FINAL ANSWER KEY

29/2017/OL

Question Paper Code:

Category Code: 009/2016 Exam: **Environmental Scientist** Medium of Question: English Date of Test 12-04-2017 Department **Environment and Climate Change Dpt** Alphacode 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? 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?

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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:-Arva 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
Question 18:- 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
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D:-Naresh Bedi

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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
Question 20:-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 Aadarsh 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:-Question Cancelled
Question 23:- 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_2^0 > CFC > CH_4^0 > CO_2^0
    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```O
    B:-`CO 2` > `CH 4` > `O 3` > CFC > `N 2```O
    C:-`CO 2` > `CH 4` > `O 3` > `N 2```O > CFC
    D:-`CO 2` > CFC > `CH 4` > `O 3` > `N 2```O
    Correct Answer: - Option-A
Question28:-Chipko movement was originated in ______ State of India.
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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 exits causing the warm air to move
over the cold surface.
A:-Nocturnal inversion
B:-Advective 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
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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 NOx, ozone, hydrocarbons
     B:-By the action of sunlight on NOx, oxygen, hydrocarbons
     C:-By the action of sunlight on SOx, ozone, hydrocarbons
     D:-By the action of sunlight on SOx, 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 2` occur in water under alkaline condition?
     A:-`HCO (3-)`
     B:-CO
     C:-`CO 2`
     D:-`CO 3`
     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
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	D:-C-horizon
	Correct Answer:- Option-C
	stion48:-The molecules can be resolved on the basis of their distribution between a gas and either a solid or liquid by aration method known as
	A:-Gas chromatography
	B:-HPLC
	C:-Filtration
	D:-Centrifugation
	Correct Answer:- Option-A
Que	stion49:-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
Oue	stion50:-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
م ر ر	stion51:-The standard method for the analysis of a low levels of ammonia in water sample is
Quc.	A:-Titration
	B:-Gravimetry
	C:-Potentiometry
	D:-Spectrophotometry
	Correct Answer:- Option-D
ر مار	stion52:-The warmer, upper layer of water in a lake is called the
Que	A:-Thermocline
	B:-Epilimnion
	C:-Hypolimnion D: Noviking and a
	D:-Neritic zone
O	Correct Answer:- Option-B
	stion53:-Among the ecological pyramids, which pyramid always show upright irrespective of the grassland or pond system
ccos	A:-Pyramid of energy
	B:-Pyramid of number
	C:-Pyramid of biomass
	D:-Pyramid of succession
	Correct Answer:- Option-A
ر مار	stion54:-Formation of a climax community from an abandoned farm land is an example of
Que	A:-Primary succession
	B:-Secondary succession
	C:-Autogenic succession
	D:-Allogenic succession
	Correct Answer:- Option-B
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Que	stion55:-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
Que:	stion56:-The grassland ecosystem of Africa is known as
	A:-Savannas
	B:-Prairies
	C:-Steppes
	D:-Pumpas
	Correct Answer:- Option-A

C:-Both 1 and 2 horizon

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 phospherous
D:-carbon, phospherous 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: Therium
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
Question 76:-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 abui minerals.	ndance of
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	on
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.	ļ
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 to	tho
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 called	s is
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	

	C:-Co-metabolism
	D:-Biosorption
	Correct Answer:- Option-A
Que	stion96:-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
Que	stion97:-Which of the following can be used for the removal of colour from the effluents of pulp mil?
	A:-Coriolus versicolor
	B:-Phenerochaete chrysosporium
	C:-Nitrosomonas europaen
	D:-Both 1 and 2
	Correct Answer:- Option-D
Que	stion98:-Addition of nutrients for enhancing bioremediation is called
	A:-Bioaugmentation
	B:-Biostimulation
	C:-Bioreaction
	D:-Bioleaching
	Correct Answer:- Option-B
Que	stion99:-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
Que	stion100:-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
sub	D:-Design safer chemical products and processes that reduce or eliminate the use and generation of hazardous stances
	Correct Answer:- Option-D

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

A:-Bioleaching B:-Biodegradation