

Fresh Batches Starting: NDA/CDS/AFCAT in October 2017

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UPSC NDA PAPER 2017 SET-A*

PART-A

Synonyms

Directions: Each item in this section consists of a sentence with an underlined word/words followed by four options. Select the option that is nearest in meaning to the underlined word/words and mark your response in your Answer Sheet accordingly.

- The discussion was wound up after a long and fruitful exchange of views.
 - (a) postponed
- (b) cut short
- (c) interrupted
- (d) concluded
- 2. He was fully <u>alive to</u> the need for .making adjustments.
 - (a) concerned about
- (b) worried about
- (c) aware of
- (d) indifferent about
- The police officer tried to intimidate the witness 3. but in vain.
 - (a) inform
- (b) reward
- (c) frighten
- (d) persuade
- 4. We must adopt <u>drastic</u> measures to control population growth.
 - (a) simple
- (b) dramatic
- (c) realistic
- (d) severe
- 5. He is extremely meticulous in his approach.
 - (a) simple
- (b) careful

(c) fair

- (d) reasonable
- The experts' minute examination brought to light some 6. important clues
 - (a) quick
- (b) detailed
- (c) superficial
- (d) prolonged
- The decision of the Union Government to repeal the 7. Urban Land Ceiling Act has been welcomed by all.
 - (a) suppress (c) cancel
- (b) amend
- (d) withhold
- This is his maiden appearance on the screen. 8.
 - (a) first (b) last
- (c) girlish
- (d) shy
- 9. At the end of the marathon everybody was exhausted.
 - (a) weakened
- (b) honoured (d) tired
- (c) satisfied 10. He gave me a counterfeit coin.
 - (a) rare
- (b) fake
- (c) unmatured
- (d) inferior

Antonyms

Directions: Each item in this section consists of a sentence with an underlined word/words followed by four options. Select the option that is opposite in meaning to the underlined word/words and mark your response in your Answer Sheet accordingly.

- 11. My mother has been working hard for the last two weeks and she feels run down.
 - (a) morbid
- (b) energetic
- (c) exhausted
- (d) emotional
- 12. The President condemned the act of violence during the celebration of the festival.
 - (a) reason
- (b) instigation

- (c) restraint (d) sobriety
- 13. The students made a generous contribution to the flood relief fund.
 - (a) niggard
- (b) selfish
- (c) spendthrift
- (d) indecent
- He was just idle by temperament. 14.
 - (a) employed
- (b) occupied
- (c) industrious
- (d) happy
- 15. Most of the decisions taken by the officer were unjust.
 - (a) serious
- (b) lenient
- (c) correct
- (d) imbecile
- He is a loving lather and takes great delight in Ms 16. children.
 - (a) revolt
- (b) dissatisfaction
- (c) enjoyment
- (d) disgust
- 17. He was quite concerned about his son's career.
 - (a) unrelated
- (b) indifferent
- (c) dispassionate
- (d) carefree
- 18. They are confident of success,
 - (a) imprudent (c) diffident
- (b) impatient (d) reluctant
- We carried on the search for the missing person.
 - (b) reconsidered
 - (a) delayed (c) broke up

(c) unnatural

- (d) called off
- This T.V. has many indigenous components.
 - (a) Indian
- (b) foreign
- (d) genuine

Selecting Words

Directions: In the following passage, at certain points you are given a choice of four words marked (a), (b), (c) and '(d), one of which fits the meaning of the passage. Choose the best word out of the four. Mark the letter, viz., (a), (b), (c) or (d), relating to this word on your Answer Sheet. Examples K and L have been solved for you.

K	L
The	
(a) boy was in the	(a) She was homesick.
school in Shimla	
(b) horse	(b) It
(c) dog	(c) He
(d) cow	(d) Her

Explanation: Out of the list given in item K, only, 'boy' is the correct answer because usually, a boy, and not a horse, a dog or a cow, attends school. So '(a)' is to be marked on the Answer Sheet for item K. A boy usually referred to as 'he', so for item L, '(c)' is the correct answer. Notice that to solve the first item K you have to read the rest of the sentence and then see what fits best.

Passage



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After	this	incic	lent	I	went	to	Nainital,	and	returned	after
nearly	a m	onth.	I ha	d	21 . (a	ı)	hardly			

- (b) barely
- (c) merely
- (d) rarely

taken 22. (a) out my clothes when I saw Gangu standing (b) away

- (c) off
- (d) on
- 23. (a) by a new baby. He was 24. (a) jumping (b) bursting
 - (b) near (c) with

(c) dancing

(d) at

(d) singing

With joy. Even Nanda 25. (a) could not have

- (b) would
- (c) should
- (d) ought
- (a) experimented 26. such joy **27**. (a) At (b) show (b) in
 - (c) felt
- (c) on

(d) heard

(d) into

getting Krishna. His face had the same 28. (a) light

- (b) glow
- (c) sense
- (d) hope

on the face of a 30. (a) starved that 29. (a) comes

(b) appears

(b) starving

(c) rises

(c) hungry

(d) shows

(d) shows

man after a full meal.

Ordering of words in a sentence

Directions: Each of the following items in this section consists of a sentence, the parts of which have been jumbled. These parts have been labelled P, Q, R and S. Given below each sentence are four sequences namely (a), (b), (c) and (d). You are required to re-arrange the jumbled parts of the sentence and mark your response accordingly.

- The spirit of man 31.
 - (P) has slowly and painfully surmounted
 - (Q) and his growing intelligence
 - (R) all the obstacles that have come in his way
 - (S) has faced all kinds of dangers
 - (a) Q P S R
- (b) SQPR
- (c) R P Q S
- (d) PRQS
- 32. After our school boys had won a well-contested hockey match
 - (P) so that they might communicate the news of their victory to the headmaster
 - (Q) who is a keen sportsman
 - (R) they came to school in high spirits
 - (S) and takes a very lively interest in school games
 - (a) Q P S R
- (b) S Q P R

(c) R P Q S

(d) PRQS

- 33. Even a leisurely game like cricket
 - (P) demanding grace rather than strength.
 - (Q) and over the rough tactics of the Australian team that visited England in 1921
 - (R) as we saw in the controversy over body-line bowling
 - (S) can cause much ill-will
 - (a) PSRQ
- (b) RSPQ
- (c) SROP
- (d) O P R S
- Scientists point out 34.
 - (P) of sunspot activity
 - (Q) that it is an aftermath that
 - (R) has now reached its peak
 - (S) of the eleven-year cycle
 - (a) R S P Q
- (b) PQSR
- (c) QRPS
- (d) QSPR
- 35. As the ship streams from San Diego
 - (P) as walls of gray water from a distant storm in the North Pacific
 - (Q) making the greener among us miserable with sea
 - (R) rock and toss the ship
 - (S) those of us aboard have a personal demonstration of powerful ocean movement
 - (a) P O R S
- (b) SRPQ
- (c) SPRQ
- (d) QSRP

Spotting Errors

Directions: Each item in this section has a sentence with three underlined parts labelled (a), (b) and (c). Read each sentence to find out whether there is any error in any underlined part and indicate your response in the Answer Sheet against the corresponding letter i.e., (a) or (b) or (c). If you find no error, your response should be indicated as (d).

- 36. An electrical circuit is the complete path
 - (a)

(b)

traversed by electric current. No error

(d)

- 37. He waved us a by-by as he boarded the train
 - (a)

(b)

which disappeared into the tunnel No error

(d)

- 38. There was great deal that had to be scrapped that must be scrapped;
 - (a)

but surely India could not have been what she undoubtedly was

(b)

and could not have continued a cultured existence for thousands of years No error

(d)



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39.	With regard to interior decoration, it is the attention given to the less overt aspects of using space		2012-2017 by the Approach Paper to the Twelfth Five Year Plan?
	(a)		(a) 7 percent (b) 8 percent
	that give it life, an identity, a quality		(c) 9 percent (d) 10 percent
	(b)	52.	Which one of the following is not a subject that has
	that makes it exciting and unusual. No error (c) (d)		been devolved to the Panchayati Raj Institutions by the II ¹ Schedule of the Constitution of India?
40.	A small parcel of novels is better than none.		(a) Non-conventional energy resources
	(a) (b) (c)		(b) Roads
	No error.		(c) Higher education
	(d)		(d) Libraries
		53.	Who among the following used the term Industrial
Fill i	n the blanks		Revolution for the first time in English to describe the
Direc	ctions: Each of the following sentences in this section		changes that occurred in the British industrial
has a	blank space and four words or group of words given		development between 1760 and 1820?
	the sentence. Select the word or group of words you		(a) Friedrich Engels
	der most appropriate for the blank space and indicate		(b) Eric Hobsbawm
	response on the Answer Sheet accordingly.		(c) Arnold Toynbee
41.	He looks as if he weary.		(d) Georges Michelet
	(a) is (b) was	54.	Who among the following is the author of the book
	(c) would be (d) were		'The Indian Struggle, 1920 - 1934'?
42.	My house is insured theft and fire.	ATTING I	(a) Maulana Abul Kalam
	(a) for (b) against		(b), Jayprakash Narayan
	(c) in (d) towards		(c) Subhash Chandra Bose
40		55.	(d) Manabendra Nath Roy
43.	The result of the prolonged discussion was	33.	Which one of the following about the Swadeshi Campaign in 1896 is not correct?
	(a) disappointment (b) disappointing		(a) Its centre was Maharashtra
4.4	(c) disappointed (d) to disappoint You are lucky in the 20 th century	3 5	(b) Its main participants were students
44.	(a) by being born (b) to have been born	20	(c) It opposed the levy of tariff on imports
	(c) for being born (d) to have born		(d) It publicly burnt foreign clothes
45.	Sita is true to	56.	Which one of the following associations was founded
чэ.	(a) word (b) her words		in London by Dadabhai Naoroji in 1866?
	(c) the words (d) words		(a) The Bengal British India Society
46.	Years since I saw her last.		(b) The East India Association
	(a) have passed (b) had passed		(c) The British Indian Association
	(c) had been passing (d) have been passing		(d) The Madras Native Association
47.	When he heard the terrible noise he asked me what was	57.	Mariana Trench is located in the ocean floor of
	on.		(a) Southern Atlantic Ocean
	(a) happening (b) being		(b) Western Pacific Ocean
	(c) getting (d) going		(c) Eastern Pacific Ocean
48.	Could you lend me some money? I am very of		(d) Northern Atlantic Ocean
	cash at the moment.	58.	Taklamakan Desert is situated in
	(a) down (b) low		(a) Western Asia
	(c) short (d) scarce		(b) Southern fringe of Sahara in Africa
49.	I saw her when she was standing the side of the old		(c) South America
	statue.	50	(d) Central Asia
	(a) by (b) at	59.	Rudraprayag is situated at the confluence of rivers
	(c) in (d) beyond		Alaknanda and
50.	True friends never their loved ones in adversity.		(a) Bhagirathi (b) Mandakini
	(a) abuse (b) criticize	60.	(c) Nandakini (d) Dhauliganga
	(c) befool (d) desert	00.	Arrange the following Indian cities according to their locations from west to east:
	DADE D		1. Bilaspur 2. Jodhpur
<i>5</i> 1	PART-B		3. Bhopal 4. Ranchi
51.	Which one of the following was set as a target of average growth of GDP of India over the plan period		Select the correct answer using the code given below:
	average growth of ODF of filling over the plan period	I	Stitut die correct and wer abing the code given below.



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(a) 3-2-1-4		(b)	2-3-1-4
(c) 4-1-2-3		(d)	2-1-3-4
TC1 T7 1			1 11.1

- The Kashmir region receives additional amount of 61. precipitation during the winter brought by,
 - (a) South-west Monsoon
- (b) Western Disturbances
- (c) Retreating Monsoon
- (d) Temperate Cyclone
- 62. Which part of India, has the Kalakot tertiary coal field?
 - (a) Brahmaputra river basin of Assam
 - (b) Damodar river basin of Jharkhand.and West Bengal
 - (c) Himalayan mountain region
 - (d) Cardamom hills in Kerala
- Tendons through which muscles are connected to 63. bones are tightly compacted bundles of which one of the following long fibrous protein?
 - (a) Fibrin
- (b) Collagen
- (c) Elastin
- (d) Cellulose
- 64. Which one of the following is the scientific name of the causal organism of elephantiasis?
 - (a) Ascaris lumbricoides
- (b) Culex pipiens
- (c) Wuchereria bancrofti
- (d) Fasciola hepatica
- 65. Melanin is the natural pigment that gives coloxir to human skin, hair and the iris. It provides protection against
 - (a) Ultraviolet radiation
 - (b) Infrared radiation
 - (c) X-ray radiation
 - (d) Short wave radio radiation
- Intake of which one of the following food components 66. should be minimized by patients having Gouty Arthritis due to elevated serum uric acid level?
 - (a) Food fibres
- (b) Nucleic acids
- (c) Lipids
- (d) Carbohydrates
- 67. Which one of the following statements about microbes is not correct?
 - (a) They are used in sewage treatment plants.
 - (b) They are used in industrial fermenters for the production of beverages.
 - (c) No antibiotic has been obtained from any microbe.
 - (d) They are used to get many bioactive molecules for the treatment of diseases.
- 68. Golden rice is a genetically-modified crop plant where the incorporated gene is meant for biosynthesis of
 - (a) Omega-3 fatty acids
- (b) Vitamin A
- (c) Vitamin B
- (d) Vitamin C
- 69. An object moves in a circular path with a constant speed. Which one of the following statements is correct?
 - (a) The centripetal acceleration of the object is smaller for a gentle curve (i.e., curve of larger radius) than that for a sharp curve (i.e., curve of smaller radius).
 - (b) The centripetal acceleration is greater for a gentle curve than that for a sharp curve.
 - (c) The centripetal acceleration is the same for both, the gentle and sharp curves.
 - (d) The centripetal acceleration causes the object to slow down.

70. The force acting on a particle of mass m moving along the x-axis is given by $F(x) = Ax^2 - Bx$. Which one of the following is the potential energy of the particle?

(a) 2Ax-B

(b) $-\frac{x^2}{6}(2Ax-3B)$

(c) $Ax^3 - Bx^2$

71. The symbol of SI unit of inductance is H. It stands for (a) Holm (b) Halogen

(c) Henry

(d) Hertz

72. In a vacuum, a five-rupee coin, a feather of a sparrow bird and a mango are dropped simultaneously from the same height. The time taken by them to reach the bottom is t_1 , t_2 and t_3 respectively. In this situation, we will observe that

(a) $t_1 > t_2 > t_3$

(b) $t_1 > t_3 > t_2$

(c) $t_3 > t_1 > t_2$

- (d) $t_1 = t_2 = t_3$
- 73. Electron emission from a metallic surface by application of light is known as
 - (a) Thermionic emission
- (b) Photoelectric emission
- (c) High field emission
- (d) Autoelectronic emission
- How long does light take to reach the Earth from the Sun?
 - (a) About 4 minutes
- (b) About 8 minutes
- (c) About 24 minutes
- (d) About 24 hours
- 75. Radioactivity is measured by
 - (a) GM Counter
 - (b) Polarimeter
 - (c) Calorimeter
- (d) Colorimeter
- 76. The mirrors used as rear-view mirrors in vehicles are

(a) concave

(b) convex

- (c) cylindrical
- (d) plane
- 77. Which one of the following waves is used for detecting forgery in currency notes?
 - (a) Ultraviolet waves
- (b) Infrared waves
- (c) Kadio waves
- (d) Microwaves
- 78. The majority charge carriers in a p-type semiconductor
 - (a) free electrons
- (b) conduction electrons

(c) ions

- (d) holes
- 79. The ionization energy of hydrogen atom in the ground state is
 - (a) 13.6 MeV
- (b) 13-6 eV
- (c) 13-6 Joule
- (d) Zero
- 80. When pure water boils vigorously, the bubbles that rise to the surface are composed primarily of (a) air (b) hydrogen

- (d) water vapour
- (c) hydrogen and oxygen Which compound, when dissolved in water, conducts
- electricity and forms a basic solution? (a) HCl (b) CH₃COOH
 - (c) CH₃OH
- (d) NaOH
- The principal use of hydrofluoric acid is 82. (a) in etching glass
 - (b) as a bleaching agent
 - (c) as an extremely strong oxidizing agent
 - (d) in the preparation of strong organic fluorine compounds

81.



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- 83. The species that has the same number of electrons as 32₁₆S Cl is
 - (a) $^{32}_{16}$ S
- (b) $^{34}_{16}S^+$
- (c) $^{40}_{18}$ Ar⁺
- (d) $^{35}_{16}S^2$
- The compound CgH₁₂O₄ contains 84.
 - (a) 22 atoms per mole
 - (b) twice the mass percent of H as compared to the mass percent of C
 - (c) six times the mass percent of C as compared to the mass percent of H
 - (d) thrice, the mass percent of H as compared to the mass percent of O
- 85. The proposition 'equal volumes of different gases contain equal numbers of molecules at the same temperature and pressure' is known as
 - (a) Avogadro's hypothesis
 - (b) Gay-Lussac's hypothesis
 - (c) Planck's hypothesis
 - (d) Kirchhoff's theory
- 86. Which one of the following statements about the Ilbert Bill is correct?
 - (a) It proposed that the Indian magistrates would try Europeans in criminal cases.
 - (b) It allowed Indians to file criminal cases against
 - (c) It authorized Indian ICS officers to try Europeans in
 - (d) It was an agitation led by Ilbert in support of the nationalists.
- Who among the following can attend the meetings of 87. both Houses of Parliament while not being a member of either House?
 - (a) The Solicitor General of India
 - (b) The Vice-President of India
 - (c) The Comptroller and Auditor General of India
 - (d) The Attorney General of India
- Who among the following was believed to be a leader 88. of the Sanyasis and Fakirs conspiring against the British in 1857?
 - (a) Mangal Pandey
- (b) Bahadur Shah II
- (c) Queen Zeenat Mahal
- (d) Nana Sahib
- 89. Who among the following was the founder of the Avadh Kingdom in the 18th century?
 - (a) Murshid Quli Khan
- (b) Saadat Khan
- (c) Alivardi Khan
- (d) Sarfaraz Khan
- 90. Who among the following was the founder of the Young Bengal Movement?
 - (a) Henry Vivian Derozio
 - (b) David Hare-
 - (c) Dwarkanath. Tagore
 - (d) Prasanna Kumar Tagore

- 91. Which one of the following statements about the Quit India Movement is not correct?
 - (a) It broke out in August 1942.
 - (b) Ahmedabad Textile Mills went on strike for more than three months.
 - (c) Muslim League and Hindu Mahasabha actively participated in the movement.
 - (d) Communist Party did not support the movement.
- 92. Who among the following is the winner of the Singapore Open Superseries Badminton Men's Singles title 2017?
 - (a) Kidambi Srikanth
- (b) Lin Dan
- (c) B. Sai Praneeth
- (d) Kento Momota
- 93. Koradi Thermal Power Station is located in
 - (a) Nagpur
- (b) Raipur
- (c) Mumbai
- (d) Seeunderabad
- 94. Which one of the following is the theme of the International Day for Monuments and Sites (World Heritage Day) 2017?
 - (a) The Heritage of Sport
 - (b) Cultural Heritage and Sustainable Tourism
 - (c) Past and Present Heritage
 - (d) Heritage and Science
- In April 2017, USA dropped MOAB (Massive Ordnance Air Blast popularly known as the Mother of All Bombs) in the suspected hideouts of militants in which one of the following countries?
 - (a) Iran
- (b) Syria
- (c) Afghanistan
- (d) Somalia
- Who among the following is the Chairman of the Interdisciplinary Committee constituted recently by the Government of India to examine framework for virtual currencies?
 - (a) Secretary, Department of Financial Services
 - (b) Special Secretary, Department of Revenue
 - (c) Special Secretary, Department of Economic Affairs
 - (d) Deputy Governor, Reserve Bank of India
- 97. SAMPADA scheme is being implemented by the Ministry of
 - (a) Finance
 - (b) Housing and Urban Affairs
 - (c) Food Processing Industries
 - (d) Earth Sciences
- 98. The shortest day length that occurs in the Northern hemisphere is on
- (a) 21^{st} March (c) 22^{nd} November
- (b) 23^{rd} September (d) 22^{nd} December
- 99. The Indian Railways have gone in for qualitative improvements since independence. Which of the following have taken place in recent years?
 - 1. Gauge conversion 3. Automatic signals
- 2. Track electrification
- Select the correct answer using the codes given below: (a) 1 and 2 only
 - (b) 2 and 3 only
- (c) 1 and 3 only
- (d) 1,2 and 3



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- 100. In India, maximum amount of rainfall is received from
 - (a) Western Disturbances (
- (b) North-east Monsoon
 - (c) South-west Monsoon
- (d) Retreating Monsoon
- 101. Which set of the following biosphere reserves in India is included in the World Network oi Biosphere Reserves?
 - (a) Gulf of Mannar, Nokrek, Panchmarhi and Simlipal
 - (b) Gulf of Mannar, Kanchanjunga, Nokrerk and Seshachalam
 - (c) Nilgai, Nokrek, Panchmarhi and Panna
 - (d) Nilgiri, Nokrek, Panchmarhi and Seshachalam
- 102. Which of the following statements about magnetite ore of iron is/are correct?
 - 1. It is known as black ore.
 - 2. It contains 60% to 70% of pure iron.
 - 3. It possesses magnetic properties.

Select the correct answer using the codi given below:

- (a) 1 only
- (b) 2 and 3 only
- (c) 1 and 3 only
- (d) 1, 2 and 3
- 103. Which one of the following vitamins has a role in blood clotting?
 - (a) Vitamin A
- (b) Vitamin D
- (c) Vitamin E
- (d) Vitamin K
- 104. The term 'Probiotic' is applied to
 - (a) Organic food
- (b) Antacid
- (c) Antibiotic
- (d) Live microbial food supplement
- 105. Which one of the following microbes caused acidification and curding of milk?
 - (a) Lactic Acid Bacillus
 - (b) Clostridium botulinum
 - (c) Vibrio choleras.
 - (d) Saccharomyces cerevisiae
- 106. Who among the following shared the Nobel Prize in 1962 along with Francis Crick and James Watson for their discoveries concerning the molecular structure of nucleic acids?
 - (a) Erwin Chargaff
 - (b) Maurice Hugh Frederick Wilkins
 - (c) Rosalind Franklin
 - (d) Phoebus Levene

Ι

- Water boils at a lower temperature at high altitudes, because
 - (a) the air pressure is less
 - (b) outside temperature is less
 - (c) latent heat is less
 - (d) None of the above
- 108. Concave mirror is used in headlights of vehicles, because it ^f
 - (a) focuses light from the bulb onto nearby vehicles
 - (b) sends parallel rays
 - (c) fits well into the shape of the headlight
 - (d) is cheaper than other mirrors

- 109. If some object is weighed when submerged in water, what will happen to its weight compared to its weight in air?
 - (a) Increase
 - (b) Decrease
 - (c) Remain exactly the same
 - (d) Increase or decrease cannot be predicted
- 110. Light year is a measure of
 - (a) time
 - (b) distance
 - (c) total amount of light falling on the Earth in a year
 - (d) average intensity of light falling on the Earth in a year
- 111. Which one of the following statements about a satellite orbiting around the Earth is correct?
 - (a) Satellite is kept in orbit by remote control from ground station.
 - (b) Satellite is kept in orbit by retro-rocket and solar energy keeps it moving around the Earth.
 - (c) Satellite requires energy from solar panels and solid fuels for orbiting.
 - (d) Satellite does not require any energy for orbiting.
- 112. Which one of the following statements about energy is correct?
 - (a) Energy can be created as well as destroyed.
 - (b) Energy can be created but not destroyed.
 - (c) Energy can neither be created nor destroyed.
 - (d) Energy cannot be created but can be destroyed.
- 113. Step-up transformers are used for
 - (a) increasing electrical power
 - (b) decreasing electrical power
 - (c) decreasing voltage
 - (d) increasing voltage
- 114. Which one among the following waves carries the maximum energy per photon?
 - (a) X-rays
- (b) Radio waves
- (c) Light waves
- (d) Microwave
- 115. How much CO₂ is produced on heating of 1 kg of carbon?
 - (a)11/3 kg
- (b) 3/11 kg
- (c) 4/3 kg
- (d) 3/4 kg
- 116. Zinc is used to protect iron from corrosion because ainc is
 - (a) more electropositive than iron
 - (b) cheaper than iron
 - (c) a bluish white metal
 - (d) a good conductor of heat and electricity
- 117. Which one of the following gases is placed second in respect of abundance in the Earth's atmosphere?
 - (a) Oxygen
- (b) Hydrogen
- (c) Nitrogen
- (d) Carbon dioxide
- 118. Which one of the following is a chemical change?
 - (a) Cutting of hair
 - (b) Graying of hair naturally
 - (c) Swelling of resin in water



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(1)	O 41		C
(a) Cutting	01	fruit

- 119. Which one among the following chemicals is used as washing soda?
 - (a) Calcium carbonate
- (b) Calcium bicarbonate
- (c) Sodium carbonate
- (d) Sodium bicarbonate
- 120. Why is potassium permanganate used for purifying drinking water?
 - (a) It kills germs
 - (b) It dissolves the impurities
 - (c) It is a reducing agent
 - (d) It is an oxidizing agent
- 121. Consider the following movements:
 - 1. Moplah Rebellion
- 2. Bardoli Satyagraha
- 3. Champaran Satyagraha 4. Salt Satyagraha Which one of the following is the correct chronological order of the above in ascending order?
- (a) 1-3-4-2
- (b) 3-1-2-4
- (c) 2-3-1-4
- (d) 4-2-1-3
- 122. Which one of the following travelogues has given an insight on the reign of Muhammad Bin Tughlaq?
 - (a) Ibn Battuta's Rihla
 - (b) François Bernier's Travels in the Mogul Empire
 - (c) Niccolao Manucci's Storia do Mogor
 - (d) Tavernier's Travels in India
- 123. Which one of the following was not a Chishti Sufi saint?
 - (a) Khwaja Moinuddin
 - (b) Baba Fariduddin Ganj-i-Shakar
 - (c) Nizamuddin Auliya
 - (d) Shaikh Bahauddin Zakariya
- 124. In April 2017, India celebrated 100 years of Mahatma Gandhi's
 - (a) Satyagraha in Kheda
 - (b) Dandi March
 - (c) Satyagraha in Champaran
 - (d) Return from South Africa
- 125. A rainbow is produced due to which one of the following phenomena?
 - (a) Dispersion of light
 - (b) Interference of light
 - (c) Diffraction of light
 - (d) Scattering of light by atmospheric dust
- 126. Bats detect obstacles in their path by receiving the reflected
 - (a) Infrasonic waves
- (b) Ultrasonic waves
- (c) Radio waves
- (d) Microwaves
- 127. The statement that heat cannot flow by itself from a body at a lower temperature to a body at a higher temperature', is known as
 - (a) Zeroth law of thermodynamics
 - (b) First law of thermodynamics
 - (c) Second law of thermodynamics
 - (d) Third law of thermodynamics
- 128. Which one of the following waves does not belong to the category of the other three ?
 - (a) X-rays
- (b) Microwaves

- (c) Radio waves (d) Soundwaves
- 129. Which one of the following statements is not correct?,
 - (a) Human eye is a refracting system containing a diverging lens.
 - (b) The retina of the human eye contains millions of light sensitive cells, called rods and cones, which concert the light into electrical messages.
 - (c) Every image that is focused on the retina is upside down.
 - (d) We need both eyes to judge the relative positions of objects accurately.
- 130. Which one of the following statements is not correct?(a) Ultrasonic waves cannot get reflected, refracted or absorbed.
 - (b) Ultrasonic waves are used to detect the presence of defects like cracks, porosity, etc. in the internal structure of common structure materials.
 - (c) Ultrasonic waves can be used for making holes in very hard materials like diamond.
 - (d) Ultrasonic waves cannot travel through vacuum.
- 131. According to the Travel and Tourism Competitiveness Index (TTCI) 2017 released by the World Economic Forum, among the 136 economies across the world, India ranked
 - (a) 50^{th} (b) 40^{th} (c) 30^{th}
- Which one of the following is the theme of the World Health Day, 2017 celebrated by the World Health Organization?
 - (a) Diabetes
- (b) Food Safety
- (c) Depression: Let's Talk (d) Ageing and Health
- 133. Which one of the following Ministries has launched a new programme on Interdisciplinary Cyber Physical Systems (ICPS) to foster and promote R&D?
 - (a) Ministry of Earth Sciences
 - (b) Ministry of Science and Technology
 - (c) Ministry of Information and Broadcasting
 - (d) Ministry of New and Renewable Energy
- 134. Consider the following statements about the Nagara style of temple architecture :
 - 1. This style of temples are commonly found in the areas between Himalavas and Vindhyas.
 - 2. The most striking feature of this style is its pyramidal shikhara.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2
- 135. Ashoka's connection with Buddhism is evident from which one of the following edicts?
 - (a) Major Rock Edict 13
- (b) Rock Edict 6
- (c) Minor Rock Edict 1
- (d) Pillar Edict 4
- 136. The Cabinet Mission Plan for India envisaged a
 - (a) Federation
 - (b) Confederation
 - (c) Unitary form of Government
 - (d) Union of States



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- 137. The creation of the institution or Lokpal was first recommended by
 - (a) Law Commission
 - (b) Santhanam Committee
 - (c) Shah Commission
 - (d) Administrative Reforms Commission
- 138. Which one of the following is a cause of acid rains?
 - (a) Ozone.
- (b) Ammonia
- (c) Sulphur dioxide
- (d) Carbon monoxide
- 139. The desirable range of pH for drinking water is
 - (a) 6.5 to 8..5
- (b) 5.0 to 6.5
- (c) 6.5 to 7.0
- (d) 7.0 to 8.5
- 140. Consider the following reaction:

$$CH_4 + 2O_2 \longrightarrow CO_2 + 2H_2O$$

Which of the following about the reaction given above is/are correct?

- 1. Carbon is oxidized.
- 2. Hydrogen is oxidized.
- 3. Hydrogen is reduced.
- 4. Carbon is reduced.
- Select the correct answer using the code given below:
- (a) 1 only
- (b) land 2 only
- (c) 2 and 3 only
- (d) 2 and 4 only
- 141. Sunrise in eastern Arunachal Pradesh would be about how many hours before the sunrise in western Gujarat?
 - (a) One hour
- (b) Two hours
- (c) Three hours
- (d) Four hours
- 142. Consider the following states of India in terms of percentage of forest area in relation to the total area of the state:
 - 1. Karnataka
- 2. Odisha
- 3. Kerala
- 4. Andhra Pradesh

Which one of the following is the correct descending order?

- (a) 1-2-4-3
- (b) 3-1-2-4
- (c) 3-2-1-4
- (d) 2-3-1-4
- 143. Which one of the following states in India has the longest coastline?
 - (a) Odisha
- (b) Tamil Nadu
- (c) Karnataka
- (d) West Bengal
- 144. Which one of the following states in India has the largest area under forest cover?
 - (a) Maharashtra
- (b) Chhattishgarh
- (c) Madhya Pradesh
- (d) Andhra Pradesh
- 145. Which one of the following is not an igneous rock?
 - (a) Gabbro
- (b) Granite
- (c) Dolomite
- (d) Basalt
- 146. The Coriolis effect is the result of
 - (a) Pressure gradient
 - (b) Earth's axis of inclination
 - (c) Earth's rotation
 - (d) Earth's revolution
- 147. Where is Mekong Delta located
 - (a) Thailand
- (b) Cambodia
- (c) Myanmar
- (d) Vietnam
- 148. Which, one of the following pairs of rivers and tributaries is not correctly matched?
 - (a) Godavari : Indravati
- (b) Ganga: Penganga

- (c) Krishna : Bhima (d) Luni : Sukri
- 149. Consider the following characteristics of a tropical cyclone:
 - 1. A warm sea temperature of $> 26^{\circ}$ C
 - 2. High relative humidity of atmosphere at a height of > 700m
 - 3. Atmospheric instability

The above mentioned characteristics are associated with which one of the following cycles of its development?

- (a) Formulation and initial stage
- (b) Modification stage
- (c) Full maturity

(Harappans)?

- (d) Decay
- 150. In the Mesopotamian records, which one of the following terms was used for the Indus Valley
 - (a) Dilmun
- (b) Meluha
- (c) Magan
- (d) Failaka

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Key Remarks by Indus Academics Team

Expert Remarks by Er. Kunal Kumar (Chief Mentor – NDA/CDS/AFCAT)

I would call this question paper as "Reasonably moderate" to "Straight forward" for serious NDA Aspirants. With 23 repeated questions in Mathematics section, 14 in physics, 7 in chemistry and 5 in Geography, 4 in History Section, NDA EXAM 2017 can be termed as. Of course, candidates with Science background will have an edge over non-science background Aspirants.

<u>Congratulatory Remarks by Amrita Goswami</u> (Co-Founder - Indus Academics)

It is certainly a proud moment for Indus Academics where 63 out of 100 questions in GAT paper-II and 23 questions in mathematics directly match our class assignments and MCQ booklet. Also 19 questions in NDA paper were same as that in our All India Test series. KUDOS to the INDUS team for setting new benchmarks and raising the bar for all coaching academies. We would ensure that all motivated aspirants achieve their objective of an officer position in one of the best Armed Forces in the world – Indian Armed Forces.