

NEET BIOLOGICAL CLASSIFICATION — VIRUSES, VIROIDS, PRIONS AND LICHENS — PYQS**Max. Marks: 112****Questions: 28****Section A (MCQ) — 28 questions****Q.1** Mad cow disease is caused by _____.

[RE-NEET (UG) 2026]

- (1) *Mycoplasma* sp. (2) prions
(3) viroids (4) *Aspergillus* sp.

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full solution**Q.2** Symbiotic associations between fungi and algae are called _____.

[RE-NEET (UG) 2026]

- (1) chrysophytes (2) lichens
(3) sponges (4) mycorrhiza

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[NEET (UG) 2022 (Phase 2)]

- (1) Prion (2) Bacterium
(3) Virus (4) Viroid

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[NEET (UG) 2020]

- (1) They have free RNA without protein coat
(2) They have DNA with protein coat
(3) They have free DNA without protein coat
(4) They have RNA with protein coat

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full solution**Q.5** Which of the following statements is **incorrect**?

[NEET (UG) 2019]

- (1) Infective constituent in viruses is the protein coat
(2) Prions consist of abnormally folded proteins
(3) Viroids lack a protein coat
(4) Viruses are obligate parasites

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- (1) DNA molecules without protein coat
(2) RNA molecules with protein coat
(3) RNA molecules without protein coat
(4) DNA molecules with protein coat

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- (1) They cause infections.
(2) Their RNA is of high molecular weight.
(3) They lack a protein coat.
(4) They are smaller than viruses.

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[AIPMT 2015]

- (1) The term '*contagium vivum fluidum*' was coined by M. W. Beijerinck.
(2) Mosaic disease in tobacco and AIDS in human being are caused by viruses.
(3) The viroids were discovered by D.J. Ivanowsky.
(4) W.M. Stanley showed that viruses could be crystallised.

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- (1) Polio virus (2) Tobacco mosaic virus
(3) Measles virus (4) Retrovirus

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- (1) DNA enclosed in a protein coat
(2) prokaryotic nucleus
(3) single chromosome
(4) both DNA and RNA.

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- (1) trees are very healthy
- (2) trees are heavily infested
- (3) location is highly polluted
- (4) location is not polluted

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Q.12 Satellite RNA are present in some :

[NEET 2013 (Karnataka)]

- (1) Prions
- (2) Bacteriophages
- (3) Plant viruses
- (4) Viroids

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Q.13 Which statement is wrong for viruses?

[AIPMT 2012 (Prelims)]

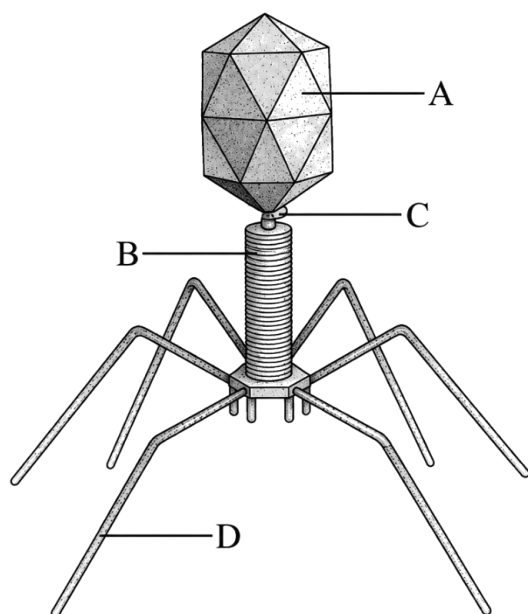
- (1) All are parasites.
- (2) All of them have helical symmetry.
- (3) They have ability to synthesize nucleic acids and proteins.
- (4) Antibiotics have no effect on them.

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Q.14 Given below is the diagram of a bacteriophage. In which one of the options all the four parts A, B, C and D are correct?

[AIPMT 2010 (Mains)]



- (1) A → Collar, B → Tail fibres, C → Head, D → Sheath
- (2) A → Tail fibres, B → Head, C → Sheath, D → Collar
- (3) A → Head, B → Sheath, C → Collar, D → Tail fibres
- (4) A → Sheath, B → Collar, C → Head, D → Tail fibres

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Q.15 Virus envelope is known as [AIPMT 2010 (Prelims)]

- (1) capsid
- (2) virion
- (3) nucleoprotein
- (4) core

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Q.16 Infectious proteins are present in –

[AIPMT 2010 (Prelims)]

- (1) Viroids
- (2) Geminiviruses
- (3) Satellite viruses
- (4) Prions

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Q.17 T.O. Diener discovered a

[AIPMT 2009]

- (1) free infectious DNA
- (2) infectious protein
- (3) bacteriophage
- (4) free infectious RNA

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Q.18 The causative agent of mad-cow disease is a-

[AIPMT 2006]

- (1) Virus
- (2) Bacterium
- (3) Prion
- (4) Worm

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Q.19 There exists a close association between the alga and the fungus within a lichen. The fungus

[AIPMT 2005]

- (1) provides protection, anchorage and absorption for the alga
- (2) provides food for the alga
- (3) fixes the atmospheric nitrogen for the alga
- (4) releases oxygen for the alga

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Q.20 Which of the following statements is not true for retroviruses?

[AIPMT 2004]

- (1) DNA is not present at any stage in the life cycle of retroviruses.
- (2) Retroviruses carry gene for RNA-dependent DNA polymerase.
- (3) The genetic material in mature retroviruses is RNA.
- (4) Retroviruses are causative agents for certain kinds of cancer in man.

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Q.21 Viruses that infect bacteria multiply and cause their lysis, are called

[AIPMT 2004]

- (1) lysozymes
- (2) lipolytic
- (3) lytic
- (4) lysogenic

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- Q.22** Lichens are well known combination of an alga and a fungus where fungus has [AIPMT 2004]
- (1) a saprophytic relationship with the alga
 - (2) an epiphytic relationship with the alga
 - (3) a parasitic relationship with alga
 - (4) a symbiotic relationship with alga

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- Q.23** Which one of the following statements about viruses is correct? [AIPMT 2003]
- (1) Viruses possess their own metabolic system.
 - (2) All viruses contain both RNA and DNA.
 - (3) Viruses are obligate parasites.
 - (4) Nucleic acid of viruses is known as capsid.

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- Q.24** Tobacco mosaic virus is a tubular filament of size [AIPMT 2003]

- (1) 300×10 nm
- (2) 300×5 nm
- (3) 300×20 nm
- (4) 700×30 nm

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- Q.25** Viruses are no more "alive" than isolated chromosomes because [AIPMT 2003]
- (1) they require both RNA and DNA
 - (2) they both need food molecules
 - (3) they both require oxygen for respiration
 - (4) both require the environment of a cell to replicate.

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- Q.26** Cauliflower mosaic virus contains [AIPMT 2001]
- (1) ss RNA
 - (2) ds RNA
 - (3) ds DNA
 - (4) ss DNA

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- Q.27** Enzymes are not found in [AIPMT 2000]
- (1) fungi
 - (2) algae
 - (3) virus
 - (4) cyanobacteria.

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- Q.28** Which disease of man is similar to cattle's bovine spongiform encephalopathy? [AIPMT 2000]
- (1) Spongiocitis of cerebrum
 - (2) Encephalitis
 - (3) Spondylitis
 - (4) Jakob–Creutzfeldt disease

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ANSWER KEY

Ques.	1	2	3	4	5	6	7	8	9	10	11
Ans.	2	2	1	1	1	3	2	3	2	1	4
Ques.	12	13	14	15	16	17	18	19	20	21	22
Ans.	3	2	3	1	4	4	3	1	1	3	4
Ques.	23	24	25	26	27	28					
Ans.	3	3	4	3	3	4					