

## MODEL QUESTIONS

### General Knowledge

#### For Open Quota & Departmental Candidates

#### PHYSICS

1. The speed of light through vacuum is ?
  - A.  $3 \times 10^8$  m/sec
  - B.  $3 \times 10^8$  Km/sec
  - C. 300 m/sec
  - D. 3000 m/sec
2. Power is generated in nuclear reactors using the principle of ?
  - A. Nuclear fission
  - B. Nuclear fusion
  - C. Uncontrolled chain reaction
  - D. None of the above
3. The communication through OPTICAL FIBER is based upon the phenomenon of ?
  - A. Reflection
  - B. Total Internal Reflection
  - C. Refraction
  - D. Interference
4. The heat of Sun reaches earth by way of?
  - A. Conduction
  - B. Convection
  - C. Radiation
  - D. None of the above
5. Which of the following is true?
  - A. Electron has no charge
  - B. Proton has negative charge
  - C. Neutron has positive charge
  - D. Proton has positive charge, electron has negative charge and neutron has no charge

6. In India, the voltage and frequency of the AC power used for domestic purpose is -

- A. 220 V, 50 Hz
- B. 110 V, 60 Hz
- C. 220 V, 60 Hz
- D. 110 V, 50 Hz

7. Boiling point of water is -

- A. 0° C
- B. 100° C
- C. 120° C
- D. 100° F

8. The name of the galaxy in which our earth is situated is -

- A. Andromeda
- B. The Milky way
- C. Triagulum
- D. None of the above

9. Renewable energy resources are -

- A. Coal, Solar & Wind
- B. Nuclear, Hydro electric, Tidal energy
- C. Solar, Hydro electric & wind
- D. Natural gas, wave & geo thermal

10. Rear view mirrors in vehicles are mostly -

- A. Concave Mirror
- B. Plane Mirror
- C. Convex Mirror
- D. None of the above

## CHEMISTRY

11. The number of elements known to us presently are -

- A. 92    B. 100    C. 118    D. 150

12. Chemical formula of Alcohol is -

- A.  $C_6H_6$     B.  $C_2H_5OH$     C.  $CH_4$     D.  $CH_3COOH$

13. pH value of pure water is -

- A. 1    B. 5    C. 7    D. 10

14. Brass is an alloy which consists of -

- A. Copper & Iron    B. Copper & tin  
C. Copper & Zinc    D. Aluminium & Copper

15. Bauxite is an ore of -

- A. Copper    B. Tin    C. Iron    D. Aluminium

## BIOLOGY

16. The heart of a healthy adult normally beats (at rest) :

- A. 120 times/minute      B. 72-75 times/minute  
C. 100 times/minute      D. 200 times/minute

17. Persons with what blood group can donate blood to persons with any blood group ?

- A. B group      B. AB group      C. A group      D. O group

18. Who gave the theory of survival of fittest or Natural selection?

- A. Charles Darwin      B. Ruther ford  
C. Pascal      D. Newton

19. Which of the following is not true for photosynthesis ?

- A. CO<sub>2</sub> is utilized by plants & O<sub>2</sub> is released  
B. Sun light is essential for photosynthesis  
C. Chlorophyll is required for photosynthesis  
D. CO<sub>2</sub> is emitted by plants during photosynthesis

20. The blood pressure of a healthy adult during normal resting condition is expressed as-

- A. 100      B. 120 mm/ 80mm Hg  
C. 150 mm/ 100mm Hg      D. 98.6°

21. Who is the father of Genetics ?

- A. Gregor Mendel      B. Charles Darwin  
C. Edward Jennar      D. Louis Pasteur

22. Which of the following diseases are caused by virus ?

- i. Small Pox
- ii. Polio
- iii. COVID -19
- iv. TB
- v. Cholera

A. iii ONLY      B. i,ii & iii      C. iv & v      D. iii, iv & v

### DIET & NUTRITION

23. Goitre is caused due to lack of \_\_\_\_\_ in the diet ?

A. Iodine      B. Iron      C. Sodium      D. Potassium

24. Soya bean is a highly rich source of ?

A. Protein      B. Fat      C. Carbohydrate      D. Vitamin C

25. Sunlight helps in production of \_\_\_\_\_ in the body ?

A. Vitamin A      B. Vitamin B      C. Vitamin C      D. Vitamin D

26. Anaemia is caused due to deficiency of ?

A. Calcium      B. Iron      C. Vitamin A      D. Protein

27. During digestion of food, the stomach produces which acid ?

A. Hydrochloric acid      B. Sulphuric acid  
B. Nitric acid      D. None of the above

## ENVIRONMENT AND ECOLOGY

28. The Green House gases are ?

- A. Carbon dioxide, Methane & CFC
- B. Sulphur dioxide
- C. Nitrogen
- D. Hydrogen & Helium

29. Ozone layer protects earth from

- A. Ultra Violet radiation from sun
- B. air pollution
- C. Infra red radiation
- D. Radiation from outer space

30. The aim of Chipko movement was

- A. To conserve water
- B. to protect & conserve trees
- C. to protect wildlife
- D. to protect old monuments of historical importance

## HISTORY

31. i) The first world war started in 1914 and ended in 1918  
ii) The second world war started in 1939 and ended in 1945

Which of the above statement/s is/are true ?

- A) i only                  B) ii Only                  C) i & ii both                  D) None of the above

32. Match the Social & Religious reform movements of the 19<sup>th</sup> century with their founders ?

- |                           |                            |
|---------------------------|----------------------------|
| i. Brahmo Samaj           | a. Swami Vivekananda       |
| ii. Arya Samaj            | b. Raja Ram Mohan Roy      |
| iii. Ramakrishan Mission  | c. Blavesky & Olcott       |
| iv. Theosophical Movement | d. Sami Dayanand Saraswati |

|   |   |    |     |    |
|---|---|----|-----|----|
|   | i | ii | iii | iv |
| A | a | b  | c   | d  |
| B | c | a  | d   | b  |
| C | b | d  | a   | c  |
| D | d | c  | a   | b  |

33. When did Vellore revolt take place?

- A) 1806                  B) 1857  
C) 1947                  D) 1757

34. Quit India Movement was launched in

- A) 1942                  B) 1945                  C) 1857                  D) 1947

35. The 'Noble eight fold path' is taught by ?

- A. Buddha
- B. Mahavira
- C. Lao-tze
- D. Confucius

36. Who built 'Red Fort' at New Delhi ?

- A. Akbar
- B. Shahjahan
- C. Aurangzeb
- D. Humayun

37. Brihadishvarar temple at Tanjavur was built by ?

- A. Chola Kings
- B. Pandaya Kings
- C. Pallava Kings
- D. Chera Kings

38. \_\_\_\_\_ led a massive campaign against Anti-Hindi agitation.

- A. E.V.R
- B. K. Kamaraj
- C. V.O.C
- D. Subramania Bharathi

39. Who organised and led a salt Satyagraha march to Vedaranyam ?

- A. Rukamani Lakshmi pathi
- B. V. Ramalingam
- C. Tirupur Kumaran
- D. Rajaji

40. Who painted world famous painting 'Mona Lisa' ?

- A. Leonardo da Vinci
- B. Michelangelo
- C. Raphael
- D. None of the above







## INDIAN POLITY

51. When did Indian Constitution come into force ?
- A) 15<sup>th</sup> August, 1947                      B) 26<sup>th</sup> January, 1947  
C) 15<sup>th</sup> August, 1950                      D) 26<sup>th</sup> January, 1950
52. Which agency is the guardian of the constitution ?
- A) Supreme Court of India                      B) High Courts  
C) Parliament                                      D) State Assemblies
53. Which of the following is true:
- i)      Rajya Sabha contains elected representatives of people  
ii)     The term of Lok Sabha is 5 years  
iii)    Rajya Sabha is a permanent house and it cannot be dissolved  
iv)    The leader of majority party in Lok Sabha is appointed by the President as the Prime Minister
- A)    ii, iii & iv  
B)    i, ii & iii  
C)    ii & iii  
D)    iii & iv
54. Who attends to the functions of the President of India, when the President is unable to discharge his duties due to illness or absence from the country.
- A) Prime Minister of India                      B) Vice President of India  
C) Chief Justice of India                        D) Speaker of Lok sabha









73. Who is Kamala Harris ?

- A. US Politician
- B. Hollywood Actor
- C. Sports Person
- D. None of the above

74. In which place, the game of Ball Badminton originated ?

- A. Delhi
- B. Maharashtra
- C. Tamil Nadu
- D. Outside of India

75. Which of the following is an incorrect pair ?

- | Author              | Book                 |
|---------------------|----------------------|
| A. Ilango Adigal    | Silappathikaram      |
| B. Sekkizhar        | Periya Puranam       |
| C. Umarupullavar    | Ratchariye yatheigam |
| D. Thiruthakkadevar | Seevaga Chinthamani  |

76. In Paralympics 2020, in which game Mariappan Thangavelu won Silver ?

- A. High Jump
- B. Long Jump
- C. 100 mt Running
- D. 400 mt Running

77. What is the height of Thiruvalluvar statue in Kanyakumari ?

- A. 100 ft
- B. 143 ft
- C. 133 ft
- D. 123 ft



78. Who is a recipient of Dada Saheb Phalke Award?

- A. Kamal Hasan
- B. Rajinikanth
- C. A.R. Rahaman
- D. P. Susila

79. Blockchain is ?

- A. A software concept
- B. It is concrete blocks connected by chain
- C. A Virus
- D. A fatal disease

80. Match the following:

|      | Classical Dance | Place of Origin   |
|------|-----------------|-------------------|
| i.   | Bharatanatyam   | a. Andhra Pradesh |
| ii.  | Kuchipudi       | b. Kerala         |
| iii. | Kathak          | c. Tamil Nadu     |
| iv.  | Kathakali       | d. Uttar Pradesh  |

- |    |   |    |     |    |
|----|---|----|-----|----|
|    | i | ii | iii | iv |
| A. | c | d  | b   | a  |
| B. | a | b  | c   | d  |
| C. | a | d  | b   | c  |
| D. | c | a  | d   | b  |

**ANSWER KEYS**  
**to the model questions on**  
**General Knowledge**

| <b>Q.NO.</b> | <b>Ans</b> | <b>Q.NO.</b> | <b>Ans</b> | <b>Q.NO.</b> | <b>Ans</b> | <b>Q.NO.</b> | <b>Ans</b> |
|--------------|------------|--------------|------------|--------------|------------|--------------|------------|
| 1            | A          | 21           | A          | 41           | B          | 61           | A          |
| 2            | A          | 22           | B          | 42           | B          | 62           | A          |
| 3            | B          | 23           | A          | 43           | B          | 63           | B          |
| 4            | C          | 24           | A          | 44           | B          | 64           | D          |
| 5            | D          | 25           | D          | 45           | A          | 65           | C          |
| 6            | A          | 26           | B          | 46           | A          | 66           | A          |
| 7            | B          | 27           | A          | 47           | B          | 67           | A          |
| 8            | B          | 28           | A          | 48           | A          | 68           | B          |
| 9            | C          | 29           | A          | 49           | A          | 69           | A          |
| 10           | A          | 30           | B          | 50           | C          | 70           | C          |
| 11           | C          | 31           | C          | 51           | D          | 71           | D          |
| 12           | B          | 32           | C          | 52           | A          | 72           | C          |
| 13           | C          | 33           | A          | 53           | A          | 73           | A          |
| 14           | C          | 34           | A          | 54           | B          | 74           | C          |
| 15           | D          | 35           | A          | 55           | C          | 75           | C          |
| 16           | B          | 36           | B          | 56           | A          | 76           | A          |
| 17           | D          | 37           | A          | 57           | D          | 77           | C          |
| 18           | A          | 38           | A          | 58           | D          | 78           | B          |
| 19           | D          | 39           | D          | 59           | C          | 79           | A          |
| 20           | B          | 40           | A          | 60           | B          | 80           | D          |

