

# PROVISIONAL ANSWER KEY

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Question1:-Who presided over the constituent Assembly while passing the constitution ?

- A:-Dr. Rajendra Prasad
  - B:-Dr. H. P. Modi
  - C:-Dr. B. R. Ambedkar
  - D:-Dr. H. C. Mukherjee
- Correct Answer:- Option-A

Question2:-Who represented the Anglo Indians in the constituent Assembly ?

- A:-C. H. Bhabha
  - B:-Frank Anthony
  - C:-H. N. Kunzru
  - D:-B. N. Rau
- Correct Answer:- Option-B

Question3:-How many sessions of the constituent Assembly were held in drafting the constitution ?

- A:-Nine
  - B:-Ten
  - C:-Eleven
  - D:-Twelve
- Correct Answer:- Option-C

Question4:-From which constitution of the world India adopted constitutional amendments ?

- A:-American
  - B:-Irish
  - C:-Australian
  - D:-South African
- Correct Answer:- Option-D

Question5:-When was the Indian Constitution first amended ?

- A:-1951
  - B:-1952
  - C:-1953
  - D:-1954
- Correct Answer:- Option-A

Question6:-When was the Lokpal Bill introduced in the Lok Sabha ?

- A:-2013
  - B:-2012
  - C:-2011
  - D:-2010
- Correct Answer:- Option-C

Question7:-When was the CMS missionaries set up a grammar school at Kottayam ?

- A:-1825
  - B:-1821
  - C:-1816
  - D:-1806
- Correct Answer:- Option-B

Question8:-Who popularised the idea of 'misra-bhojanam' among the Ezhavas and other lower castes ?

- A:-Dr. Palpu
  - B:-Kumaran Asan
  - C:-C. V. Kunhiraman
  - D:-K. Ayyappan
- Correct Answer:- Option-D

Question9:-Who was the founder of Samathwa Samajam ?

A:-Poikayil Yohannan  
B:-C. Krishnan  
C:-K. P. Karuppan  
D:-Vaikunda Swamikal  
Correct Answer:- Option-D

Question10:-When was the 'Ezhava memorial' submitted to the Maharaja of Travancore ?

A:-1891  
B:-1893  
C:-1896  
D:-1898

Correct Answer:- Option-C

Question11:-Name the leader who organised 'Savarna Jatha' in the famous Vaikom Satyagraha ?

A:-T. K. Madhavan  
B:-Mannath Padmanabhan  
C:-K. P. Kesava Menon  
D:-C. Krishnan

Correct Answer:- Option-B

Question12:-Who started the newspaper Kerala Kaumudi ?

A:-C. V. Kunhiraman  
B:-Kesavan Asan  
C:-K. Ayyappan  
D:-K. Kelappan

Correct Answer:- Option-A

Question13:-Who is the author of the Malayalam novel 'Kundalatha' ?

A:-P. Kesavadev  
B:-C. V. Raman Pillai  
C:-Raman Nambisan  
D:-T. M. Appu Nedungadi

Correct Answer:- Option-D

Question14:-Who was the first woman in India to become a high court judge ?

A:-Arya Pallam  
B:-A. V. Kuttimalu Amma  
C:-Anna Chandi  
D:-Accama Cherian

Correct Answer:- Option-C

Question15:-Who received the Khel Ratna Award from the President of India for excellence in Sports for the year 2015 ?

A:-Mary Kom  
B:-Mahendra Singh Dhoni  
C:-Sania Mirza  
D:-Saina Nehwal

Correct Answer:- Option-C

Question16:-When was Pradhan Mantri Jan Dhan Yojana launched ?

A:-1992  
B:-2013  
C:-2002  
D:-2015

Correct Answer:- Option-D

Question17:-Name the US President who coined the term 'United Nations' ?

A:-J. F. Kennedy  
B:-Franklin D. Roosevelt  
C:-George Bush  
D:-Bill Clinton

Correct Answer:- Option-B

Question18:-Name the Nobel Peace Prize winner who is also associated with an organisation called 'Bachpan Bachao Andolan' ?

A:-Kailash Satyarthi  
B:-Baba Amte  
C:-Sunderlal Bahuguna  
D:-Naresh Bedi

Correct Answer:- Option-A

Question19:-When is world water day celebrated ?

- A:-March 20
- B:-March 22
- C:-March 24
- D:-March 26

Correct Answer:- Option-B

Question20:-Which development scheme of Prime Minister Narendra Modi is designed to increase Agricultural productivity ?

- A:-Pradhan Mantri Gram Sinchai Yojana
- B:-Krishi Amdani Beema Yojana
- C:-Shramev Jayate Programme
- D:-Sansad Adarsh Gram Yojana

Correct Answer:- Option-A

Question21:-The word 'Environment' is derived from

- A:-Greek
- B:-French
- C:-Spanish
- D:-English

Correct Answer:- Option-B

Question22:-Which of the following conceptual spheres of the environment is having the least pollutant-receptor capability ?

- A:-Atmosphere
- B:-Lithosphere
- C:-Hydrosphere
- D:-Biosphere

Correct Answer:- Option-A

Question23:-Which one of the following characteristics is widely regarded as being an important aspect of sustainable development ?

- A:-Increased levels of saving
- B:-Increasing consumption expenditure
- C:-Intra-generational inequality
- D:-Inter-generational equity

Correct Answer:- Option-D

Question24:-\_\_\_\_\_ is an established method of collecting very dense and accurate geo-referenced elevation data across landscapes and can be used to generate three-dimensional representations of the earth's surface and its features.

- A:-Radar
- B:-Lidar
- C:-Lightsar
- D:-SLAR

Correct Answer:- Option-B

Question25:-Which of the following is a high spatial resolution satellite used for environmental management ?

- A:-IKONOS
- B:-QuickBird
- C:-NOAA
- D:-Both 1 and 2

Correct Answer:- Option-D

Question26:-Global Warming Potential of important green house gases in the order of abundance are ` `

- A:-`N\_2`O > CFC > `CH\_4` > `CO\_2`
- B:-CFC > `CH\_4` > `N\_2`O > `CO\_2`
- C:-CFC > `N\_2`O > `CH\_4` > `CO\_2`
- D:-`N\_2`O > ` ` ` `CH\_4 > CFC > ` `CO\_2`

Correct Answer:- Option-C

Question27:-In the atmosphere, the green house gases in the order of abundance are as follows

- A:-`CO\_2` > `CH\_4` > CFC > `O\_3` > `N\_2`
- B:-`CO\_2` > `CH\_4` > `O\_3` > CFC > `N\_2`
- C:-`CO\_2` > `CH\_4` > `O\_3` > `N\_2` > CFC
- D:-`CO\_2` > CFC > `CH\_4` > `O\_3` > `N\_2`

Correct Answer:- Option-A

Question28:-Chipko movement was originated in \_\_\_\_\_ State of India.

- A:-Madhya Pradesh

B:-Uttarakhand

C:-Rajasthan

D:-Gujarath

Correct Answer:- Option-B

Question29:-Narmada debate is associated with \_\_\_\_\_

A:-Damodar valley Project

B:-Doyang dam project

C:-Sardar Sarovar Project

D:-Ganga basin project

Correct Answer:- Option-C

Question30:-Silent Spring is a \_\_\_\_\_ on \_\_\_\_\_

A:-book, Antartica

B:-documentary, melting of ice

C:-book, climate change

D:-book, pesticide toxicity

Correct Answer:- Option-D

Question31:-The law which enable to compute the amount of total spectral radiant emittance which falls between two selected wavelengths or frequencies is \_\_\_\_\_

A:-Wien's Displacement law

B:-Stefan-Boltzmann law

C:-Kirchhoff's law

D:-Planck's Radiation law

Correct Answer:- Option-D

Question32:-\_\_\_\_\_ is used as a reference scale for classifying tropical cyclone based on wind speed.

A:-Saffir-Simpson Hurricane Scale

B:-John-Smith Hurricane scale

C:-Wentwoth Hurricane Scale

D:-None

Correct Answer:- Option-A

Question33:-\_\_\_\_\_ is the type of inversion formed when a topographic difference exists causing the warm air to move over the cold surface.

A:-Nocturnal inversion

B:-Adveective inversions

C:-Radiational inversions

D:-Subsidence inversions

Correct Answer:- Option-B

Question34:-Example of a low altitude rain cloud having pronounced vertical development

A:-Cumulus

B:-Cumulonimbus

C:-Nimbostratus

D:-Nimbus

Correct Answer:- Option-B

Question35:-The combined albedo of the earth and the atmosphere is approximately

A:-4%

B:-10%

C:-30%

D:-50%

Correct Answer:- Option-C

Question36:-The ratio of the volume of water that a soil or rock after saturation can be drained by gravity to its own volume is known as \_\_\_\_\_

A:-Specific yield

B:-Specific retention

C:-Specific storage

D:-Specific discharge

Correct Answer:- Option-A

Question37:-In Ghyben-Herzberg relation between fresh water and saline water, salt water occur underground at a depth below sea level of about \_\_\_\_\_ times the height of fresh water above sea level.

A:-20

B:-30

C:-40

D:-50

Correct Answer:- Option-C

Question38:-Which of the following pairs regarding earth's crustal composition is incorrect ?

A:-Oxygen-46.6%

B:-Silicon-27.7%

C:-Aluminium-8.1%

D:-Iron-4%

Correct Answer:- Option-D

Question39:-The weathering process which produce clay minerals from feldspar minerals.

A:-Hydration

B:-Hydrolysis

C:-Oxidation

D:-Carbonation

Correct Answer:- Option-B

Question40:-The seismic wave which can travel through both solids and liquids is \_\_\_\_\_

A:-P-wave

B:-S-wave

C:-L-wave

D:-R-wave

Correct Answer:- Option-A

Question41:-Photochemical smog is formed by the reaction between the following components in the atmosphere

A:-By the action of sunlight on NO<sub>x</sub>, ozone, hydrocarbons

B:-By the action of sunlight on NO<sub>x</sub>, oxygen, hydrocarbons

C:-By the action of sunlight on SO<sub>x</sub>, ozone, hydrocarbons

D:-By the action of sunlight on SO<sub>x</sub>, oxygen, hydrocarbons

Correct Answer:- Option-A

Question42:-Normal average thickness of stratospheric ozone layer across the globe is around

A:-200 DU

B:-300 DU

C:-400 DU

D:-500 DU

Correct Answer:- Option-B

Question43:-Which of the following pair regarding global distribution of water is wrongly matched ?

A:-Glaciers-2.15%

B:-Groundwater-0.3%

C:-Streams-0.1%

D:-Soil moisture-0.005%

Correct Answer:- Option-C

Question44:-Which predominant species of `CO<sub>2</sub>` occur in water under alkaline condition ?

A:-`HCO<sub>3</sub><sup>-</sup>`

B:-CO

C:-`CO<sub>2</sub>`

D:-`CO<sub>3</sub><sup>-</sup>`

Correct Answer:- Option-D

Question45:-The various stages of formation of coal in the ranking order is as \_\_\_\_\_

A:-Peat, lignite, bituminous, anthracite

B:-Peat, lignite, anthracite, bituminous

C:-Lignite, peat, anthracite, bituminous

D:-Lignite, peat, bituminous, anthracite

Correct Answer:- Option-A

Question46:-Example of a mineral without cleavage

A:-Feldspar

B:-Pyroxene

C:-Calcite

D:-Quartz

Correct Answer:- Option-D

Question47:-In a typical soil profile, true soil is represented by \_\_\_\_\_

A:-A-horizon

B:-B-horizon

C:-Both 1 and 2 horizon

D:-C-horizon

Correct Answer:- Option-C

Question48:-The molecules can be resolved on the basis of their distribution between a gas and either a solid or liquid by separation method known as

A:-Gas chromatography

B:-HPLC

C:-Filtration

D:-Centrifugation

Correct Answer:- Option-A

Question49:-Which of the following methods is used to determine large number of inorganic ions and organic compounds ?

A:-Filtration

B:-Gravimetry

C:-Titrimetry

D:-Colorimetry

Correct Answer:- Option-D

Question50:-The standard method for the analysis of higher levels of CO in air sample is \_\_\_\_\_

A:-IR spectrophotometry

B:-Gas chromatography

C:-Chemiluminescence

D:-UV spectrophotometry

Correct Answer:- Option-A

Question51:-The standard method for the analysis of a low levels of ammonia in water sample is \_\_\_\_\_

A:-Titration

B:-Gravimetry

C:-Potentiometry

D:-Spectrophotometry

Correct Answer:- Option-D

Question52:-The warmer, upper layer of water in a lake is called the \_\_\_\_\_

A:-Thermocline

B:-Epilimnion

C:-Hypolimnion

D:-Neritic zone

Correct Answer:- Option-B

Question53:-Among the ecological pyramids, which pyramid always show upright irrespective of the grassland or pond ecosystem

A:-Pyramid of energy

B:-Pyramid of number

C:-Pyramid of biomass

D:-Pyramid of succession

Correct Answer:- Option-A

Question54:-Formation of a climax community from an abandoned farm land is an example of \_\_\_\_\_

A:-Primary succession

B:-Secondary succession

C:-Autogenic succession

D:-Allogenic succession

Correct Answer:- Option-B

Question55:-What type of organisms are the primary producers in the deep-sea ?

A:-photosynthetic bacteria

B:-chemosynthetic bacteria

C:-crabs and fish

D:-worms

Correct Answer:- Option-B

Question56:-The grassland ecosystem of Africa is known as \_\_\_\_\_

A:-Savannas

B:-Prairies

C:-Steppes

D:-Pampas

Correct Answer:- Option-A

Question57:-An association between two individuals or population in which both are benefited and where neither can survive without the other

- A:-commensalisms
- B:-mutualism
- C:-co-operation
- D:-competition

Correct Answer:- Option-B

Question58:-Biofilms are \_\_\_\_\_

- A:-films about biology
- B:-masses of biological materials attached to wet walls
- C:-masses of cells and extracellular materials attached to surfaces bathed in liquids
- D:-collections of cells and extracellular materials attached to dry walls

Correct Answer:- Option-C

Question59:-Elements that cycle in the environment and that also have a gaseous phase at some point in the cycle include the following

- A:-carbon
- B:-carbon and sulphur
- C:-carbon and phosphorous
- D:-carbon, phosphorous and sulphur

Correct Answer:- Option-B

Question60:-Which of the following techniques can be used to estimate the number of microbes in a natural sample ?

- A:-Enrichment culture
- B:-Extinction culture technique
- C:-Microdroplet culture
- D:-Most Probable Number (MPN)

Correct Answer:- Option-D

Question61:-Which of the following environments has the greatest percentage of culturable microbes ?

- A:-saline water
- B:-fresh water
- C:-activated sludge
- D:-soil

Correct Answer:- Option-C

Question62:-Black soils are commonly found in \_\_\_\_\_

- A:-Rajasthan
- B:-Maharashtra
- C:-Odisha
- D:-Himalayan region

Correct Answer:- Option-B

Question63:-What are the Khetri mines in India famous for ?

- A:-Coal
- B:-Copper
- C:-Iron
- D:-Gold

Correct Answer:- Option-B

Question64:-Which State in India is the largest produce of mica mineral ?

- A:-Andhra Pradesh
- B:-Karnataka
- C:-Madhya Pradesh
- D:-Odisha

Correct Answer:- Option-A

Question65:-The Monazite sands of Kerala beach are rich in

- A:-Radium
- B:-Uranium
- C:-Platinum
- D:-Thorium

Correct Answer:- Option-D

Question66:-Which species of fauna are found in an area separated by natural or geographic barriers ?

- A:-Rare
- B:-Extinct

- C:-Endemic
- D:-Vulnerable

Correct Answer:- Option-C

Question67:-Which of the following is an example of rare species ?

- A:-Blackbuck
- B:-Blue sheep
- C:-Mithun
- D:-Hornbill

Correct Answer:- Option-D

Question68:-Which of the following is not treated under in situ conservation ?

- A:-National park
- B:-Botanical garden
- C:-Wildlife sanctuary
- D:-Biosphere reserve

Correct Answer:- Option-B

Question69:-Which is not a freshwater lake in India ?

- A:-Sambhar lake
- B:-Dal lake
- C:-Nainital lake
- D:-Wular lake

Correct Answer:- Option-A

Question70:-Molasses from sugar industry is used to generate \_\_\_\_\_

- A:-bio-diesel
- B:-hydrogen
- C:-bio-ethanol
- D:-bio-methanol

Correct Answer:- Option-C

Question71:-The most important fuel used by nuclear power plant is \_\_\_\_\_

- A:-U-248
- B:-U-235
- C:-U-236
- D:-U-238

Correct Answer:- Option-B

Question72:-Which toxic metal is of greatest concern in urban atmosphere \_\_\_\_\_

- A:-Pb
- B:-Hg
- C:-Cd
- D:-As

Correct Answer:- Option-A

Question73:-Which of the following statement regarding PAH is correct ?

- A:-PAHs are synthesised from saturated hydrocarbons under oxygen deficient conditions
- B:-Low molecular mass hydrocarbons form PAHs by pyrosynthesis
- C:-Higher alkanes in fuels form PAH by pyrolysis
- D:-All of the above

Correct Answer:- Option-D

Question74:-Concern about atmospheric mercury is due to its \_\_\_\_\_

- A:-toxicity
- B:-volatility
- C:-mobility
- D:-all of the above

Correct Answer:- Option-D

Question75:-Most important source of CO in atmosphere is transportation and is about \_\_\_\_\_ % of the total CO in atmosphere.

- A:-60%
- B:-65%
- C:-70%
- D:-75%

Correct Answer:- Option-B

Question76:-Photochemical smog is a \_\_\_\_\_



A:-oxidising smog

B:-reducing smog

C:-neutral smog

D:-none of above

Correct Answer:- Option-A

Question77:-The concentration of ozone in the stratosphere is lowest during \_\_\_\_\_

A:-February-April

B:-July-October

C:-December-January

D:-None of above

Correct Answer:- Option-B

Question78:-The optimum DO in natural water is \_\_\_\_\_

A:-3-5 ppm

B:-4-6 ppm

C:-5-7 ppm

D:-6-8 ppm

Correct Answer:- Option-B

Question79:-Example of an organochlorine pesticide is \_\_\_\_\_

A:-Malathion

B:-Carbaryl

C:-DDT

D:-Trichlorphon

Correct Answer:- Option-C

Question80:-Acid mine drainage is characteristic of mining areas usually within rocks containing an abundance of \_\_\_\_\_ minerals.

A:-sulfide minerals

B:-oxide minerals

C:-carbonate minerals

D:-nitrate minerals

Correct Answer:- Option-A

Question81:-The process of conversion of nitrate to ammonium is \_\_\_\_\_

A:-Nitrification

B:-Nitrogen fixation

C:-Denitrification

D:-Ammonification

Correct Answer:- Option-D

Question82:-The first comprehensive environmental legislation in the world is

A:-National Environmental Policy Act (NEPA)-USA

B:-Canadian Environmental Assessment Act (CEAA)-Canada

C:-EIA Directive-European Union

D:-Environmental Protection Act EPA-India

Correct Answer:- Option-A

Question83:-The beginning of EIA was made in India with the impact assessment of \_\_\_\_\_

A:-River valley projects

B:-Industrial projects

C:-Thermal power projects

D:-Mining projects

Correct Answer:- Option-A

Question84:-In India, Public consultation has been made a mandatory component of EIA by \_\_\_\_\_

A:-EIA notification 1994

B:-Amendments in 1997 to the EIA Notification 1994

C:-EIA Notification 2006

D:-Amendments in 2009 to the EIA notification 2006

Correct Answer:- Option-B

Question85:-Which of the statement regarding EIA in India is not correct ?

A:-All 'A' category projects require prior EC from Central Government

B:-All 'B' category projects require prior EC from the State/Union Territory

C:-Scoping process is applicable to all A and B projects

D:-In the scoping stage, TOR for EIA shall be furnished to proponent by EAC or SEAC

Correct Answer:- Option-C

Question86:-\_\_\_\_\_ stage in the EIA process will identify the key impacts requiring further investigation in connection with a project.

- A:-Screening
- B:-Assessing
- C:-Scoping
- D:-Mitigation

Correct Answer:- Option-C

Question87:-Leopold Matrix involves the use of a matrix with \_\_\_\_\_ specified actions and \_\_\_\_\_ potentially impacted environmental characterization.

- A:-90 specified actions and 78 potential impacts
- B:-100 specified actions and 88 potential impacts
- C:-110 specified actions and 98 potential impacts
- D:-120 specified actions and 90 potential impacts

Correct Answer:- Option-B

Question88:-EMS is the component of an organization with primary responsibility for leading, planning, controlling and organizing as they relate specifically to

- A:-Processes
- B:-Products
- C:-Services
- D:-All of the above

Correct Answer:- Option-D

Question89:-\_\_\_\_\_ series of environmental management standards are intended to assist organizations manage the environmental effect of their business practices.

- A:-ISO 9000
- B:-ISO 13000
- C:-ISO 14000
- D:-ISO 15000

Correct Answer:- Option-C

Question90:-Identify the one wrongly matched

- A:-Environmental Protection Act - 1986
- B:-The Air (prevention and control of pollution) Act - 1981
- C:-The water (prevention and control of pollution) Act - 1975
- D:-The wild life Protection Act - 1972

Correct Answer:- Option-C

Question91:-Identify the wrong match

- A:-Cartagena Protocol - Climate change
- B:-Kyoto Protocol - To reduce green house gases
- C:-Montreal Protocol - Substances depleting `O\_3` layer
- D:-Vienna Protocol - Protection of `O\_3` layer

Correct Answer:- Option-A

Question92:-The process of converting environmental pollutants into harmless products by naturally occurring microbes is called \_\_\_\_\_

- A:-Ex situ bioremediation
- B:-Intrinsic bioremediation
- C:-Extrinsic bioremediation
- D:-None of these

Correct Answer:- Option-B

Question93:-Microbes remove metals by \_\_\_\_\_

- A:-Adsorption and precipitation
- B:-Adsorption and complexation
- C:-Adsorption and volatilization
- D:-All of the above

Correct Answer:- Option-D

Question94:-Which of the following bacterium is called the superbug that could clean up oil spills ?

- A:-Pseudomonas putida
- B:-Bacillus subtilis
- C:-Pseudomonas denitrificans
- D:-Bacillus denitrificans

Correct Answer:- Option-A

Question95:-Microbial conversion of an insoluble metal into a soluble form

- A:-Bioleaching
- B:-Biodegradation
- C:-Co-metabolism
- D:-Biosorption

Correct Answer:- Option-A

Question96:-Which of the following microorganisms leach metals out of rock ores ?

- A:-Pseudomonas aeruginosa
- B:-Thiobacillus sp.
- C:-Pseudomonas putida
- D:-Bacillus megaterium

Correct Answer:- Option-B

Question97:-Which of the following can be used for the removal of colour from the effluents of pulp mill ?

- A:-Coriolus versicolor
- B:-Phenerochaete chrysosporium
- C:-Nitrosomonas europaea
- D:-Both 1 and 2

Correct Answer:- Option-D

Question98:-Addition of nutrients for enhancing bioremediation is called \_\_\_\_\_

- A:-Bioaugmentation
- B:-Biostimulation
- C:-Bioreaction
- D:-Bioleaching

Correct Answer:- Option-B

Question99:-In waste water treatment method, the activated sludge process is a \_\_\_\_\_

- A:-pre-treatment method
- B:-primary treatment method
- C:-secondary treatment method
- D:-tertiary treatment method

Correct Answer:- Option-C

Question100:-Green chemistry aims to ?

- A:-Utilize non-renewable energy
- B:-Design chemical products and processes that work most efficiently
- C:-Design chemical products and process that maximize profits
- D:-Design safer chemical products and processes that reduce or eliminate the use and generation of hazardous substances

Correct Answer:- Option-D