d) can have happened / would be
78. One of the US National Security advisers ---- there ---- better intelligence sharing before the 11 September 2001 attacks.
a) had acknowledged / can be
b) acknowledges / might be
c) has acknowledged / could have been
d) acknowledged / must be
79. We all think that Maria ---- an interesting person to meet as we ---- a lot of stories about her so far.
a) is / had heard
b) can be / heard
c) might have been / hear
d) would be / have heard
80. As a young woman who had never given birth before, she ---- what the experience of childbirth ---- like.
a) may not know / is
b) must not have known / will be
c) may not know / would be
d) couldn't have known / would be

| ANSWER-KEY |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1. | b | 2. | b | 3. | a | 4. | b | 5. | a | 6. | c |
| 7. | c | 8. | b | 9. | d | 10. | a | 11. | d | 12. | b |
| 13. | c | 14. | a | 15. | c | 16. | b | 17. | c | 18. | b |
| 19. | b | 20. | c | 21. | b | 22. | d | 23. | d | 24. | b |
| 25. | d | 26. | a | 27. | c | 28. | c | 29. | b | 30. | c |
| 31. | a | 32. | c | 33. | a | 34. | d | 35. | b | 36. | a |
| 37. | c | 38. | a | 39. | c | 40. | a | 41. | d | 42. | d |
| 43. | b | 44. | d | 45. | b | 46. | a | 47. | c | 48. | c |
| 49. | d | 50. | d | 51. | c | 52. | c | 53. | a | 54. | c |
| 55. | a | 56. | a | 57. | b | 58. | c | 59. | d | 60. | d |
| 61. | d | 62. | d | 63. | a | 64. | d | 65. | d | 66. | a |
| 67. | a | 68. | d | 69. | a | 70. | c | 71. | c | 72. | b |
| 73. | d | 74. | b | 75. | c | 76. | d | 77. | d | 78. | c |
| 79. | d | 80. | d |  |  |  |  |  |  |  |  |

## MATHEMATICS

## SYLLABUS

1. Number system
2. Commercial mathematics
3. Algebra including expansion and factorization
4. Linear equations
5. Indices and logarithms
6. Geometry of triangle and quadrilaterals
7. Mensuration
8. Statistics
9. Basics of trigonometry
10. Basics of coordinate geometry
11. General aptitude
12. A rational number between $\sqrt{2}$ and $\sqrt{3}$ is:
(a) $\frac{\sqrt{2}+\sqrt{3}}{2}$
(b) $\frac{\sqrt{2} \times \sqrt{3}}{2}$
(c) 1.5
(d) 1.8
13. If $\mathrm{a}+\mathrm{b}+\mathrm{c}=0$ value of $\frac{(b+c)^{2}}{b c}+\frac{(a+b)^{2}}{a b}+\frac{(a+c)^{2}}{a c}$ is
(a) 0
(b) 1
(c) 2
(d) 3
14. If $\frac{x}{y}+\frac{y}{x}=-1$ the value of $\mathrm{x}^{3}-\mathrm{y}^{3}$
(a) 1
(b) 0
(c) -1
(d) None of these
15. Two consecutive discounts of $20 \%$ and $25 \%$ are equivalent to :
(a) $42 \%$
(b) $45 \%$
(c) $40 \%$
(d) $41 \%$
16. A shopkeeper marks the cost price of an article $20 \%$ more than its cost price and he gives a discount of $20 \%$ on it, what is the result?
(a) loss of $4 \%$
(b) Profit of $4 \%$
(c) Profit of $20 \%$
(d) No loss no profit
17. At a certain rate of compound interest a sum gets doubled in 4 years. Then how many years it would take to get 16 times more on the same rate of interest ?
(a) 12 years
(b) 16 years
(c) 24 years
(d) 30 years
18. On a certain sum difference between compound interest and simple interest for 2 years @ 05 p.a. is Rs. 15. The sum is :
(a) 6,500
(b) 5,500
(c) 6,000
(d) 7,000
19. 'A' can do three fifth part of his work in a day then in how many days he will complete his remaining work.
(a) $2 / 3$ days
(b) $5 / 3$ days
(c) $2 / 5$ days
(d) $3 / 4$ days
20. A and B can do a piece of work in 30 and 40 days respectively. In how many days both can finish the work.
(a) $17 \frac{1}{7}$ days
(b) $27 \frac{1}{7}$ days
(c) $42 \frac{3}{4}$ days
(d) 70 days
21. 120 people can do a piece of work in 15 days. How many can do the same work in 10 days.
(a) 150
(b) 180
(c) 200
(d) 210
22. A train is running at a speed of $45 \mathrm{~km} /$ hour can cross a bridge of 180 m in 30 seconds. The length of bridge is :
(a) 200 m
(b) 225 m
(c) 195 m
(d) 250 m
23. To cover a certain distance a person takes 1 hour, if he reduces his speed to $\frac{2}{3}$ of his normal speed. In how much time he will cover the same distance.
(a) 2
(b) 1
(c) 3
(d) 1.5
24. The value of $\sqrt{10+\sqrt{25+\sqrt{108+\sqrt{154+\sqrt{225}}}}}$ be :
(a) 10
(b) 8
(c) 6
(d) 4
25. The value of $(\sqrt{72}-\sqrt{18}) \div \sqrt{12}$ be :
(a) $\sqrt{6}$
(b) $\sqrt{\frac{3}{2}}$
(c) $\sqrt{\frac{2}{3}}$
(d) $\sqrt{\frac{6}{2}}$
26. If $\sqrt{1+\frac{25}{144}}=1+\frac{x}{12}$, then value of $x$ is :
(a) 1
(b) 2
(c) 5
(d) 9
27. $\frac{\sqrt[3]{8}}{\sqrt{16}} \div \frac{\sqrt{100}}{\sqrt{49}} \times \sqrt[3]{125}$ is :
(a) $7 / 4$
(b) $3 / 4$
(c) -2
(d) 1
28. $\frac{\left(x^{3}\right)^{2} \times x^{4}}{x^{10}}=x^{\mathrm{P}}$ the value of P is :
(a) 26
(b) 2
(c) 1
(d) 0
29. The value $\frac{2^{n+4}-2.2^{n}}{2.2^{n+3}}+2^{-3}$ is :
(a) $2^{n+1}$
(b) $-2^{n+1}+\frac{1}{8}$
(c) $\frac{9}{8}-2^{n}$
(d) 1
30. $\sqrt{5+\sqrt[3]{x}}=3$, then value of $x$ is :
(a) 125
(b) 64
(c) 27
(d) 9
31. If $a^{x}=b^{y}=c^{2}$ and $b^{2}=a c$, then $y$ is equal to :
(a) $\frac{x z}{x+z}$
(b) $\frac{x z}{2(x-z)}$
(c) $\frac{x z}{2(z-x)}$
(d) $\frac{2 x z}{x+z}$
32. The rationalising factor of $\sqrt[3]{40}$ is :
(a) $\sqrt[3]{25}$
(b) $\sqrt{8}$
(c) $\sqrt[3]{5}$
(d) None of these
33. In $\frac{3}{\sqrt{3}-\sqrt{2}}=a \sqrt{3}-b \sqrt{2}$ values of $a$ and $b$ are :
(a) 3 and -3
(b) 3 and 4
(c) 1 and 2
(d) $\sqrt{3}$ and $\sqrt{2}$
34. The single discount equivalent to successive discount of $20 \%, 15 \%$ and $10 \%$ is :
(a) $40 \%$
(b) $38.8 \%$
(c) $45 \%$
(d) $30 \%$
35. The difference between C.I. and S.I. on ₹ 10,600 in one year @ $10 \%$ p.a. compounded annually is :
(a) Rs. 106
(b) Rs. 60
(c) 0
(d) None of these
36. On what sum of money will compound interest for 2 years at $5 \%$ p.a. amounts to Rs. 164.
(a) Rs. 2,000
(b) Rs. 1,600
(c) Rs. 2,400
(d) Rs. 2,100
37. In how many years will ₹ 2,000 amounts to $₹ 2,662$ at $10.5 \%$ p.a. compound interest.
(a) 1 year
(b) 2 years
(c) 3 years
(d) 4 years
38. If $a+b=9$ and $a b=-22$, the value of $a^{2}-b^{2}$ is:
(a) 117
(b) $\sqrt{120}$
(c) 400
(d) -198
39. If $x+\frac{1}{x}=2$, value of $x^{2}+\frac{1}{x^{2}}$ is :
(a) 1
(b) 4
(c) 2
(d) 0
40. If $a^{2}-5 a+1=0$, then value of $a^{2}+\frac{1}{a^{2}}$ is :
(a) 21
(b) 25
(c) 0
(d) 23
41. The value of $38^{3}+(-20)^{3}+(-18)^{3}$ is :
(a) 0
(b) 35568
(c) 38998
(d) None of these
42. Factors of $a^{4}-7 a^{2}+1$ are :
(a) $\left(a^{2}-1+3 a\right)\left(a^{2}-a-3 a\right)$
(b) $\left(a^{2}-3 a+1\right)\left(a^{2}+3 a+1\right)$
(c) $\left(a^{2}+7\right)\left(a^{2}-1\right)$
(d) None of these
43. The factors of $a^{2}+\frac{1}{a^{2}}-18$ are :
(a) $\left(a-\frac{1}{a}+4\right)\left(a+\frac{1}{a}+4\right)$
(b) $\left(a-\frac{1}{a}+4\right)\left(a-\frac{1}{a}-4\right)$
(c) $\left(a+\frac{1}{a}-\sqrt{18}\right)\left(a+\frac{1}{a}+\sqrt{18}\right)$
(d) None of these
44. The value of $x$ in $\frac{2(2 x-1)}{9}-\frac{x-1}{2}=0$ is :
(a) 2
(b) 5
(c) 7
(d) 0
45. If $x(5-a)=10-x^{2}$ and $x=2$, find value of ' $a$ ' :
(a) 0
(b) 1
(c) 2
(d) 3
46. A's age is six times that of B. After 15 years A's age will be three times that of B. Find age of A :
(a) 10 Years
(b) 60 Years
(c) 6 Years
(d) 30 Years
47. The cost of article A and B is Rs. 2,226 and cost of A is $10 \%$ more than ' B '. Find cost of ' B ' :
(a) Rs. 1166
(b) Rs. 1100
(c) Rs. 1060
(d) Rs. 1000
48. The values of $x$ and $y$ in solution of $3 x-4 y=10$ and $5 x-3 y=24$ is :
(a) $x=6, y=5$
(b) $x=3, y=5$
(c) $x=6, y=2$
(d) $x=0, y=8$
49. Sum of two numbers is 12 and difference is 2 . Find the number :
(a) 6 and 6
(b) 7 and 5
(c) 8 and 4
(d) 10 and 2
50. Sum of two digit number and number obtained on reversing the digits is 165 . If digit differ by 3 , find the number :
(a) 52
(b) 96
(c) 25
(d) 74
51. The graph drawn of $x=2$ in two variable is :
(a) Parallel to X axis
(b) Parallel to Y axis
(c) Graph can not be drawn
(d) None of these
52. The value of $9^{3 / 2}-3(5)^{0}-\left(\frac{1}{81}\right)^{-\frac{1}{2}}$ is :
(a) 12
(b) 16
(c) 15
(d) 20
53. In $9 \times 3^{x}=(27)^{2 x-5}$, value of $x$ is :
(a) $\frac{18}{5}$
(b) $\frac{17}{5}$
(c) $\frac{16}{5}$
(d) 3
54. If $a=b^{2 x}, b=c^{2 y}$ and $c=a^{2 z}$, the value of $8 x y z$ is :
(a) 0
(b) 2
(c) 1
(d) None of these
55. Value of $x$ in $\log _{2}\left(x^{2}-4\right)=5$ is :
(a) 5
(b) 4
(c) 6
(d) 7
56. Find the value of $2 \log _{10} 5+\log _{10} 8-\frac{1}{2} \log _{10} 4$ :
(a) 3
(b) 2
(c) 1
(d) 0
57. Values of $x$ in $\log _{10}(x+1)+\log _{10}(x-1)=\log _{10} 11+2 \log _{10} 3$ :
(a) 10
(b) 8
(c) 11
(d) 12
58. If $\frac{\log 81}{\log 27}=x$, then value of $x$ is :
(a) $\frac{3}{4}$
(b) $\frac{4}{3}$
(c) 3
(d) 4
59. In triangle $\mathrm{ABC}, 2\left(\angle \mathrm{~A}-20^{\circ}\right)=\left(\angle \mathrm{B}+10^{\circ}\right)=2\left(\angle \mathrm{C}-10^{\circ}\right)$. the value of $\angle \mathrm{C}$ is :
(a) $60^{\circ}$
(b) $70^{\circ}$
(c) $50^{\circ}$
(d) $80^{\circ}$
60. In $\triangle \mathrm{PQR} \angle \mathrm{P}-\angle \mathrm{Q}=18^{\circ}$ and $\angle \mathrm{Q}-\angle \mathrm{R}=12^{\circ}$ then $\angle \mathrm{Q}$ is :
(a) $50^{\circ}$
(b) $76^{\circ}$
(c) $48^{\circ}$
(d) $58^{\circ}$
61. In

(a) $\triangle \mathrm{ABC} \cong \triangle \mathrm{PQR}$
(b) $\triangle \mathrm{BAC} \cong \triangle \mathrm{PQR}$
(c) $\triangle \mathrm{BAC} \cong \triangle \mathrm{RPQ}$
(d) $\triangle \mathrm{CAB} \cong \triangle \mathrm{PQR}$

Questions no. 51, 52 and53 are based on given figure :

51. Value of ' $a$ ' is :
(a) $36^{\circ}$
(b) $32^{\circ}$
(c) $35^{\circ}$
(d) $20^{\circ}$
52. Value ' $b$ ' is :
(a) $36^{\circ}$
(b) $32^{\circ}$
(c) $68^{\circ}$
(d) $60^{\circ}$
53. Value of ' $c$ ' is :
(a) $42^{\circ}$
(b) $32^{\circ}$
(c) $44^{\circ}$
(d) $36^{\circ}$
54. In $\triangle \mathrm{ABC}, \mathrm{AB}=\mathrm{AC}$ and $\angle \mathrm{A}: \angle \mathrm{B}=8: 5$, find angle ' A ' :
(a) 100
(b) 50
(c) 80
(d) 30
55. A model of an aeroplane is made to a scale of $1: 400$ and if the length of the plane is 40 m , then find the length of the model :
(a) 18 cm
(b) 15 cm
(c) 20 cm
(d) 10 cm
56. Sum of the interior angles of a polygon is $1440^{\circ}$, how many sides does this polygon have :
(a) 10
(b) 8
(c) 11
(d) 20
57. A map of building is drawn of a scale of $1: 200$. If surface area of model is $5 \mathrm{~cm}^{2}$, then the surface area of building should be :
(a) $20 \mathrm{~m}^{2}$
(b) $25 \mathrm{~m}^{2}$
(c) $10 \mathrm{~m}^{2}$
(d) 200 m
58. The model of a ship is made by a scale of $1: 200$. IF the length of model is 4 m . Calculate the length of the ship :
(a) 204 m
(b) 400 m
(c) 800 m
(d) None of these
59. Sum of interior angle of a polygon is 5 times the sum of its exterior angle. The number of sides of the polygon are :
(a) 11
(b) 11
(c) 12
(d) 13
60. One angle of an eight sided polygon is $100^{\circ}$, and other angles are equal, measurement of each equal angle is :
(a) $80^{\circ}$
(b) $140^{\circ}$
(c) $120^{\circ}$
(d) $200^{\circ}$
61. The mean of $7,5, \mathrm{p}, 9$ and 11 is 8 . The value of P is :
(a) 8
(b) 10
(c) 9
(d) 11
62. The mean of 15 observation is 200 , if one observation is excluded. Then new mean is 198 . The value of excluded observation be :
(a) 220
(b) 228
(c) 230
(d) 250
63. The median of data $34,47,41,52,53,56,35,49,55$ and 42 is :
(a) 34
(b) 47
(c) 46
(d) 48
64. Find the area of an isoscele triangle whose equal sides are 5 cm each and base is 6 cm .
(a) 12
(b) 13
(c) 15
(d) 10
65. Area of square field is $484 \mathrm{~m}^{2}$. The length of its diagonal is :
(a) 28
(b) 31.11
(c) 35
(d) 40
66. A circular wheel of radius 28 cm makes 300 revolutions per minute. Then speed of wheel is :
(a) $31.68 \mathrm{~km} / \mathrm{hour}$
(b) $25 \mathrm{~km} /$ hour
(c) $40 \mathrm{~km} / \mathrm{hour}$
(d) $28 \mathrm{~km} / \mathrm{hour}$
67. The total surface area of a cube is $726 \mathrm{~cm}^{2}$. Its volume is :
(a) $800 \mathrm{~cm}^{3}$
(b) $1000 \mathrm{~cm}^{3}$
(c) $726 \mathrm{~cm}^{3}$
(d) $1331 \mathrm{~cm}^{3}$
68. Area of curved surface of a cylinder is $4400 \mathrm{~cm}^{2}$ and circumference of base is 110 cm . Its height is :
(a) 28 cm
(b) 40 cm
(c) 22 cm
(d) 44 cm
69. The volume of cylinder (largest) formed when a rectangular piece of paper 22 cm by 15 cm is rolled along its longer side.
(a) $577 \mathrm{~cm}^{3}$
(b) $600 \mathrm{~cm}^{3}$
(c) $550 \mathrm{~cm}^{3}$
(d) $500 \mathrm{~cm}^{3}$
70. If $13 \sin \mathrm{~A}=12$, then value of $\sec ^{2} \mathrm{~A}-\tan ^{2} \mathrm{~A}$ is :
(a) 5
(b) 1
(c) $1 / 5$
(d) 12
71. If $\tan \mathrm{A}=\sqrt{3}$, then $\cos ^{2} \mathrm{~A}-\sin ^{2} \mathrm{~A}$ is :
(a) $\sqrt{3}$
(b) 1
(c) $\frac{1}{2}$
(d) $-\frac{1}{2}$
72. If $5 \cos \mathrm{~A}=6 \sin \mathrm{~A}$ then value of $\tan \mathrm{A}$ is :
(a) $\frac{6}{5}$
(b) $\frac{5}{6}$
(c) $\frac{\sqrt{3}}{2}$
(d) 1
73. Value of $\sin ^{2} 30-2 \cos ^{3} 60+3 \tan ^{4} 45$ is :
(a) 1
(b) 2
(c) 3
(d) 4
74. If $x=15^{\circ}$, then value of $8 \sin 2 x \cos 4 x \sin 6 x$ is :
(a) $\sqrt{3}$
(b) 2
(c) $\frac{\sqrt{3}}{2}$
(d) 1
75. If $4 \sin ^{2} x-3=0$ the value of $x$ is :
(a) $30^{\circ}$
(b) $60^{\circ}$
(c) $45^{\circ}$
(d) $90^{\circ}$
76. If $\sin (A+B)=\cos (A-B)=\frac{\sqrt{3}}{2}$ then value of ' B ' is :
(a) $45^{\circ}$
(b) $30^{\circ}$
(c) $15^{\circ}$
(d) $60^{\circ}$
77. The two lines $x=5$ and $2 x+3=0$ are :
(a) Intersecting lines
(b) Parallel lines
(c) Perpendicular lines
(d) None of these
78. The slop of line $2 x-3 y+5=0$ is :
(a) 5
(b) $\frac{5}{3}$
(c) $\frac{2}{3}$
(d) $\frac{3}{5}$
79. The point on which line $2 x+5 y=7$, intersect $y$ axis is :
(a) $\frac{7}{2}$
(b) $\frac{5}{7}$
(c) $-\frac{7}{5}$
(d) $\frac{2}{5}$
80. Equation of line whose slop is -3 and $y$ intercept is 5 , be :
(a) $3 x+y=5$
(b) $3 x-y=5$
(c) $3 x+y+5=0$
(d) $x+y=\frac{5}{2}$

## ANSWER - KEY

| 1. | c | 2. | d | 3. | b | 4. | c | 5. | a | 6. | b | 7. | a |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 8. | a | 9. | a | 10. | b | 11. | c | 12. | d | 13. | d | 14. | d |
| 15. | a | 16. | a | 17. | d | 18. | d | 19. | b | 20. | d | 21. | a |
| 22. | a | 23. | b | 24. | c | 25. | b | 26. | c | 27. | a | 28. | c |
| 29. | d | 30. | d | 31. | b | 32. | b | 33. | b | 34. | c | 35. | b |
| 36. | c | 37. | c | 38. | b | 39. | b | 40. | b | 41. | c | 42. | b |
| 43. | c | 44. | c | 45. | b | 46. | a | 47. | b | 48. | c | 49. | d |
| 50. | b | 51. | a | 52. | c | 53. | c | 54. | c | 55. | d | 56. | a |
| 57. | a | 58. | c | 59. | c | 60. | b | 61. | c | 62. | b | 63. | d |
| 64. | a | 65. | b | 66. | a | 67. | d | 68. | b | 69. | a | 70. | b |
| 71. | d | 72. | b | 73. | c | 74. | b | 75. | b | 76. | c | 77. | b |
| 78. | c | 79. | c | 80. | a |  |  |  |  |  |  |  |  |

## PHYSICS

## SYLLABUS

1. Units and measurements
2. Motion of objects in one dimension
3. Pressure in fluids and atmospheric pressure
4. Heat and flow of heat energy
5. Refraction and reflection of light
6. Sound
7. Static and current electricity
8. Magnetism
9. Unit of length used to measure the astronomically large distances.
(a) Hour
(b) Parsec
(c) Leap Year
(d) Second
10. Which of following is not a fundamental unit :
(a) metre
(b) litre
(c) second
(d) kg
11. What is S.I. Unit of volume :
(a) $\mathrm{cm}^{3}$
(b) $\mathrm{kg}^{3}$
(c) $\mathrm{m}^{3}$
(d) litre $^{3}$
12. The least count of a metre rule is :
(a) 1 cm
(b) 1 m
(c) 0.1 cm
(d) 0.01 cm
13. Which of the following is scalar quantity :
(a) Pressure
(b) Foce
(c) Momentum
(d) Weight
14. S.I. Unit of retardation is :
(a) $\mathrm{m} \mathrm{sec}^{-2}$
(b) $\mathrm{kg} \mathrm{sec}^{-1}$
(c) $\mathrm{ms}^{-1}$
(d) m
15. $18 \mathrm{~kg} \mathrm{~h}^{-1}$ is equal to :
(a) $0 \mathrm{~m} \mathrm{sec}^{-1}$
(b) $5 \mathrm{~m} \mathrm{sec}^{-1}$
(c) $18 \mathrm{~m} \mathrm{sec}^{-1}$
(d) $1.8 \mathrm{~m} \mathrm{sec}^{-1}$
16. Correct equation of motion is :
(a) $\mathrm{v}=\mathrm{u}+\mathrm{as}$
(b) $\quad \mathrm{v}=\mathrm{ut}+\mathrm{a}$
(c) $\mathrm{s}=\mathrm{ut}+1 / 2 \mathrm{a}^{2} \mathrm{t}$
(d) $v=u+$ at
17. A body projected vertically upward with in that velocity $u$, if acceleration due to gravity is ' $g$ ', the time for which it remain in air will be :
(a) $\mathrm{u} / \mathrm{g}$
(b) $u g$
(c) $2 \mathrm{u} / \mathrm{g}$
(d) $u / 2 g$
18. The property of inertia is more in :
(a) a car
(b) a truck
(c) a toy car
(d) a horse cart
19. A unit of linear momentum is :
(a) NS
(b) $\quad \mathrm{kg} \mathrm{m} \mathrm{sec}-2$
(c) $\mathrm{NS}^{-1}$
(d) $\mathrm{kg}^{2} \mathrm{~m} \mathrm{sec}^{-2}$
20. The value of G is :
(a) $9.8 \mathrm{Nm}^{2} \mathrm{~kg}^{-2}$
(b) $6.7 \times 10^{-11} \mathrm{Nm}^{2} \mathrm{~kg}^{-2}$
(c) $6.7 \times 10^{-11} \mathrm{msec}^{-2}$
(d) $6.7 \mathrm{~N} \mathrm{~kg}^{-1}$
21. Pressure $P_{1}$ at certain depth in river water and $P_{2}$ at same depth in sea water are related as
(a) $\mathrm{P}_{1}>\mathrm{P}_{2}$
(b) $\mathrm{P}_{1}=\mathrm{P}_{2}$
(c) $\mathrm{P}_{1}<\mathrm{P}_{2}$
(d) $\mathrm{P}_{1}-\mathrm{P}_{2}=\mathrm{atm}$ pressure
22. Normal atmospheric pressure is :
(a) 76 m of Hg
(b) 76 cm of Hg
(c) 76 Pa
(d) $76 \mathrm{Nm}-2$
23. A body will experience minimum upthrust when it is immersed in :
(a) Turpentine
(b) Water
(c) Glycerine
(d) Mercury
24. A body of density $d$ sinks in a liquid of density $d_{L}$ The density $d$ and $d_{L}$ are related as :
(a) $d=d_{L}$
(b) $d<d_{L}$
(c) $d>d_{L}$
(d) Nothing can be said
25. A body of weight W is floating in a liquid, its apparent weight will be :
(a) equal to W
(b) less than W
(c) greater than W
(d) Zero
26. Unit of relative density is :
(a) $\mathrm{g} \mathrm{cm}^{-3}$
(b) $\mathrm{kg} \mathrm{m}^{-3}$
(c) $\mathrm{m}^{3} \mathrm{~kg}^{-1}$
(d) No unit
27. A hydrometer submerges to a mark $X$ in water. In turpentine, it will submerge to a mark.
(a) below X
(b) above X
(c) X
(d) Zero
28. For a liquid the coefficients of apparent expansion $y_{a}$ and real expansion $y_{r}$ are related as :
(a) $y_{a}=y_{r}$
(b) $y_{a}<y_{r}$
(c) $y_{a}>y_{r}$
(d) $y_{a} \div y_{r}=$ constant
29. Density of water is maximum at :
(a) $0^{\circ} \mathrm{C}$
(b) $100^{\circ} \mathrm{C}$
(c) $4{ }^{\circ} \mathrm{C}$
(d) $15^{\circ} \mathrm{C}$
30. The size of one degree on Celsius scale $x$ and size of one degree on farenheit scale $y$ are related as :
(a) $x=1.8 \mathrm{y}$
(b) $1.8 \mathrm{x}=\mathrm{y}$
(c) $x=y$
(d) $x=0.5 y$
31. In a solid, heat is transferred mainly by the process of :
(a) Conduction
(b) Convection
(c) Radiation
(d) Conduction and convection both
32. In convection, heat is transferred :
(a) upwards
(b) down wards
(c) side ways
(d) in all direction
33. The image formed in plane mirror is :
(a) eract and diminished
(b) eract and enlarged
(c) inverted and same size
(d) eract and of same size
34. Real and enlarged image can be formed/obtained by using :
(a) Convex mirror
(b) Concave mirror
(c) Plane mirror
(d) Either convex or plane mirror
35. The mirror used by a dentist is :
(a) Plano convex
(b) Plane
(c) Convex
(d) Concave
36. Sound in air propagate in form of :
(a) longitudinal wave
(b) Longitudinal and transverse waves
(c) Transverse waves
(d) None of these
37. Sonar makes use of :
(a) Infrasonic Sound
(b) Ultrasound
(c) Ordinary Sound
(d) light
38. Two uncharged bodies charged on rubbing because of :
(a) Friction
(b) Conduction
(c) Induction
(d) None of these
39. Which of these is a insulator :
(a) Copper
(b) Silk
(c) Human Body
(d) Acidulated water
40. On increasing resistance in circuit, current in it :
(a) Decrease
(b) Increase
(c) Remain Unchanged
(d) Nothing can be said
41. In a uniform magnetic field. The field lines are :
(a) Curved
(b) Parallel and equidistant lines
(c) Parallel but non equiplaced straight lines
(d) None of these
42. Attractive property of a magnet is maximum at :
(a) North pole only
(b) South pole only
(c) north and South Pole both
(d) At centre

## ANSWER-KEY

| 1. | b | 2. | b | 3. | c | 4. | c | 5. | a | 6. | a | 7. | b |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 8. | d | 9. | c | 10. | b | 11. | a | 12. | b | 13. | c | 14. | b |
| 15. | a | 16. | c | 17. | d | 18. | d | 19. | b | 20. | b | 21. | c |
| 22. | a | 23. | a | 24. | a | 25. | d | 26. | b | 27. | d | 28. | a |
| 29. | b | 30. | a | 31. | b | 32. | a | 33. | b | 34. | c |  |  |

## CHEMISTRY

1. The densest substance among the following :
(a) Air
(b) Exhaust from chimneys
(c) Honey
(d) Water
2. When a solid melts, its temperature remains the same because of :
(a) Interparticle force
(b) Interparticle space
(c) Latent heat of fusion
(d) Latent heat of vapourisation
3. Dry ice is :
(a) Solid carbondioxide
(b) Solid Carbon monoxide
(c) Liquid Nitrogen
(d) Liquid Oxygen
4. The state of matter which consists of super energetic and super excited particles :
(a) Bose-Einstein Condensate
(b) Plasma
(c) Solid
(d) Gas
5. The heat energy required to change 1 kg of a liquid to gas, at atmospheric pressure at its boiling point is :
(a) Latent heat of fusion
(b) Latent heat of vapourisation
(c) Melting point
(d) Boiling point
6. The state of matter with maximum interparticle force of attraction.
(a) Solid
(b) Liquid
(c) Plasma
(d) Gas
7. Naphthalene balls disappear with time without leaving any solid residue due to :
(a) Boiling
(b) Evaporation
(c) Freezing
(d) Sublimation
8. An alloy with $30 \% \mathrm{Zn}$ and $70 \% \mathrm{Cu}$ is :
(a) Bronze
(b) Brass
(c) Gun Metal
(d) Duralumin
9. The mass percentage of the solution containing 40 g of common salt in 320 g of water is :
(a) $11.0 \%$
(b) $1.11 \%$
(c) $11.1 \%$
(d) $1.01 \%$
10. Which among the following is an emulsion :
(a) Mud
(b) Face cream
(c) Smoke
(d) Mist
11. Which among the following is a Gel :
(a) Clouds
(b) Fog
(c) Butter
(d) Milk
12. Immiscible liquids separate out in layers depending on their :
(a) Mass
(b) Volume
(c) Density
(d) Boiling Point
13. Boiling point of oxygen is :
(a) $-183^{\circ} \mathrm{C}$
(b) $-186^{\circ} \mathrm{C}$
(c) $-138^{\circ} \mathrm{C}$
(d) $-168^{\circ} \mathrm{C}$
14. The element which exists as liquid at room temperature is :
(a) Bromine
(b) Iodine
(c) Chlorine
(d) Fluorine
15. Scientist who put forward Atomic Theory :
(a) Neils Bohr
(b) James Chadwick
(c) John Dalton
(d) J.J. Thomson
16. Unit for Atomic Radius
(a) Metre
(b) Centimeter
(c) Nanometre
(d) Angestrom
17. Which among the following metals is divalent :
(a) Aluminium
(b) Iron
(c) Potassium
(d) Zinc
18. Which among the following metals is monovalent :
(a) Sodium
(b) Magnesium
(c) Iron
(d) Calcium
19. Number of moles in 52 g of Helium is :
(a) 13
(b) 31
(c) 26
(d) 62
20. The mass of 0.5 mole of water molecules is :
(a) 3.2 g
(b) $\quad 9 \mathrm{~g}$
(c) 32 g
(d) 90 g
21. The molar mass of Phosphorus molecule is :
(a) 142 g
(b) 124 g
(c) 31 g
(d) 13 g
22. The molar mass of Nitric acid is :
(a) 15 g
(b) 48 g
(c) 36 g
(d) 63 g
23. Formula for sodium sulphate is :
(a) $\mathrm{NaSO}_{4}$
(b) $\mathrm{Na}_{2} \mathrm{SO}_{4}$
(c) $\mathrm{P}_{2} \mathrm{SO}_{4}$
(d) $\mathrm{KSO}_{4}$
24. The maximum number of electrons that can be accomodated in N shell :
(a) 32
(b) 18
(c) 8
(d) 2
25. The property of catenation is exhibited by :
(a) Sulphur
(b) Phosphorus
(c) Carbon
(d) Nitrogen
26. The metal that exhibits variable valency is :
(a) Magnesium
(b) Zinc
(c) Iron
(d) Calcium
27. Scientist known as 'Father of Nuclear Physics'.
(a) E. Rutherford
(b) Neils Bohr
(c) J.J. Thomson
(d) Albert Einstein
28. Oxide of Nitrogen known as laughing gas is :
(a) Nitrogen dioxide
(b) Nitric ocide
(c) Nitrous oxide
(d) Nitrogen Pentoxide
29. Compound used in artificial ripening of fruits :
(a) Ethyne
(b) Ethane
(c) Propyne
(d) Propene
30. Which among the following is 'Green House Gas' :
(a) Acetylene
(b) Methane
(c) Ethane
(d) Propane

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 1. | c | 2. | c | 3. | a | 4. | b | 5. | b | 6. | a | 7. | d |
| 8. | b | 9. | c | 10. | b | 11. | c | 12. | c | 13. | a | 14. | a |
| 15. | c | 16. | c | 17. | d | 18. | a | 19. | a | 20. | b | 21. | b |
| 22. | d | 23. | b | 24. | b | 25. | c | 26. | c | 27. | a | 28. | c |
| 29. | a | 30. | b |  |  |  |  |  |  |  |  |  |  |

## BIOLOGY

## SYLLABUS

1. Plant \& Animal tissues
2. Introducing biology
3. Five kingdom classification
4. Digestive system
5. Reproduction in plants and animals
6. Cell: the unit of life
7. Nutrition
8. Movement and locomotion
9. Ecosystems
10. Diseases: cause and control
11. Seeds: structure and germination
12. Skin: "the jack of all trades"
13. Which of the following plant tissue is elongated and thick at the corners ?
(a) Sclerenchynia
(b) Collenchyma
(c) Parenchyma
(d) Chlorenchyma
14. Phloem does not consist of which of the following :
(a) Tracheids
(b) Sieve tubes
(c) Phloem parenchyma
(d) Companion cells
15. The branch of biology applied both to plants and animals is :
(a) Physiology
(b) Virology
(c) Taxonomy
(d) Entomology
16. Bamboo is a $\qquad$
(a) Grass
(b) Herb
(c) Shrub
(d) Tree
17. A reptile with a four chambered heart is :
(a) Snake
(b) Turtle
(c) Lizard
(d) Crocodile
18. What is found inside a seed ?
(a) Stored food
(b) A flower and little leaves
(c) Smaller seeds
(d) Pollen
19. Hardest part in human body is :
(a) Dentine
(b) Enamel
(c) Keratin
(d) Chitin
20. Glycolysis is a process :
(a) In which glycogen is broken down into glucose
(b) Which occurs is mitochondria
(c) in which glucose is broken down into pyruvate
(d) That occurs next to krebs cycle
21. Which of the following is the group with closely related animal types ?
(a) Sea-star, sea lify, sea-hare
(b) Dog fish, silver fish, cray-fish
(c) Leech, louse, snail
(d) Jelly-fish, hydra, sea-anemone
22. Plant cells are different to animal cells in not having:
(a) Plastids
(b) Cell Wall
(c) Dictyosome
(d) Lysosome
23. Who invented the drug called penicillin?
(a) Alexander Fleming
(b) Alfred Nobel
(c) Louis Pasteur
(d) Dr. Christian Bernard
24. Which one of the following is the correct matching of a nutrient mineral element and its one rich source ?
(a) Calcium-Potato
(b) Iodine-Dairy milk
(c) Sodium-Citrus fruits
(d) Potassium-Banana
25. Which one of the following categories of vertebrae are correctly numbered :
(a) Cervical-7
(b) Thoracic-10
(c) Lumbar-4
(d) Sacral-4
26. Poultry products are a rich source of :
(a) Sugar
(b) Animal Proteins
(c) Plant Proteins
(d) Carbohydrates
27. The branch of agricultural science which deals with feeding, shelter, health and breeding of animals is called :
(a) Cytology
(b) Poultry
(c) Animal Husbandry
(d) Eugenics
28. Prokaryotes are included in the kingdom :
(a) Monera
(b) Protista
(c) Plantae
(d) Animalia
29. Which muscle type is moved voluntarily ?
(a) Cardiac
(b) Skeletal
(c) Smooth
(d) All of these
30. Rat in any food chain would occupy the position of :
(a) Tertiary consumer
(b) Secondary consumer
(c) Primary consumer
(d) Producer
31. Carbon is incorporated into life forms through the basic process of :
(a) Respiration
(b) Transpiration
(c) Photosynthesis
(d) Active Absorption
32. Which of the following is a sexually transmitted disease ?
(a) Anthrax
(b) Syphilis
(c) Japanese Encephalitis
(d) Tuberculosis
33. The two cell organelles that contain their own genetic material are :
(a) mitochondria and Plastids
(b) Mitochondria and Golgi Apparatus
(c) Mitochondria and Lysosomes
(d) Mitochondria and Ribosomes
34. Which one of the following is an example of a neurotransmitter present in the axon endings :
(a) Acetone
(b) Aceticanhydride
(c) Acetic acid
(d) Acetylcholine
35. DPT is a vaccine given to young babies to protect them from, which of the following, three diseases ?
(a) Dysentry, tetanus, polio
(b) Diarrhoea, tuberculosis, polio
(c) Diptheria, tetanus, pertussis
(d) dog-bite, pinworm, typloid
36. Which one of the following is a genetic disorder ?
(a) Bronchitis
(b) Night blindness
(c) Osteoporosis
(d) Sickle cell anaemia
37. Which of the following is called the complete food ?
(a) Cereal
(b) Milk
(c) Vegetable
(d) Chapati
38. The absence of cobalt in minute quantities in human body causes :
(a) Leucoderma
(b) Perinicious anaemia
(c) Arthritis
(d) Matta fever
39. Hair, finger, nails and hoofs are all made up of :
(a) Protein
(b) Vitamin
(c) Iron
(d) Fat
40. Which part of a plant respires ?
(a) Root
(b) Leaf
(c) Seed
(d) All of these
41. Gastric juice contains :
(a) HCl and pepsin
(b) Trypsin and HCl
(c) Pepsin and Trypsin
(d) Amylopsin and Pepsin
42. The cotyledon of a maize grain is called as :
(a) Coleorhiza
(b) Scutellum
(c) Coleoptile
(d) Endospern

## ANSWER-KEY

| 1. | b | 2. | a | 3. | c | 4. | a | 5. | d | 6. | a | 7. | b |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 8. | c | 9. | d | 10. | d | 11. | a | 12. | d | 13. | a | 14. | b |
| 15. | c | 16. | a | 17. | b | 18. | c | 19. | c | 20. | b | 21. | a |
| 22. | d | 23. | c | 24. | d | 25. | b | 26. | b | 27. | a | 28. | d |
| 29. | a | 30. | b |  |  |  |  |  |  |  |  |  |  |

## SOCIAL STUDIES

## SYLLABUS

## HISTORY

1. INDIAN FREEDOM MOVEMENT
2. GANDHI AS FREEDOM FIGHTER
3. RENAISSANCE
4. REFORMATION

## CIVICS

1. PARLIAMENTARY SYSTEM OF INDIA
2. DEMOCRACTIC RIGHT

## GEOGRAPHY

1. INDIA-SIZE AND LOCATION
2. NEIGHBOURING COUNTRIES
3. PHYSICAL FEATURES OF INDIA
4. CLIMATE OF INDIA
5. Which among the following were factors for growth of Modern Nationalism?
6. An understanding of contradiction between Indian and Colonial interest.
7. Western thought and Education
8. Role of Press and Literature
9. Benevolent Nature of British government
(a) All of the above
(b) 1, 2 and 3
(c) Only 4
(d) 1 and 4
10. The political mentor of Mahatma Gandhi was
(a) Lala Lajpat Rai
(b) Dadabhai Naoroji
(c) Gopal Krishna Gokhale
(d) Bipin Chandra Pal
11. Government policies which evoked reactions before 1905 were:
12. Reduction of ICS age limit to 19 years.(1876)
13. Grand Durbar of Delhi(1877)
14. Vernacular Press Act(1878)
15. Arms Act (1878)
(a) All of the above
(b) 1, 2 and 3
(c) Only 4
(d) 1 and 4
16. Illbert Bill was brought up by:
(a) Lord Lytton
(b) Lord Ripon
(c) Lord Barlow
(d) Lord Canning
17. In 1851, Bengal British India Society and Landholder's society merged to form:
(a) The Bangabhasha Prakasika Sabha
(b) The Zamindari Association
(c) British India Asssociaton
(d) The East India Association
18. The East India Association was formed in year 1866 in London by:
(a) Firoz Shah Mehta
(b) Surendranath Benarjee
(c) Anandranath Bose
(d) Dadabhai Naroji
19. Find the correct Answer:
20. Anand Mohan Bose and Surendranath Benarjee founded Indian Association of Calcutta.
21. It was formed in year 1876.
(a) Only 1
(b) Only 2
(c) 1 and 2
(d) None
22. Poona Sarvajanik Sabha was formed in the year:
(a) 1865
(b) 1866
(c) 1867
(d) 1868
23. Who founded The Bombay Presidency Association:
(a) B Tyabji
(b) P Mehta
(c) K T Telang
(d) All of the above
24. When did Mahatma Gandhi return to India from South Africa?
(a) 1913
(b) 1919
(c) 1915
(d) 1921
25. What did the Rowlatt Act, 1919 presume?
(a) Detention of political prisoners without trial
(b) Forced recruitment in the army
(c) Forced manual labour
(d) Equal pay for equal work
26. What did Mahatma Gandhi in his book, Hind Swaraj, declare?
(a) British ruled India because the latter was militarily weak
(b) British ruled India because Indians cooperated with them
(c) British ruled India because they got international support
(d) None of these
27. What did the term 'picket' refer to?
(a) Stealing from shops
(b) Import of goods
(c) Protest by blocking shop entrances
(d) Boycott of clothes and goods
28. What was the effect of the Non-cooperation movement on the plantation workers in Assam?
(a) They left the plantations and headed home
(b) They went on strike
(c) They destroyed the plantations
(d) None of these
29. Where was Gandhi's ashram located?
(a) Dandi
(b) Sabarmati
(c) Allahabad
(d) Nagpur
30. What led to the Civil Disobedience Movement?
(a) Arrival of the Simon Commission
(b) Working at the firm without payments
(c) Violation of Salt Tax by Gandhi
(d) Fall in demand for agricultural goods
31. Who were the 'Sanatanis'?
(a) Saints
(b) Dalits
(c) High-caste Hindus
(d) None of these
32. In which year did the famous Dandi March take place-
(a) 1920
(b) 1930
(c) 1936
(d) 1931
33. Who shot Mahatma Gandhi?
(a) Nathu Ramsay
(b) John Wilkes Booth
(c) Nathuram Godse
(d) Leon Czolgosz
34. Where did Gandhi go to study law?
(a) South Africa
(b) Russia
(c) United States
(d) England
35. In which year did Gandhi die?
(a) 1948
(b) 1944
(c) 1947
(d) 1942
36. Gandhi called the people of lower castes by this name:
(a) Untouchables
(b) Kshatriyas
(c) Dalits
(d) Harijans
37. In which year was the Quit India Movement launched?
(a) 1942
(b) 1945
(c) 1948
(d) 1947
38. Where was Mahatma Gandhi born?
(a) West Bengal
(b) Maharashtra
(c) Gujarat
(d) Bihar
39. "Europe is waking out of a long, deep sleep...time was when learning was only found in the religious orders...learning has passed to secular princes and peers."
This quotation best describes the
(a) Renaissance
(b) Decline of the Roman Empire
(c) Crusades
(d) Rise of Christianity
40. Which was a major characteristic of the Renaissance?
(a) Conformity
(b) Humanism
(c) Mysticism
(d) Obedience
41. The Renaissance and the Protestant Reformation were similar in that both were
(a) Stimulated by a spirit of inquiry
(b) Supported by the working class
(c) Limited to Italy, France, and Germany
(d) Encouraged by the successes of the French Revolution
42. One factor that enabled the Renaissance to flourish in Northern Italy was that the region had
(a) A wealthy class that invested in the arts
(b) A socialist for of government
(c) Limited contact with the Byzantine Empire
(c) A shrinking middle class
43. In Europe, a major characteristic of humanism was
(a) A belief in the supremacy of the state in relation to individual rights
(b) A rejection of ancient civilizations and their cultures
(c) An emphasis on social control and obedience to national rulers
(d) An appreciation for the basic worth of individual achievement
[29]
44. Which social condition was basic to the development of Greek philosophy and Renaissance art?
(a) Rigid social classes
(b) Emphasis on individualism
(c) Religious uniformity
(d) Mass education
45. European society during the Renaissance differed from European society during the Middle Ages in that during the Renaissance
(a) The Church was no longer influential
(b) The emphasis on individual worth increased
(c) Economic activity declined
(d) Art no longer contained religious themes
46. Martin Luther's Ninety-Five Theses were a call for
(a) Religious revolt against the German princes
(b) Reforms within the Roman Catholic Church
(c) Greater papal authority
(d) Crusades to spread Christianity
47. In Western Europe, a major immediate effect of the Reformation was a
(a) Renewed domination of the Catholic Church over the German states
(b) Greater tolerance of religions other than Christianity
(c) Decrease in educational opportunities for the middle class
(d) Decline in religious unity and in the power of the Catholic Church
48. During the Renaissance, which development contributed most to the Protestant Reformation?
(a) Interest in Ancient Greece and Rome
(b) Advances in mathematics and science
(c) Questioning of traditional authority
(d) Attention to realism and detail
49. Which was a result of the Protestant Reformation in Europe?
(a) The Catholic Church accepted the dominance of the new Protestant religions in Italy, France, and Germany
(b) Spain became a predominantly Protestant nation
(c) Catholic Church leaders refused to make any changes in church practices
(d) The power of the Catholic Church in Europe was weakened
50. Which was a major result of the Protestant Reformation?
(a) New Christian denominations emerged
(b) Religious teachings were no longer allowed in the universities
(c) The Crusades were organized
(d) The power of the Pope was strengthened
51. Which factor helped most to bring about the Protestant Reformation?
(a) The Catholic clergy had lost faith in their religion
(b) Islam was attracting many converts in Western Europe
(c) Kings and princes in Northern Europe resented the power of the Catholic Church
(d) The exploration of the Americas led to the introduction of new religious ideas
52. The Protestant Reformation and the European Renaissance were similar in that both
(a) Discouraged the growth of strong monarchs
(b) Encouraged people to question tradition
(c) Were led by the military
(d) Supported the return of the Roman Empire
53. The Protestant Reformation represents a turning point in European history because it
(a) Allowed religious reformers to escape persecution
(b) Standardized all religious writings
(c) Ended religious unity in Western Europe
(d) Forced most of Europe's monarchs to become Protestants
54. The Governor of a State is appointed by the President on the advice of the
(a) Prime Minister
(b) Vice- President
(c) Chief Minister
(d) Chief Justice
55. The Indian President gives his resignation to the
(a) Chief Justice
(b) Parliament
(c) Vice President
(d) Prime Minister
56. For what period does the Vice President of India hold office ?
(a) 5 years
(b) Till the age of 65 years
(c) 6 years
(d) 2 years
57. Who among the following holds office during the pleasure of the President?
(a) Governor
(b) Election Commissioner
(c) Speaker of Lok Sabha
(d) Prime Minister
58. Which of the following is not true regarding the payment of the emoluments of the President ?
(a) They can be reduced during a Financial Emergency.
(b) They are shown separately in the budget.
(c) They are charged on the Contigency Fund of India.
(d) They do not require any parliament sanction.
59. The total number of members nominated by the President to the Lok Sabha and the Rajya Sabha is
(a) 16
(b) 18
(c) 14
(d) 12
60. Which one of the following does not constitute the electoral college for electing the President of India?
(a) Elected members of Lok Sabha
(b) Elected members of the State Legislative Assembly.
(c) Elected members of the State Legislative Council
(d) Elected members of Rajya Sabha
61. The council of Ministers in a Parliamentary type of Government can remain in office till it enjoys the support of the
(a) Majority of the nominated members of the Upper House of the Parliament
(b) Majority of the members of the Upper House of Parliament
(c) Majority of the nominated members of the Lower House
(d) Majority of the members of the Lower House of the Parliament
62. Which of the following appointments is not made by the President of India ?
(a) Chief of the Army
(b) Speaker of the Lok Sabha
(c) Chief Justice of India
(d) Chief of the Air Force
63. What was the reason given by America for imprisoning people at Guantanamo Bay?
(a) They had been caught spying.
(b) They were planning to kill the US President.
(c) They were planning to set up a Communist government in USA.
(d) America considered them as enemies and linked them to the attack on New York on 11th September, 2001.
64. Which body exposed to the world that prisoners at Guantanamo Bay were being tortured in ways that violated the US laws?
(a) United Nations
(b) International Court of Justice
(c) Amnesty International
(d) Supreme Court of USA
65. Which of these options is not correct regarding Saudi Arabian political system?
(a) The king selects the executive, legislature and judiciary
(b) Citizens cannot form political parties
(c) There is no freedom of religion
(d) None of the above
66. What is the position of women in Saudi Arabia?
(a) Women are given all the rights
(b) Women are given equal status with men
(c) Women are subjected to many public restrictions
(d) They are offered high positions
67. Of which country was Kosovo a province before its split?
(a) USSR
(b) Yugoslavia
(c) South Africa
(d) Germany
68. What was Milosevic's attitude towards the Albanians?
(a) His government was hostile to the Kosovo Albanians
(b) He wanted to bring equality between Serbs and Albanians
(c) He wanted Serbs to dominate the Albanians
(d) Both (a) and (c)
69. How was the massacre of Albanians finally stopped?
(a) The UN ordered for Milosevic's arrest
(b) Several countries intervened to stop the massacre
(c) The Serbs turned against Milosevic
(d) Milosevic reformed himself
70. What was the result of the intervention of other countries to stop the killings of Albanians?
(a) Milosevic lost power and was tried for crimes against humanity
(b) The other countries were punished by UNO for interfering in another country
(c) Led to further army action by Milosevic
(d) None of the above
71. Mc Mohan Line is the line forming the border between
(a) India and China
(b) India and Pakistan
(c) India and Nepal
(d) India and Bhutan
72. IST is ----- ahead of GMT
(a) 5 h 30 min
(b) 4 h 30 min
(c) 6 h 45 min
(d) 5 h 45 min
73. IST is
(a) A uniform time adopted by all places in India
(b) The difference in time between two states
(c) The difference in time between two places
(d) The difference in time between two countries
74. At Greenwich the time is 12 noon Thursday, the IST is
(a) $5.30 \mathrm{p} . \mathrm{m}$.
(b) $6.30 \mathrm{a} . \mathrm{m}$.
(c) 3 p.m.
(d) $6.30 \mathrm{p} . \mathrm{m}$.
75. Indian climate is an example of
(a) Equatorial
(b) Tropical Monsoon
(c) Mediterranean
(d) Sub-Tropical
76. New Moore island is located in
(a) Indian Ocean
(b) Arabian Sea
(c) Bay of Bengal
(d) Palk Strait
77. The strait located between Sri Lanka and India is
(a) Cook Strait
(b) Strait of Malacca
(c) Palk Strait
(d) Strait of Gibraltar
78. Which parallel of latitude divides India into almost two equal parts?
(a) Equator
(b) Tropic of Cancer
(c) Tropic of Capricorn
(d) Arctic Circle
79. In which of the following water bodies are Lakshadweep islands situated?
(a) Arabian Sea
(b) Bay of Bengal
(c) Indian Ocean
(d) Atlantic Ocean
80. How much of the total geographical area of world does India account for?
(a) $32.8 \%$
(b) $2.5 \%$
(c) $2.4 \%$
(d) $10.0 \%$
81. At which parallel of latitude does India begin to taper towards south?
(a) $23^{\circ} 30^{\prime} \mathrm{N}$
(b) $22^{\circ} \mathrm{N}$
(c) $8^{\circ} 4^{\prime} \mathrm{N}$
(d) $68^{\circ} 7^{\prime} \mathrm{E}$
82. With which country does India share its northern boundary?
(a) Myanmar
(b) Bangladesh
(c) China
(d) Pakistan
83. How does India stand apart from the rest of Asia?
(a) Because of being separated from rest of Asia by the Himalayas
(b) Because of its peninsular situation
(c) Because of being situated in the south
(d) Because of the Western and Eastern Ghats
84. How did spices, muslin and other merchandise were taken from India to different countries in ancient times?
(a) Through Sea
(b) Through routes passing through passes in the mountains of the north
(c) Through air
(d) Through none of the above
85. How does India occupy an important strategic position in South Asia?
(a) Due to being situated on the head of the Indian Ocean
(b) Due to being situated in South Asia
(c) Due to an independent country
(d) Due to being a peninsula
86. Consider the following statements and identify the right ones:
I. The peninsular block is rigid and stable in its geological structure.
II. The Himalayas are young, weak and flexible in its geological structure.
(a) I only
(b) II only
(c) Both
(d) None
87. The origin of Himalayas can best be explained by
(a) Continental Drift Theory
(b) Ocean Floor Mapping
(c) Sea Floor Spreading
(d) Theory of Plate Tectonics
88. Consider the following statements about Himalayas and identify the right ones.
I. They act as a climate divide.
II. They do not play an important role in the phenomenon of Monsoon rainfall in Indian Sub continent.
(a) I only
(b) II only
(c) Both
(d) None
89. Arrange the following Himalayan sub-divisions from west to east
I. Kashmir Himalayas
II. Himachal Himalayas
III. Darjeeling Himalayas
IV. Arunachal Himalayas
(a) I, II, III, IV
(b) IV, III, II, I
(c) I, II, IV, III
(d) II, III, IV, I
90. Consider the following statements and identify the right ones:
I. The Greater Himalayas are known for their profound continuity
II. The Lesser Himalayas are characterized by their broadness and longitudinal valleys.
III. The Shiwalik is the outer Himalayas which is youngest in the origin.
(a) I and II only
(b) II and III only
(c) None
(d) All
91. Match the following passes and mountain ranges.
I. Zoji La ---------- A. Pir Panjal
II. Photu la
B. Ladakh
III. Banihal
C. Great Himalayas
IV. Khardung la D. Zaskar
(a) IA, IIB, IIIC, IVD
(b) IC, IID, IIIA, IVB
(c) IB, IIC, IIID, IVA
(d) ID, IIA, IIIB, IVC
92. What are the suitable conditions for tea plantations which is prevalent in Darjeeling Himalayas?
I. Moderate Slope
II. Thick soil cover
III. High Rainfall
IV. Adequate sunshine
(a) I, II and IV only
(b) All
(c) I and II only
(d) I, II and III only

## ANSWER KEY

| 1. b | 2. c | 3. a | 4. b | 5. c | 6. d | 7. c |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 8. c | 9. d | 10. c | 11. a | 12. b | 13. c | 14. a |
| 15. b | 16. c | 17. c | 18. b | 19.c | 20. d | 21. a |
| 22. d | 23. a | 24. c | 25. a | 26. b | 27. a | 28. a |
| 29. d | 30. b | 31. b | 32. b | 33. d | 34. c | 35. d |
| 36. a | 37. c | 38. b | 39. c | 40. a | 41. c | 42. a |
| 43. a | 44. c | 45. c | 46. c | 47. d | 48. b | 49. d |
| 50. c | 51. d | 52. c | 53. b | 54. d | 55. b | 56. a |
| 57. a | 58. a | 59. a | 60. a | 61. b | 62. c | 63. c |
| 64. b | 65. a | 66. c | 67. b | 68. c | 69. a | 70. b |
| 71. a | 72. c | 73. d | 74. a | 75. a | 76. d | 77. b |

78. a

## GENERAL KNOWLEDGE

## SYLLABUS

1. Religion and Mythology
2. Literature
3. Famous Personalities
4. Awards
5. Sports and Games
6. Entertainment
7. Inventions
8. Abbreviations
9. Current Affairs
10. Health Issues
11. Who was the Guru of Sikh Community started Khalsa Brotherhood
a) Guru Ramdas
b) Guru Angad
c) Guru Tegh Bahadur
d) Guru Govind Singh
12. Angkor Wat is the worlds largest temple located in
a) India
b) Cambodia
c) Myanmar
d) Nepal
13. Famous Sufi saint Hazrat Nizamuddin Auliya in Delhi was at the period of?
a) Bahadur Shah
b) Aurangazeb
c) Babar
d) Akbar
14. One of the incarnations of Vishnu is represented in art as raising the Earth from the Ocean. Identifyhim from the given options
a) Kurma
b) Matsya
c) Narsingha
d) Varaha
15. The Commemoration of Mahatma Gandhi's return from South Africa to India is being celebrated as $\qquad$
a) Pravasi Bharatiya Divas
b) Anivasi Bharatiya Divas
c) Videshiya Bharatiya Divas
d) Swadeshi Bharatiya Divas
16. Amir Amanullah Khan Award the Afghani highest civilian honour was conferred on?
a) Mrs Arundhati Bhattacharya
b) Mr. Narendra Modi
c) Mr Pranab Mukherjee
d) Mr Hamid Ansari
17. Which of these derives its name from a river in the Democratic Republic of Congo?
a) Chikungunia virus
b) Lassa fever
c) Ebola virus
d) Salmonella bacteria
18. Boxing Champion Mohammad Ali Passed away he belongs to
a) Iran
b) US
c) UK
d) India
19. FIFA World Cup 2018 will be hosted by
a) Qatar
b) Japan
c) Brazil
d) Russia
20. Which of the following IPL team did not exist in the 2016 series
a) Chennai Super Kings
b) Gujarat Lions
c) Royal Challengers Bengaluru
d) Sunrisers Hyderabad
21. Silent Valley National Park is in
a) Uttarakhand
b) Tamil Nadu
c) Kerala
d) Madhya Pradesh
22. Azlan Shah Cup is associated with $\qquad$
a) Football
b) Hockey
c) Cricket
d) Badminton
23. If US is the Largest oil consumer then Indian Position is?
a) Second
b) Third
c) Fourth
d) Fifth
24. The Telecommunication regulator in India is
a) TRAI
b) BSNL
c) VSNL
d) MTNL
25. Apart from India, in which of the following two countries, Tamil is an official language?
a) Mauritius and Malaysia
b) Malaysia and Indonesia
c) Sri Lanka and Singapore
d) Sri Lanka and Mauritius
26. The famous "Ganga Sagar Mela", an annual fair is held in which state of India?
a) Uttar Pradesh
b) West Bengal
c) Bihar
d) Jharkhand
27. Arundhati Roy is the author of
a) God ofSmall Things
b) God ofGreat Wonders
c) God of Poor People
d) God of Sinners
28. Television was invented by
a) Mac Millan
b) Edison
c) John Bird
d) A Graham Bell
29. Wheeler Island where missiles and satellites are launched was renamed after a legend
a) Prof Satish Dhawan
b) Vikram Sarabhai
c) Dr AP J Abdul Kalam
d) H J Bhaba
30. Which of these banks are not a subsidiary to State Bank Of India?
a) State Bank of Mysore
b) State Bank of Bikaner and Jaipur
c) State Bank of Patiala
d) State Bank of Saurashtra
31. Grand Central Terminal, Park Avenue, New York is the world's
a) largest railway station
b) highest railway station
c) longest railway station
d) None of the above
32. Which Indian City has adopted Gangetic Dolphin as City animal
a) Guwahati
b) Patna
c) Agra
d) Jaipur
33. Eritrea, which became the 182 nd member of the UN in 1993, is in the continent of
a) Asia
b) Africa
c) Europe
d) Australia
34. Choose the Correct ones of State and Wild life sanctuaries
a) Garampani : Gujarat
b) Ranthambore : Rajasthan
c) Girnar: Maharastra
d) Bandipura : Jammu and Kashmir
35. For which of the following disciplines is Nobel Prize awarded?
a) Physics and Chemistry
b) Physiology or Medicine
c) Literature, Peace and Economics
d) All of the above
36. Expand the popular Inerternational organisation in News - BRICS Nations
a) Brazil Russia Iran Canada Switzerland
b) Brazil Russia India China South Africa
c) Brazil Russia Iraq Canada Switzerland
d) Brazil Russia India Canada South Africa
37. SEZ stands for
a) Special Electricity Zone
b) Special Economic Zone
c) Socio Economic Zone
d) None of these
38. Fastest shorthand writer was
a) Dr. G. D. Bist
b) J.R.D. Tata
c) J.M. Tagore
d) Khudada Khan
39. Epsom (England) is the place associated with
a) Horse racing
b) Polo
c) Shooting
d) Snooker
40. First human heart transplant operation conducted by Dr. Christian Bernard on Louis Washkansky, was conducted in
a) 1967
b) 1968
c) 1958
d) 1922

31 Galileo was an Italian astronomer who
a) Developed the telescope
b) Discovered four satellites of Jupiter
c) Discovered that the movement of pendulum produces a regular time measurement
d) All of the above
32. Where is the Headquarters of Amnesty International an International Human Rights Watchdog
a) NewYork
b) Paris
c) London
d) Geneva
33. India is Not a member of
a) BRICS
b) G 20
c) SAARC
d) G 8
34. Golf player Vijay Singh belongs to which country?
a) USA
b) Fiji
c) India
d) UK
35. Guarantee to an exporter that the importer of his goods will pay immediately for the goods ordered by him, is known as
a) Letter of Credit (L/C)
b) Laissezfaire
c) Inflation
d) None of the above
36. Which of the following countries do not have bus survices from India.
a) Myanmar
b) Pakistan
c) Nepal
d) All of the above
37. Gulf cooperation council was originally formed by
a) Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and United Arab Emirates
b) Second World Nations
c) Third World Nations
d) Fourth World Nations
38. Lipu - Lekh-La (Pass) is a tri junction of India and
a) China and Nepal
b) China and Tibet
c) China and Pakistan
d) Bhutan and Nepal
39. Dumping is
a) Selling of goods abroad at a price well below the production cost at the home market price
b) The process by which the supply of a manufacture's product remains low in the domestic market, which batches him better price
c) Prohibited by regulations of GATT
d) All of the above
40. The Grand Old Man of India was
a) LalBahadur Shastri
b) Rash Behari Bose
c) Dada Bhai Naoroji
d) Sardar Patel
41. Federation Cup, World Cup, Allwyn International Trophy and Challenge Cup are awarded to winners of
a) Tennis
b) Volleyball
c) Basketball
d) Cricket
42. Which is the oldest paramilitary force in the country?
a) Assam Rifles
b) Coast Guard
c) Border Security Force
d) The Rashtriya Rifles
43. Which Academy develops and promotes literature of all scheduled languages in India?
a) Sangeet Academy
b) Sahitya Academy
c) Lalit Kala Academy
d) Sandesha Academy
44. Who scored the fastest centuary in ODI cricket
a) Shahid Afridi
b) Correy Anderson
c) A.B. Devilliers
d) Chris Gayle
45. Which of the Indian languages given below belongs to Dravidian family
a) Konkani
b) Punjabi
c) Hindi
d) Malayalam
46. Victoria Falls is located between which of the two countries
a) Senegal \& Botswana
b) Zambia \& Zimbabwe
c) Ethiopia \& Kenya
d) Tanzania \& Kenya
47. Where is Sistine Chapel a world famous for its unique paintings by Michealangelo
a) San Marino
b) Italy
c) Vatican
d) Russia
48. Who is the father of Geometry
a) Aristotle
b) Euclid
c) Pythagoras
d) Kepler
49. What is common between Kutty, Shankar, Laxman and Sudhir Dar?
a) Film Direction
b) Drawing Cartoons
c) Instrumental Music
d) Classical Dance
50. Who was known as Iron man of India?
a) Govind Ballabh Pant
b) Jawaharlal Nehru
c) Subhash Chandra Bose
d) Sardar Vallabhbhai Patel
51. The Indian to beat the computers in mathematical wizardry is
a) Ramanujam
b) Rina Panigrahi
c) Raja Ramanna
d) Shakunthala Devi
52. Jude Felix is a famous Indian player in which of these games ?
a) Volleyball
b) Tennis
c) Football
d) Hockey
53. Who invented the BALLPOINT PEN?
a) Biro Brothers
b) Waterman Brothers
c) Bicc Brothers
d) Wright Brothers
54. A bird that can run fast but cannot fly it is $\qquad$
a) Ostrich
b) Peacock
c) Penguin
d) All of these
55. What J. B. Dunlop invented?
a) Pneumatic rubber tire
b) Automobile wheel rim
c) Rubber boot
d) Model airplanes
56. Which scientist discovered the radioactive element radium?
a) Isaac Newton
b) Albert Einstein
c) Benjamin Franklin
d) Marie Curie
57. The Fuel used in nuclear reactor is
a) Petroleum
b) Coal
c) Uranium
d) All of these
58. What is the name of the CalTech seismologist who invented the scale used to measure the magnitude of earthquakes?
a) Charles Richter
b) Hiram Walker
c) Giuseppe Mercalli
d) Joshua Rumble
59. What Galileo invented?
a) Barometer
b) Pendulum clock
c) Microscope
d) Thermometer
60. This statesman, politican, scholar, inventor, and one of early presidents of USA invented the swivel chair, the spherical sundial, the moldboard plow, and the cipher wheel.
a) George Washington
b) Alexander Hamilton
c) John Adams
d) Thomas Jefferson
61. Pulitzer Prize is awarded for the achievement in the field of
a) Literature and Music
b) Philateal
c) Dance and Arts
d) All of these
62. Which is the Mecca of Indian Football?
a) Kolkata
b) Mumbai
c) Guwahati
d) Lucknow
63. Who among the military personals is not a five star officers
a) Field Marshal Gen Manekshaw
b) Field Marshal Gen Cariappa
c) General Thimmayya
d) Marshal of Air Force Arjan Singh
64. Choose the incorrect pair with respect to champions and sports
a) Gagan Narang : Archery
b) Suranjoy Singh : Boxing
c) Ashwini Ponnappa : Badminton
d) Yogeshwar Dutt : Wrestling
65. Who invented the first mechanical calculator in 1624 ?
a) Charles Babbage
b) W. Schickard
c) John Napier
d) B. Pascal
66. Who wrote the famous book - 'We the people'?
a) T.N.Kaul
b) J.R.D. Tata
c) Khushwant Singh
d) Nani Palkhivala
67. Who is the author of the book 'Nineteen Eighty Four'?
a) Thomas Hardy
b) Emile Zola
c) George Orwell
d) Walter Scott
68. Which of the following is NOT written by Munshi Premchand?
a) Gaban
b) Godan
c) Guide
d) Manasorovar
69. Who is the author of the book 'Forbidden Verses'?
a) Salman Rushdie
b) Abu Nuwas
c) Ms. Taslima Nasrin
d) D.H. Lawrence
70. The lead character in the film 'The Bandit Queen' has been played by
a) Rupa Ganguly
b) Seema Biswas
c) Pratiba Sinha
d) Shabama Azmi
71. Which of the following books has been written by Vikram Seth?
a) My God Died Young
b) Islamic Bomb
c) Look Back in Anger
d) A Suitable Boy
72. Who wrote the line: 'A thing of beauty is a joy forever'?
a) John Keats
b) Robert Browing
c) P.B.Shelley
d) William Wordsworth
73. The Centre for Cellular and Molecular Biology is situated at
a) Patna
b) Jaipur
c) Hyderabad
d) New Delhi
74. The famous Dilwara Temples are situated in
a) Uttar Pradesh
b) Rajasthan
c) Maharashtra
d) Madhya Pradesh
75. Machu Picchu a world wonder is situated in $\qquad$
a) Cambodia
b) China
c) Peru
d) Brazil
76. Bijapur in Karnataka is known for its
a) Severe drought condition
b) GolGumbaz
c) Heavy rainfall
d) Statue of Gomateswara
77. Who among the following are not among the newly ecelcted Chief ministers in recently held state elections?
a) Jayalalithaa
b) Pinarayi Vijayan
c) Mamata Banerjee
d) Omman Chandy
78. Nico Rosberg is associated with which sports?
a) Tennis
b) Badminton
c) Billiards
d) Car Racing
79. Recently Jharsuguda Coal Mining was in the news in which state does this belong to
a) Jharkhand
b) Madhya Pradesh
c) Odisha
c) Chattisgarh
80. The languages having constitutional status under schedule VIII of Indian Constitution.

1. Hindi, Sanskrit, Bhojpuri
2. Hindi, Kannada, Malayalam
3. Konkani, Marathi, Punjabi
(a) 1 only
(b) $2 \& 3$
(c) $1 \& 2$
(d) All of these

## ANSWER KEY

| 1. d | 2. b | 3. d | 4. d | 5. a | 6. b | 7. c |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 8. b | 9. d | 10. a | 11. c | 12.b | 13. b | 14. a |
| 15. c | 16. b | 17. a | 18. c | 19.c | 20. d | 21. a |
| 22. b | 23. b | 24. b | 25. d | 26. b | 27. b | 28. a |
| 29. a | 30. a | 31. d | 32. c | 33. d | 34. b | 35. a |
| 36. a | 37. a | 38. a | 39. d | 40.c | 41. b | 42. a |
| 43. b | 44. c | 45. d | 46. b | 47. c | 48. b | 49. b |
| 50. d | 51. d | 52. d | 53. a | 54.a | 55. a | 56. d |
| 57. c | 58. a | 59. d | 60. d | 61.c | 62. a | 63. c |
| 64. a | 65. b | 66. d | 67. c | 68.c | 69. b | 70. b |
| 71. d | 72. a | 73. c | 74. b | 75.c | 76. b | 77. d |
| 78. d | 79. c | 80. b |  |  |  |  |

## PART B (SUBJECTIVE TYPE) <br> ESSAY WRITING

## Instructions :

* Students are required to write an essay on any ONE of the given topics
* Maximum word limit is 300 words
* Part B is considered only if you score $\mathbf{8 0 \%}$ and above in Part A Objective type
* Attempting Essay is compulsory failing which the answer sheet will not be considered for grading even if you score $100 \%$ in Part A
* Adequate space will be provided for Part B
* There is no provision of Extra Sheet so please complete the essay in the space given to you


## Topics

1. Write an essay on HIV/AIDS, its causes and various measures in its prevention.
2. Write an essay on climate change and bring out the preparedness to save the Earth
3. Write an essay on the health issues like obesity, BP, Diabetics among young people in this era of fast food
4. Write an essay on growing menace of alchohol consumption and its adverse effects
5. Write an essay on Tuberculosis prevention and treatment
6. How can we help people affected bycommunicable diseasess like TB, AIDS, Leprosy etc to have a life of dignity and social acceptance

## KNEUS SCHOLASTIC APTITUDE TEST CLASS X Model Question Paper

## Kindly follow the instructions

- Verify your Roll Number, School Code and other details before you start answering
- This question paper contains $\mathbf{1 0 0}$ questions in Part A. Each question is followed by a series of choices or possible answers. Choose any one option which you feel is correct.
- All questions carry equal marks. There is no negative marking for wrong answers.
- There is a essay writing in Part B. No evaluation will be made if Part B is unattempted.

Thus Both the sections are to be compulsorily attempted.However part B is considered only when a student secures more than $90 \%$ in Part A Objective type

- Try to answer every question. Your test score will be based on the number of questions you answer correctly.
- Please attempt Part B in the space provided in the test booklet or any other medium which is specified
- use either blue or black pen for shading the OMR.
- Please do not mark anything on the OMR sheet other than shading portion to mark your answers
- shade only one answer for each question. Double shading are scored as wrong answers.
- Keep your answer sheets on a hard surface while answering. Do not fold or crease your answer sheet.
- Do not scribble on the answer book.
- For rough work use the plain sheet given at the end of the book.
- When you finish your test, iftime permits, you may re check your work.


## Sample Procedure for answering the question

Who is remembered as the missile man of India?
A. Mr. Narendra Modi
B. Dr. Manmohan Singh
C. Dr. Pranab Mukherjee
D. Smt Pratibha Patil
E. Dr. APJ Abdul Kalam

Correct Way
Don't do this way
[A] [B] [C] [D] [ E ]

| $[\mathrm{A}]$ | $[\mathrm{B}]$ | $[\mathrm{C}]$ | $[\mathrm{D}]$ | $[\mathrm{E}]$ |
| :---: | :---: | :---: | :---: | :---: |
| $[\mathrm{A}]$ | $[\mathrm{B}]$ | $[\mathrm{C}]$ | $[\mathrm{D}]$ | $[\mathrm{X}]$ |
| $[\mathrm{A}]$ | $[\mathrm{B}]$ | $[\mathrm{C}]$ | $[\mathrm{D}]$ | $[\mathrm{B}]$ |

## PART A (OBJECTIVE TYPE)

## Read the passage given below carefully. Read the questions given below and write the option you consider the most appropriate

The idea of euthanasia, of hastening the death of someone from motives of compassion, covers two main situations. The first is where someone is close to death and can be kept alive briefly, with intensive medical care. The official reason for the use of every possible technique on pa tients, for whom there seems no hope, is that we never know that there is no hope of at least a brief recovery.
The second situation, in which it is proposed to end the life of someone who is not expected to die at once from natural causes, is more morally doubtful. In so far as the suggestion may be based on the notion of the 'quality of life' experienced by the patient, this is an inadequate approach to human beings. At one extreme we may be dealing with a birth that cannot be called 'human' at all: such a being likely to live at the most for only a few hours. Many feel that during this time it ought to be given ordinary nursing care. Bringing to an end of the life of say, a spastic child, by the deliberate refusal of the fullest medical care seems morally indefensible.

1. Euthanasia means
a) a place in Asia
b) bringing about gentle and easy death
c) enthusiasm
d) the youth in Asia
(e) feeling sympathy
2. One reason for trying all possible measures to save a person is
a) death is horrifying
b) there is possibility of recovery
c) doctors need to be compassionate
d) science may invent more sophisticated machines later
(e) to have a long life

Read the passage given below carefully. Read the questions given below and write the option you consider the most appropriate

## Cricket is a game

From which players get fame.
Some people watching are tense,
When they see the opposition hit the ball to the fence.
Some people buy tickets,
To watch the bowlers take wickets.

There is a batsman who works hard to concentrate,
While the bowler tries hard to frustrate him.
There is an umpire, who always makes the right decision,
To help the players who are out to accomplish a mission.
But these days there is a lot of chaos in cricket,
Because the players play badly deliberately on the wicket.

I hope cricket is played sincerely,
So that everyone can enjoy it happily.
3. The poet feels that there is chaos in cricket because
a) the wickets are of a poor quality.
b) the players intentionally play a bad game.
c) the players are troubled by the spectators.
d) the players run into the pitch and break the wickets.
(e) the players are very aggressive these days
4. The poem ends with
a) a request to restore fame to the game by playing with loyalty.
b) anger at the stupidity of the game.
c) happiness at the change in the people towards cricket.
d) a feeling of indifference to the game.
(e) mourning the death of cricket

Choose the correct word for the following statements (one word substitutes)
5. One who does not make mistakes
a) Gullible
b) Bibliophile
c) Anarchist
d) Infallible
(e) paedofile
6. A government by officials
a) Democracy
b) Aristocracy
c) Bureaucracy
d) Monarchy
(e) anarchy
7. A life history written by oneself.
a) Autobiography
b) Biography
c) Neophyte
d) Immigrant
(e) bibliography

## Choose the correct word for the following statements

8. One who eats too much
a) Mutton
b) Bomoo
c) Glutton
d) Alien
(e) lusty
9. Not able to pay one's debt
a) Solvent
b) Insolvent
c) Creditor
d) Insane
(e) cheater

## Fill in the blanks with the proper tense or form of the verb given in brackets :-

10. Our examination $\qquad$ on 4th March .[ begin ]
a) has begun
b) is beginning
c) begins
d) began
(e) begun
11. After he ---------------- the roof ------------- [ leave, collapse ]
a) left, collapsed
b) has left, collapsed c) left, had collapsed d) had left, collapsed
e) leave, collapsed

Fill in the blanks with the proper tense or form of the verb given in brackets :-
12. He $\qquad$ to my house to tell me what $\qquad$ [ come, happen ]
a) came, happened
b) comes, happens
c) came, had happened
d) had come, happened
e) come, happened

Choose the correct forms of passive / active to complete the sentences.
13. It ---- that the victim ---- with poison.
a) was thought / had been killed
b) thought / had been killed
c) is thought / has killed
d) is thought / must killed
e) was thought, had killed

Choose the correct forms of passive / active to complete the sentences.
14. Look at Susan's fair hair. She has had it ---- .
a) dyed
b) to be dyed
c) to dye
d) being dyed
e) died

## Fill in the blanks with correct conjunctions

15. ---- museums, libraries and archives are cultural institutions, they should ensure that their collections are built up in accordance with universally recognized moral principles.
a) In view of
b) In order to
c) As if
d) Considering that
e) As a result

Fill in the blanks with correct conjunctions
16. Businesses are failing ---- a lack of trained workers and people to buy products.
a) that's why
b) in addition
c) because of
d) in spite of
e) like

## Choose the appropriate preposition to complete the sentences

17. I'm going to meet my friends, ---- Times Square tonight.
a) on
b) at
c) in
d) over
e) by

Choose the appropriate preposition to complete the sentences
18. See you ---- Monday morning.
a) under
b) at
c) in
d) on
e) around

## Complete the sentences with the most appropriate phrasal verbs.

19. You'd better ---- your cigarette as it is extremely dangerous to smoke in a petrol station.
a) pull through
b) get through
d) hang up
d) put out
e) put down

## Complete the sentences with the most appropriate phrasal verbs.

20. I find it hard to ---- with the other students in the Italian class as they have been attending the classes more regularly than I do.
a) fall through
b) call in
c) do away
d) catch up
e) catch on
21. The value of $1+\frac{2}{1+\frac{3}{2-\frac{1}{1+\frac{1}{2}}}}$ is :
(a) $13 / 21$
(b) $21 / 23$
(c) $13 / 4$
(d) $12 / 13$
(e) none of these
22. If cost price of 24 pens and selling price of 18 pens are equal then the profit percent is :
(a) $25 \%$
(b) $20 \%$
(c) $15 \%$
(d) $33 \frac{1}{3} \%$
(e) $23 \%$
23. If cost price of 24 pens and selling price of 18 pens are equal then the profit percent is :
(a) $25 \%$
(b) $20 \%$
(c) $15 \%$
(d) $33 \frac{1}{3} \%$
(e) $27 \%$
24. 'A' can do three fifth part of his work in a day then in how many days he will complete his remaining work.
(a) $2 / 3$ days
(b) $5 / 3$ days
(c) $2 / 5$ days
(d) 3/4 days
(e) $1 / 5$ days
25. 120 people can do a piece of work in 15 days. How many can do the same work in 10 days.
(a) 150
(b) 180
(c) 200
(d) 210
(e) 270
26. To cover a certain distance a person takes 1 hour, if he reduces his speed to $\frac{2}{3}$ of his normal speed. How long he will take to cover the same distance.
(a) 2 h
(b) 1 h
(c) 3 h
(d) 1.5 h
(e) 2.5 h
27. If $\sqrt{1+\frac{25}{144}}=1+\frac{x}{12}$, then value of $x$ is :
(a) 1
(b) 2
(c) 5
(d) 9
(e) 3
28. The value $\frac{2^{n+4}-2.2^{n}}{2.2^{n+3}}+2^{-3}$ is :
(a) $2^{n+1}$
(b) $\quad-2^{n+1}+\frac{1}{8}$
(c) $\frac{9}{8}-2^{n}$
(d) 1
(e) 0
29. If $a^{x}=b^{y}=c^{2}$ and $b^{2}=a c$, then $y$ is equal to :
(a) $\frac{x z}{x+z}$
(b) $\frac{x z}{2(x-z)}$
(c) $\frac{x z}{2(z-x)}$
(d) $\frac{2 x z}{x+2}$
(e) $\frac{2 x}{2 x+z}$
30. On what sum of money will compound interest for 2 years at $5 \%$ p.a. amounts to Rs. 164.
(a) Rs. 2,000
(b) Rs. 1,600
(c) Rs. 2,400
(d) Rs. 2,100
(e) Rs. 1,900
31. If $a^{2}-5 a+1=0$, then value of $a^{2}+\frac{1}{a^{2}}$ is :
(a) 21
(b) 25
(c) 0
(d) 23
(e) 27
32. The factors of $a^{2}+\frac{1}{a^{2}}-18$ are :
(a) $\left(a-\frac{1}{a}+4\right)\left(a+\frac{1}{a}+4\right)$
(b) $\left(a-\frac{1}{a}+4\right)\left(a-\frac{1}{a}-4\right)$
(c) $\left(a+\frac{1}{a}-\sqrt{18}\right)\left(a+\frac{1}{a}+\sqrt{18}\right)$
(d) $\left(a+\frac{1}{a}+2\right)\left(a-\frac{1}{a}\right)$
(e) None of these
33. Sum of two digit number and number obtained on reversing the digits is 165 . If digit differ by 3 , find the number :
(a) 52
(b) 96
(c) 25
(d) 74
(e) 102
34. If $a=b^{2 x}, b=c^{2 y}$ and $c=a^{2 z}$, the value of $8 x y z$ is :
(a) 0
(b) 2
(c) 1
(d) 4
(e) None of these
35. In triangle $\mathrm{ABC}, 2\left(\angle \mathrm{~A}-20^{\circ}\right)=\left(\angle \mathrm{B}+10^{\circ}\right)=2\left(\angle \mathrm{C}-10^{\circ}\right)$. the value of $\angle \mathrm{C}$ is :
(a) $60^{\circ}$
(b) $70^{\circ}$ In diagram
(c) $50^{\circ}$
(d) $80^{\circ}$
(e) None of these
36. Value ' $b$ ' is :

(a) $36^{\circ}$
(b) $32^{\circ}$
(c) $68^{\circ}$
(d) $60^{\circ}$
(e) $75^{\circ}$
37. A map of building is drawn of a scale of $1: 200$. If surface area of model is 5 cms , then the surface area of building should be :
(a) $20 \mathrm{~m}^{2}$
(b) $25 \mathrm{~m}^{2}$
(c) $10 \mathrm{~m}^{2}$
(d) 200 m
(e) $150 \mathrm{~m}^{2}$
38. The mean of 15 observation is 200 , if one observation is excluded. Then new mean is 198 . The value of excluded observation be :
(a) 220
(b) 228
(c) 230
(d) 250
(e) 180
39. A circular wheel of radius 28 cm makes 300 revolutions per minutes. Then speed of wheel is :
(a) $31.68 \mathrm{~km} /$ hour
(b) $25 \mathrm{~km} /$ hour
(c) $40 \mathrm{~km} /$ hour
(d) $28 \mathrm{~km} / \mathrm{hour}$
(e) $27 \mathrm{~km} /$ hour
40. If $13 \operatorname{Sin} \mathrm{~A}=12$, then value of $\operatorname{Sec} \mathrm{A}-\operatorname{Tan} \mathrm{A}$ is :
(a) 5
(b) 1
(c) $1 / 5$
(d) 12
(e) 0
41. S.I. Unit of retardation is :
(a) $\mathrm{m} \mathrm{sec}^{-2}$
(b) $\mathrm{kg} \mathrm{sec}^{-1}$
(c) $\mathrm{ms}^{-1}$
(d) m
(e) Newton
42. Pressure $P_{1}$ at certain depth in river water and $P_{2}$ at same depth in sea water are related as
(a) $P_{1}>P_{2}$
(b) $\mathrm{P}_{1}=\mathrm{P}_{2}$
(c) $\mathrm{P}_{1}<\mathrm{P}_{2}$
(d) $\mathrm{P}_{1}-\mathrm{P}_{2}=\mathrm{atm}$ pressure
(e) $\mathrm{P}_{1}-\mathrm{P}_{2}=0$
43. Unit of relative density is :
(a) $\mathrm{g} \mathrm{cm}^{-3}$
(b) $\mathrm{kg} \mathrm{m}^{-3}$
(c) $\mathrm{m}^{3} \mathrm{~kg}^{-1}$
(d) All the three
(e) None of these
44. Real and enlarged image can be formed/obtained by using :
(a) Convex mirror
(b) Concave mirror
(c) Plane mirror
(d) Either convex or plane mirror
(e) Either concave or plane mirror
45. On increasing resistance in circuit, current in it :
(a) Decreases
(b) Increases
(c) Remain Unchanged
(d) Nothing can be said
(e) First increases then decreases
46. When a solid melts, its temperature remains the same because of :
(a) Interparticle force
(b) Interparticle space
(c) Latent heat of fusion
(d) Latent heat of vaporisation
(e) None of these
47. The state of matter with maximum interparticle force of attraction.
(a) Solid
(b) Liquid
(c) Plasma
(d) Gas
(e) Bose - Einstein Condensation state
48. Which among the following is an emulsion :
(a) Mud
(b) Face cream
(c) Smoke
(d) Mist
(e) Air
49. Boiling point of oxygen is :
(a) $-183^{\circ} \mathrm{C}$
(b) $-186^{\circ} \mathrm{C}$
(c) $-138^{\circ} \mathrm{C}$
(d) $-168^{\circ} \mathrm{C}$
(e) $-170^{\circ} \mathrm{C}$
50. Which among the following metals is monovalent :
(a) Sodium
(b) Magnesium
(c) Iron
(d) Calcium
(e) Aluminium
51. Formula for sodium sulphate is :
(a) $\mathrm{NaSO}_{4}$
(b) $\mathrm{Na}_{2} \mathrm{SO}_{4}$
(c) $\mathrm{P}_{2} \mathrm{SO}_{4}$
(d) $\mathrm{KSO}_{4}$
(e) $\mathrm{Na}_{2} \mathrm{CO}_{3}$
52. What is found inside a seed ?
(a) Stored food
(b) A flower and little leaves
(c) Smaller seeds
(d) Pollen
(e) Glucose
53. Glycolysis is a process :
(a) In which glycogen is broken down into glucose
(b) Which occurs in mitochondria
(c) In which glucose is broken down into pyruvate
(d) That occurs next to krebs cycle
(e) Glucose is changed to fat
54. Poultry products are a rich source of :
(a) Sugar
(b) Animal Proteins
(c) Plant Proteins
(d) Carbohydrates
(e) Minerals
55. The two cell organelles that contain their own genetic material are :
(a) mitochondria and Plastids
(b) Mitochondria and Golgi Apparatus
(c) Mitochondria and Lysosomes
(d) Mitochondria and Ribosomes
(e) Lysosomes and Ribosomes
56. Which of the following is called the complete food ?
(a) Cereal
(b) Milk
(c) Vegetable
(d) Chapati
(e) Meat
57. Gastric juice contains :
(a) HCl and pepsin
(b) Trypsin and HCl
(c) Pepsin and Trypsin
(d) Amylopsin and Pepsin
(e) $\mathrm{H}_{2} \mathrm{SO}_{4}$
58. Phloem does not consist of which of the following :
(a) Tracheids
(b) Sieve tubes
(c) Parenchyma
(d) Companion cells
(e) Fibers
59. Which muscle type is moved voluntarily ?
(a) Cardiac
(b) Skeletal
(c) Smooth
(d) All of these
(e) None of these
60. DPT is a vaccine given to young babies to protect them from, which of the following, three diseases ?
(a) Dysentry, tetanus, polio
(b) Diarrhoea, tuberculosis, polio
(c) Diptheria, tetanus, pertussis
(d) dog-bite, pinworm, typloid
(e) None of the above
61. Which among the following were factors for growth of Modern Nationalism?
62. An understanding of contradiction between Indian and Colonial interest.
63. Western thought and Education
64. Role of Press and Literature
65. Benevolent Nature of British government
(a) All of the above
(b) 1, 2 and 3
(c) Only 4
(d) 1 and 4
(e) Only 1
66. Illbert Bill was brought up by:
(a) Lord Lytton
(b) Lord Ripon
(c) Lord Barlow
(d) Lord Canning
(e) Lord Mount Batten
67. Poona Sarvajanik Sabha was formed in the year:
(a) 1865
(b) 1866
(c) 1867
(d) 1868
(e) 1855
68. What did Mahatma Gandhi in his book, Hind Swaraj, declare?
(a) British ruled India because the latter was militarily weak
(b) British ruled India because Indians cooperated with them
(c) British ruled India because they got international support
(d) India should have only Hindus
(e) None of these
69. What led to the Civil Disobedience Movement?
(a) Arrival of the Simon Commission
(b) Working at the firm without payments
(c) Violation of Salt Tax by Gandhi
(d) Fall in demand for agricultural goods
(e) Jalianwala Bagh Massacre
70. Where did Gandhi go to study law?
(a) South Africa
(b) Russia
(c) United States
(d) England
(e) France
71. Where was Mahatma Gandhi born?
(a) West Bengal
(b) Maharashtra
(c) Gujarat
(d) Bihar
(e) Rajasthan
72. One factor that enabled the Renaissance to flourish in Northern Italy was that the region had
(a) A wealthy class that invested in the arts
(b) A socialist for of government
(c) Limited contact with the Byzantine Empire
(c) A shrinking middle class
(e) Lot of Christians
73. Martin Luther's Ninety-Five Theses were a call for
(a) Religious revolt against the German princes
(b) Reforms within the Roman Catholic Church
(c) Greater papal authority
(d) Crusades to spread Christianity
(e) Repentance
74. Which was a major result of the Protestant Reformation?
(a) New Christian denominations emerged
(b) Religious teachings were no longer allowed in the universities
(c) The Crusades were organized
(d) The power of the Pope was strengthened
(e) Many Churches were destroyed
75. The Governor of a State is appointed by the President on the advice of the
(a) Prime Minister
(b) Vice- President
(c) Chief Minister
(d) Chief Justice
(e) Leading political party
76. Which of the following is not true regarding the payment of the emoluments of the President?
(a) They can be reduced during a Financial Emergency.
(b) They are shown separately in the budget.
(c) They are charged on the Contigency Fund of India.
(d) They do not require any parliament sanction.
(e) None of the above
77. Which of the following appointments is not made by the President of India ?
(a) Chief of the Army
(b) Speaker of the Lok Sabha
(c) Chief Justice of India
(d) Chief of the Air Force
(e) Chief of Navy
78. What is the position of women in Saudi Arabia?
(a) Women are given all the rights
(b) Women are given equal status with men
(c) Women are subjected to many public restrictions
(d) They are offered high positions
(e) They have $33 \%$ reservations
79. What was the result of the intervention of other countries to stop the killings of Albanians?
(a) Milosevic lost power and was tried for crimes against humanity
(b) The other countries were punished by UNO for interfering in another country
(c) Led to further army action by Milosevic
(d) None of the above
(e) All the first three
80. At Greenwich the time is 12 noon Thursday, the IST is
(a) $5.30 \mathrm{p} . \mathrm{m}$.
(b) $6.30 \mathrm{a} . \mathrm{m}$.
(c) 3 p.m.
(d) $6.30 \mathrm{p} . \mathrm{m}$.
(e) 5.30 a.m.
81. Which parallel of latitude divides India into almost two equal parts?
(a) Equator
(b) Tropic of Cancer
(c) Tropic of Capricorn
(d) Arctic Circle
(e) Antartic Circle
82. With which country does India share its northern boundary?
(a) Myanmar
(b) Bangladesh
(c) China
(d) Pakistan
(e) Sri Lanka
83. Consider the following statements and identify the right ones:
I. The peninsular block is rigid and stable in its geological structure.
II. The Himalayas are young, weak and flexible in its geological structure.
(a) I only
(b) II only
(c) Both
(d) None
(e) Both are Partially True
84. Consider the following statements and identify the right ones:
I. The Greater Himalayas are known for their profound continuity
II. The Lesser Himalayas are characterized by their broadness and longitudinal valleys.
III. The Shiwalik is the outer Himalayas which is youngest in the origin.
(a) I and II only
(b) II and III only
(c) None
(d) All
(e) only III
85. The first death anniversary day of Sri Rajiv Gandhi was observed as the
a) National Integration Day
b) Peace and Love Day
c) Secularism Day
d) Anti-TerrorismDay
(e) Martyr's day
86. The Commemoration of Mahatma Gandhi's return from South Africa to India is being celebrated as $\qquad$
a) Pravasi Bharatiya Divas
b) Anivasi Bharatiya Divas
c) Videshiya Bharatiya Divas
d) Swadeshi Bharatiya Divas
(e) Gandhi - Mandela Divas
87. Union Government on 28 October 2014 has launched Vanbandhu Kalyan Yojana (VKY) for the welfare of?
a) Tribal Folk
b) Backward Castes
c) Labourers
d) Minorities
(e) Tigers
88. International Yoga Day was observed on
a) 21st May
b) 21st June
c) 21 st April
d) 21 st July
(e) 21st March
89. Who awarded the trophy to the Champion of ICC world cup 2015
a) Mr. Mustafa Kamal
b) Mr. N. Srinivasan
c) Mr. Sharad Pawar
d) Mr. Tony Abbot
e) Mr. Sachin Tendulkar
90. Who sang the patriotic song "Aye Mere Pyare Watan" of film Kabuliwala?
a) Hemant Kumar
b) Md. Rafi
c) Kishore Kumar
d) Manna Dey
e) Mukesh
91. For which of the following disciplines is Nobel Prize awarded?
a) Physics and Chemistry
b) Economics
c) Literature
d) Peace
e) All The above
92. First human heart transplant operation conducted by Dr. Christian Bernard on Louis Washkansky, was conducted in
a) 1967
b) 1968
c) 1958
d) 1922
e) 1965
93. Exposure to sunlight helps a person improve his health because
a) The infrared light kills bacteria in the body
b) Resistance power increases
c) The pigment cells in the skin get stimulated and produce a healthy tan
d) The ultraviolet rays convert skin oil into Vitamin D
e) It keeps him warm
94. Gulf cooperation council was originally formed by
a) Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and United Arab Emirates
b) Second World Nations
c) Third World Nations
d) Fourth World Nations
e) U.S. \& Gulf countries
95. The Grand Old Man of India was
a) Lal Bahadur Shastri
b) Rash Behari Bose
c) Dada Bhai Naoroji
d) Sardar Patel
e) Gopal Krishna Gokhale
96. Who scored the fastest centuary in ODI cricket
a) Shahid Afridi
b) Correy Anderson
c) A.B. Devilliers
d) Chris Gayle
e) Virender Sehwag
97. Who was known as Iron man of India?
a) Govind Ballabh Pant
b) Jawaharlal Nehru
c) Subhash Chandra Bose
d) Sardar Vallabhbhai Patel
e) Ratan Tata
98. What J. B. Dunlop invented?
a) Pneumatic rubber tire
b) Automobile wheel rim
c) Rubber boot
d) Model airplanes
e) Bicycle
99. Pulitzer Prize is awarded for the achievement in the field of
a) Literature and Music
b) Philanthropy
c) Dance and Arts
d) All of these
e) None of these
100. The prestigious Ramon Magsaysay Award was conferred was conferred upon Ms. Kiran Bedi for her excellent contribution to which of the following fields?
a) Literature
b) Community Welfare
c) Government Service
d) Journalism
e) Politics
101. Who is the author of the book 'Nineteen Eighty Four'?
a) Thomas Hardy
b) Emile Zola
c) George Orwell
d) Walter Scott
e) Charles Dickens
102. Which of the following books has been written by Vikram Seth?
a) My God Died Young
b) Islamic Bomb
c) Look Back in Anger
d) A Suitable Boy
e) God ofSmall Things
103. Pondichery Mahe and Yenem were the enclaves of
a) The British
b) The Portuguese
c) The French
d) The Dutch
e) The Germans
104. Recently Jharsuguda Coal Mining was in the news in which state does this belong to
a) Jharkhand
b) Madhya Pradesh
c) Odisha
c) Chattisgarh
e) Andhra Pradesh

## Part B (Subjective Type)

Essay Writing

## Instructions

* Essay Should be written in Ball point pen only either blue or black
* Essay should be written in the space provided

Select any one of the given topics and write without exceeding 300 words

1. Write an essay on HIV/AIDS, its causes and various measures in its prevention.
2. Write an essay on climate change and bring out the preparedness to save the Earth

Please use this speace for rough work

