Test Booklet No.

Subject : BIOLOGY

Code : 304 E

Medium: English

(Do not open this Test Booklet until you are asked to do so)



Time Allowed : 45 minutes	Maximum Marks : 200	Total Questions : 50	Number of questions to be answered : 40				
Kindly read the Instructions given on this Page and Back Page carefully before attempting this Question Paper.							
Important Instruction	is for the Candidates	s :					
	• •	<u> </u>	, the candidate is required to answer any answered questions will be considered for				
2. When you are given the 0	OMR Answer Sheet, fill in	n your particulars on it car	efully with blue/black ball point pen only.				
3. Use only Blue/Black Bal	l Point Pen for marking re	esponses.					
on this Test Booklet. Als	. The CODE for this Test Booklet is A . Make sure that the CODE printed on the OMR Answer Sheet is the same as that on this Test Booklet. Also ensure that your Test Booklet No. and OMR Answer Sheet No. are exactly the same. In cast of discrepancy, the candidate should immediately report the matter to the Invigilator for replacement of both the Test Booklet and the OMR Answer Sheet. No claim in this regard will be entertained after five minutes from the start of the examination.						
consists of one sheet. At	the start of the examination	on within first five minute	as total 16 pages and OMR Answer Sheet es, candidates are advised to ensure that all are not damaged in any manner.				
•	•	ese four options choose the MR Answer Sheet with a B	e MOST APPROPRIATE OPTION and lue/Black Ball Point Pen.				
Five (5) marks will be given for each correct answer. One (1) mark will be deducted for each incorrect answer. If more than one circle is found darkened/blackened for a question, then it will be considered as an incorrect answer Unanswered questions will be given no mark. P.T.C.							
Name of the Candidate (in	Capital Letters):						
Application Number (in fig	gures) :						
Roll Number (in figures)):						
Centre of Examination (in	Capital Letters) :						
			re :				
'acsimile signature stamp of Centre Superintendent :							

1.	Alla	logous structures are a result of :		
	(1)	Convergent evolution		
	(2)	Divergent evolution		
	(3)	Parallel evolution		
	(4)	Retrogressive evolution		
2.	Whi	ich of the following does <i>not</i> affect the Hardy-	Weint	perg equilibrium ?
	(1)	Natural selection	(2)	Genetic drift
	(3)	Gene pool	(4)	Gene migration
3.	Whi	ich of the following primates was more like an	ape ?	
	(1)	Homo erectus	(2)	Dryopithecus
	(3)	Australopithecines	(4)	Ramapithecus
4.	Nuc	eleosome is associated with molecules	of hi	stones.
	(1)	Four		
	(2)	Nine		
	(3)	Two		
	(4)	Eight		
5.	Sele	ect the observations drawn from the human gen	ome p	project which are correct.
	(A)	The human genome contains 3164.7 million b	p.	
	(B)	The average gene consists of 3000 bases.		
	(C)	Total number of genes is estimated at 30,000.		
	(D)	The functions are unknown for over 50% of d	iscov	ered genes.
	(E)	Less than 2% of the genome codes for protein	s.	
	Cho	ose the <i>correct</i> answer from the options given	below	<i>'</i> :
	(1)	(A), (B), (C) and (D) only	(2)	(A), (C), (D) and (E) only
	(3)	(A), (C) and (E) only	(4)	(A), (B), (C), (D) and (E)
		SPACE FOR R	OHG	H WORK

	List-I		List-II
	Placental mammals		Counterpart Marsupials
(A)	Anteater	(I)	Spotted cuscus
(B)	Bobcat	(II)	Numbat
(C)	Lemur	(III)	Flying Phalanger
(D)	Flying squirrel	(IV)	Tasmanian tiger cat

Choose the *correct* answer from the options given below:

- (1) (A) (II), (B) (IV), (C) (I), (D) (III)
- (2) (A) (II), (B) (I), (C) (IV), (D) (III)
- (3) (A) (IV), (B) (I), (C) (II), (D) (III)
- (4) (A) (IV), (B) (I), (C) (III), (D) (II)

7. Identify the *incorrect* statement/s:

- (A) Intestinal perforation and death may occur in severe cases of typhoid infection.
- (B) Common cold is caused by Rhinoviruses.
- (C) Lips and fingernails may turn grey to bluish colour in severe cases of pneumonia.
- (D) Pneumonia is caused by Salmonella.
- (E) Typhoid fever could be confirmed by Widal test.

Choose the answer from the options given below:

(1) (A), (C) and (D) only

(2) (B) and (E) only

(3) (D) only

(4) (A) and (D) only

8. Match List-I with List-II:

	List-I		List-II
	Types of barriers		Examples
(A)	Cytokine barriers	(I)	Mucus coating
(B)	Physical barriers	(II)	Tears from eyes
(C)	Cellular barriers	(III)	Phagocytosis
(D)	Physiological barriers	(IV)	Interferons

Choose the *correct* answer from the options given below :

- (1) (A) (IV), (B) (III), (C) (I), (D) (II)
- (2) (A) (II), (B) (IV), (C) (III), (D) (I)
- (3) (A) (II), (B) (I), (C) (IV), (D) (III)
- (4) (A) (IV), (B) (I), (C) (III), (D) (II)

- **9.** Smack is chemically:
 - (1) Diacetyl morphine

(2) Cocaine

(3) Benzodiazepine

(4) Amphetamine

- **10.** Antibodies are secreted by :
 - (1) T-Cells

(2) B-Cells

(3) α-Cells

(4) β -Cells

- 11. In sewage treatment, flocs are:
 - (1) the solids that settle during sedimentation.
 - (2) the supernatant that is formed above the primary sludge.
 - (3) the masses of bacteria associated with fungal filaments.
 - (4) the bacteria which grow anaerobically and are also called anaerobic sludge digesters.
- 12. Match List-I with List-II:

	List-I		List-II
	Products		Organisms
(A)	Statin	(I)	Streptococcus
(B)	Clot buster	(II)	Trichoderma
(C)	Swiss cheese	(III)	Monascus
(D)	Cyclosporin-A	(IV)	Propionibacterium

Choose the *correct* answer from the options given below:

- (1) (A) (II), (B) (I), (C) (IV), (D) (III)
- (2) (A) (III), (B) (I), (C) (IV), (D) (II)
- $(3) \quad (A) (III), (B) (IV), (C) (II), (D) (I)$
- (4) (A) (II), (B) (III), (C) (I), (D) (IV)
- 13. The beetle used as a biocontrol agent for aphids and mosquitoes is:
 - (1) Trichoderma

(2) Dragonflies

(3) Ladybird

- (4) Silver fish
- **14.** Downstream processing method involves :
 - (1) Identification

(2) Amplification

(3) Fermentation

(4) Purification

304 E/A	5)
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15.

	enzy	yme ?		
	(1)	Fungi – Chitinase	(2)	Algae – Methylase
	(3)	Plant cells – Cellulase	(4)	Bacteria – Lysozyme
16.	Arra	ange the following steps involved in transforma	tion (of bacteria in a sequence from initiation to end.
	(A)	Incubation of rDNA with bacterial cell on ice		
	(B)	Treatment with divalent cations		
	(C)	Heat shock treatment		
	(D)	Selection on antibiotic containing agar plate		
	(E)	Placed them again on ice		
	Cho	ose the <i>correct</i> answer from the options given b	elow	<i>7</i> :
	(1)	(A), (B), (D), (C), (E)	(2)	(B), (A), (C), (E), (D)
	(3)	(B), (C), (D), (A), (E)	(4)	(A), (C), (B), (D), (E)
17.	Whi	ich of the following statements are <i>incorrect</i> ?		
	(A)	Fragments of DNA can be separated by ELISA	λ.	
	(B)	Transformation is a procedure through which a	a pied	ce of DNA is introduced in a host bacterium.
	(C)	Recombinant DNA technology does not involve	ve iso	plation of a desired DNA fragment.
	(D)	DNA ligases are used for stitching DNA fragn	nents	into a vector.
	Cho	ose the answer from the options given below:		
	(1)	(A) and (C) only	(2)	(A) and (B) only
	(3)	(B) and (C) only	(4)	(A), (C) and (D) only
18.	Whi	ich of the following statements are <i>true</i> ?		
	(A)	Milk obtained from 'Rosie' is nutritionally mo	re ba	alanced for human babies than natural human milk.
	(B)	Biopiracy refers to the use of bioresources with	hout	proper authorisation from MNCs.
	(C)	GEAC is the decisive body for safety and valid	dity (of GMOs and GM research respectively.
	(D)	Transgenic animals help us to understand the o	contri	ibution of genes in the development of disease.
	Cho	ose the <i>correct</i> answer from the options given b	elow	<i>7</i> :
	(1)	(A) and (C) only	(2)	(C) and (D) only
	(3)	(A) and (D) only	(4)	(B) and (C) only

Which of the following is *not* the correctly matched pair of organism and its respective cell wall degrading

	List-I		List-II
	Transgene		Used for/Products
(A)	α-1-antitrypsin	(I)	Meloidegyne incognitia
(B)	cryIAc	(II)	Corn borer
(C)	Antisense RNA	(III)	Treat emphysema
(D)	cryIAb	(IV)	Cotton bollworms

Choose the *correct* answer from the options given below:

$$(3)$$
 $(A) - (III), (B) - (II), (C) - (I), (D) - (IV)$

20. Expand "GEAC":

- (1) Genetic and Environmental Advisory Committee
- (2) Gene Establisment Approval Committee
- (3) Genetic Engineering Advisory Committee
- (4) Genetic Engineering Approval Committee
- **21.** When an insect feeds on the *Bt* plant, the insect dies due to the conversion of inactive protein to active protein in :
 - (1) Alkaline pH of the gut.
 - (2) Acidic pH of the gut.
 - (3) Acidic pH of saliva.
 - (4) Alkaline pH of saliva.

List-I			List-II	
	Interspecies Relationships		Features	
(A)	Commensalism	(I)	One species is benefitted at the expense of the other	
(B)	Mutualism	(II)	One species is harmed and the other is unaffected	
(C)	Amensalism	(III)	Both the species are benefitted	
(D)	Parasitism	(IV)	One species benefits and other remains unaffected	

Choose the *correct* answer from the options given below:

- (1) (A) (I), (B) (II), (C) (III), (D) (IV)
- (2) (A) (IV), (B) (III), (C) (II), (D) (I)
- (3) (A) (II), (B) (I), (C) (III), (D) (IV)
- (4) (A) (III), (B) (IV), (C) (I), (D) (II)
- 23. In a country, at any time, the population has the same number of youngs and mature ones. What type of growth does it reflect?
 - (1) Expanding
- (2) Declining
- (3) Stable
- (4) S-shaped
- **24.** Two closely related species can co-exist indefinitely and violate the Gause's 'Competitive Exclusion Principle' by:
 - (1) eliminating the inferior species.
 - (2) resource partitioning.
 - (3) interacting with each other symbiotically.
 - (4) changing the area of grazing.
- **25.** The process of mineralisation by microorganisms helps in the release of :
 - (1) inorganic nutrients from detritus and formation of humus.
 - (2) organic nutrients from humus.
 - (3) inorganic nutrients from humus.
 - (4) organic and inorganic nutrients from detritus.
- **26.** In which ecosystem is the biomass of primary consumers greater than producers?
 - (1) Forests
- (2) Grassland
- (3) Desert
- (4) Sea

304 E/A (8)

27. Choose the correct statements with respect to decomposition from the following:

- (A) Decomposition is an anaerobic process.
- (B) Decomposition rate of detritus depends upon the chemical nature of it.
- (C) Water-soluble organic nutrients go into the soil and get precipitated in the process of leaching.
- (D) Humification follows mineralisation.

Choose the *correct* answer from the options given below:

(1) (B) and (D) only

(2) (A) and (C) only

(3) (B) and (C) only

(4) (A) and (D) only

28. Match List-I with List-II:

List-I	List-II
Concepts	Explanation
(A) Standing state	(I) Available biomass for the consumption of heterotrophs
(B) Secondary productivity	(II) Rate of formation of organic matter by consumers
(C) Standing crop	(III) Mass of living matter in a trophic level at a given time
(D) Net primary productivit	y (IV) Amount of mineral nutrients in the soil at a given time

Choose the *correct* answer from the options given below:

- (1) (A) (IV), (B) (III), (C) (II), (D) (I)
- (2) (A) (I), (B) (II), (C) (III), (D) (IV)
- (3) (A) (IV), (B) (II), (C) (III), (D) (I)
- (4) (A) (I), (B) (IV), (C) (II), (D) (III)

Read the passage carefully and give the answer to the next five questions:

India was amongst the first countries in the world to initiate action plans and programmes at a national level to attain total reproductive health as a social goal. These programmes called 'family planning' were initiated in 1951 and were periodically assessed over the past decades. Improved programmes covering wider reproduction-related areas are currently in operation. Creating awareness among the people about various reproduction-related aspects and providing facilities and support for building up a reproductively healthy society are the major tasks under these programmes.

29. Which of the following is *not* a Sexually Transmitted Disease?

(1) Chlamydiasis

(2) Filariasis

(3) Genital herpes

(4) Trichomoniasis

- **30.** Which of the following statements is *incorrect* with respect to Medical Termination of Pregnancy?
 - (1) They are considered safe during the first trimester.
 - (2) It is legalised in India from 1971.
 - (3) MTPs can be performed even after 24 weeks, but with the opinion of 2 registered medical practitioners on specific grounds.
 - (4) About 20% of the total number of conceived pregancies undergo MTP in a year globally.

	List-I		List-II
	Various Assisted		Process Involved
	Reproductive Technologies		
(A)	ZIFT	(I)	Formation of embryo <i>in vitro</i> by injecting sperm directly
			into ovum
(B)	ICSI	(II)	Transferring of embryo with more than 8 blastomeres into
			the uterus
(C)	IUI	(III)	Transferring of fertilised egg up to 8 blastomeres into
			fallopian tube
(D)	IUT	(IV)	Transfer of semen from a healthy donor into the uterus
			artificially

Choose the *correct* answer from the options given below:

- (1) (A) (III), (B) (I), (C) (II), (D) (IV)
- (2) (A) (III), (B) (I), (C) (IV), (D) (II)
- (3) (A) (II), (B) (III), (C) (IV), (D) (I)
- (4) (A) (IV), (B) (III), (C) (I), (D) (II)
- **32.** Which of the following methods of contraception is *not* meant for females?
 - (1) IUDs
 - (2) Lactational amenorrhea
 - (3) Vasectomy
 - (4) Condoms
- 33. 'Saheli' an oral contraceptive pill, also known as the 'Once a week' pill, was developed by :
 - (1) AIIMS

(2) NBRI

(3) CDRI

(4) NBPGR

304 E/A (10)

Read the passage carefully and give the answers to the next five questions:

Does the number of species in a community really matter to the functioning of the ecosystem? This is a question for which ecologists have not been able to give a definitive answer. For many decades, ecologists believed that communities with more species, generally, tend to be more stable than those with less species. According to the International Union for Conservation of Nature and Natural Resources (IUCN) (2004), the total number of plant and animal species described so far is more than 1.5 million.

- 34. Which of the following is **not** a characterstic of a stable biological community? (1) It must be resistant to invasions by alien species. (2) It should not show too much variation in productivity from year to year. (3) All the species are equally important in a stable community and absence of any one leads to its unstability. (4) It is resilient to occasional disturbances, whether natural or man-made. In 'rivet popper hypothesis' the 'rivet' signifies: 35. (1) Key species (2) Endemic species (4) Species (3) Community 36. The scientist who proved that species richness directly correlates with the stability of a community, (1) Paul Ehrlich (2) David Tilman (3) Robert May (4) Edward Wilson 37. Among the vertebrates, which of the following is the most species-rich group? (1) Reptiles (2) Fishes (3) Insects (4) Mammals 38. The following are the various hypotheses proposed in explaining the greatest biological diversity in tropics
- **38.** The following are the various hypotheses proposed in explaining the greatest biological diversity in tropics *except*:
 - (1) Temperate regions are subjected to glaciations, but tropical latitudes have remained relatively undisturbed.
 - (2) Tropical environments have more humidity/moisture which helps the diversity to flourish.
 - (3) Tropical environments are less seasonal and more constant.
 - (4) There is more solar energy available in the tropics which contributes to higher productivity and hence, biodiversity.

- **39.** Cells present in the mature pollen grains are _____.
 - (1) Central cell and generative cell
- (2) Antipodal cell and vegetative cell
- (3) Vegetative cell and generative cell
- (4) Filiform cell and micropylar cell

	List-I		List-II
	Structures		Functions
(A)	Filiform apparatus	(I)	Made up of sporopollenin
(B)	Tapetum	(II)	Attachment of ovule to the placenta
(C)	Exine	(III)	Guides pollen tube into the synergid
(D)	Funicle	(IV)	Nourishes the pollen grain

Choose the *correct* answer from the options given below:

- (1) (A) (IV), (B) (I), (C) (II), (D) (III)
- (2) (A) (III), (B) (IV), (C) (I), (D) (II)
- (3) (A) (II), (B) (I), (C) (III), (D) (IV)
- (4) (A) (I), (B) (III), (C) (IV), (D) (II)
- **41.** Primary Endosperm Nucleus is the product of :
 - (1) Double fusion

(2) Triple fusion

(3) Parthenogenesis

- (4) Apomixis
- **42.** In humans, mammary gland is divided into lobes.
 - (1) 10-12

(2) 25-30

 $(3) \quad 30 - 35$

- (4) 15 20
- **43.** Sex in human embryo is determined by :
 - (1) 'X' chromosome of egg
 - (2) 'X' or 'Y' chromosome of sperm
 - (3) Only 'Y' chromosome of sperm
 - (4) Health of mother

304	E/A		(12)										
44.	Arrange the following stages of oogenesis in order of their occurrence.												
	(A)	Ovum	(B)	Oogonia									
	(C)	Primary oocyte	(D)	Secondary oocyte									
	Cho	Choose the <i>correct</i> answer from the options given below:											
	(1)	(C), (B), (D), (A)	(2)	(B), (C), (D), (A)									
	(3)	(D), (C), (A), (B)	(4)	(A), (D), (C), (B)									
45.	Whi	Which of the following pair of contrasting traits was <i>not</i> studied by Mendel ?											
	(1)	Pink and white flowers											
	(2)	Inflated and constricted pods											
	(3)	Axial and terminal flowers											
	(4)	Green and yellow pods											
46.	Fail	Failure of chromatids to segregate during cell division cycle results in :											
	(1)	Polyploidy		Euploidy									
	(3)	Aneuploidy	(4)	Autopolyploidy									
47.	Select the correctly matched pair about sickle cell anaemia:												
		Genotype: Phenotype											
	(A)) Hb ^A Hb ^A : Diseased phenotype											
	(B)) Hb ^A Hb ^S : Diseased phenotype											
	(C)) Hb ^S Hb ^S : Diseased phenotype											
	(D)) Hb ^S Hb ^A : Carrier of disease											
	Cho	Choose the <i>correct</i> answer from the options given below:											
	(1)	(C) and (D) only											
	(2)	(A) and (C) only											

(3) (B), (C) and (D) only

(4) (A), (B), and (C) only

304 E/A

48. Match List-I with List-II:

	List-I		List-II
	Scientists		Discovery
(A)	Sutton and Boveri	(I)	X-Body
(B)	Sturtevant	(II)	Chromosomal Theory of Inheritance
(C)	Henking	(III)	Transformation in bacteria
(D)	Griffith	(IV)	Genetic maps

(13)

Choose the *correct* answer from the options given below:

$$(3)$$
 $(A) - (I), (B) - (III), (C) - (II), (D) - (IV)$

49. Which of the following statements are *incorrect* with respect to nucleotides?

- (A) Purines and pyrimidines are nitrogenous bases.
- (B) Nucleotides are non-enzymatic molecules.
- (C) Phosphate group is linked to OH of 5' C of a nucleoside through phosphoester linkage.
- (D) In RNA, every nucleotide residue has an additional OH group present at 2' position in the ribose.
- (E) Thymine is an example of Pyrimidine.

Choose the *correct* answer from the options given below:

(1) (A), (B) and (E) only

(2) (D) and (E) only

(3) (B) and (D) only

(4) (B) and (E) only

50. Arrange the given steps of DNA fingerprinting in the sequence from initiation to end.

- (A) Digestion of DNA by restriction endonuclease
- (B) Isolation of DNA
- (C) Hybridisation using labelled VNTR probe
- (D) Transferring (blotting) of separated DNA fragments to synthetic membrane

Choose the $\it correct$ answer from the options given below :

(1) (A), (B), (C), (D)

(2) (A), (D), (C), (B)

(3) (B), (A), (D), (C)

(4) (C), (A), (B), (D)

304 E/A (14)

SPACE FOR ROUGH WORK

304 E/A (15)

SPACE FOR ROUGH WORK

304 E/A (16)

Read carefully the following instructions:

- 8. No candidate will be allowed to leave the OMR Answer Sheet blank. If any OMR Answer Sheet is found blank, it shall be crossed by the Invigilator with his/her signature, mentioning "Cancelled" on it.
- 9. Do not tear or fold any page of the Test Booklet and OMR Answer Sheet.
- 10. Candidates are advised to ensure that they fill the correct particulars on the OMR Answer Sheet, i.e., Application No., Roll No., Test Booklet No., Name, Mother's Name, Father's Name and Signature.
- 11. Rough work is to be done in the space provided for this purpose in the Test Booklet only.
- 12. The answers will be evaluated through electronic scanning process. Incomplete or incorrect entries may render the OMR Answer Sheet invalid.
- 13 Candidates are advised not to fold or make any stray marks on the OMR Answer Sheet. Use of Eraser, Nail, Blade, White Fluid/Whitener, etc., to smudge, scratch or damage in any manner the OMR Answer Sheet during examination is strictly prohibited. Candidature and OMR Answer Sheet of candidates using Eraser, Nail, Blade or White Fluid/Whitener to smudge, scratch or damage in any manner shall be cancelled.
- 14. There will be one copy of OMR Answer Sheet i.e., the Original Copy. After the examination is over, the candidate shall hand over the OMR Answer Sheet to the Invigilator. The candidate can take away the Test Booklet after the examination is over. If the candidate does not hand over the OMR Answer Sheet to the Invigilator and goes away with the OMR Answer Sheet, his/her candidature shall be cancelled and criminal proceedings shall also be initiated against him/her.
- 15. Candidates are advised strictly not to carry handkerchief, any mobile phone, any type of watch, belt or wear ornaments like ring, chain, ear-ring, etc., electronic or communication device, pen, pencil, eraser, sharpener and correction fluid to the Examination Centre. If any candidate is found possessing any such item, he/she will not be allowed to enter the examination centre. Possession of a mobile phone or any other aiding material as mentioned above by the candidate in the examination room will be treated as a serious violation and it may lead to cancellation of the candidature and debarring him/her from future examinations.
- 16. If a candidate violates any instructions or shows any indiscipline or misbehaviour, appropriate action will be taken including cancellation of candidature and debarring from future examinations.
- 17. Use of electronic/manual calculator is **not** allowed.

NATIONAL TESTING AGENCY CUET (UG) 2024 : Final Answer Keys

Exam Date: 15.05.2024 Subject: 304 - Biology (English)

Exam	Exam Date: 15.05.2024 Subject: 304 - Biology (English														
Q.No Key		Q.No Key		Q.No Key		Q.No Key		Q.No Key		Q.No Key		Q.No Key		Q.No Key	
Book : A		Book : A		Book : B		Book : B		Book : C		Book : C		Book : D		Book : D	
1	1	46	3	1	3	46	3	1	3	46	3	1	3	46	1
2	3	47	1	2	4	47	2	2	2	47	4	2	2	47	2
3	2	48	1	3	1	48	1	3	2	48	2	3	3	48	1
4	2	49	Drop	4	2	49	3	4	4	49	2	4	4	49	4
5	4	50	3	5	3	50	4	5	2	50	2	5	2	50	1
6	1			6	2			6	2			6	3		
7	3			7	2			7	1			7	3		
8	4			8	2			8	3			8	2		
9	1			9	1			9	1			9	3		
10	2			10	2			10	1			10	2		
11	3			11	1			11	Drop			11	3		
12	2			12	4			12	3			12	3		
13	3			13	1			13	2			13	3		
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18	2			18	4			18	1			18	3		
19	1			19	3			19	3			19	2		
20	4			20	3			20	4			20	2		
21	1			21	2			21	1			21	4		
22	2			22	3			22	2			22	2		
23	3			23	2			23	3			23	2		
24	2			24	3			24	2			24	1		
25	3			25	3			25	3			25	3		
26	4			26	3			26	4			26	1		
27	3			27	4			27	2			27	1		
28	3			28	2			28	2			28	Drop		
29	2			29	2			29	1			29	3		
30	3			30	2			30	2			30	2		
31	2			31	3			31	1			31	4		
32	3			32	2			32	4			32	1		
33	3			33	2			33	1			33	3		
34	3			34	4			34	2			34	2		
35	4			35	2			35	3			35	1		
36	2			36	2			36	2			36	3		
37	2			37	1			37	3			37	4		
38	2			38	3			38	4			38	1		
39	3			39	1			39	3			39	2		
40	2			40	1			40	3			40	3		
41	2			41	Drop			41	2			41	2		
42	4			42	3			42	3			42	3		
43	2			43	2			43	2			43	4		
44	2			44	4			44	3			44	2		
45	1			45	1			45	3			45	2		

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