

PANJAB UNIVERSITY, CHANDIGARH

PU-CET (P.G.)-2018

LL.M (Master of Laws)

(i) **Question No. 4**

(ii) Objection/s: Correct answer may be only B

(iii) **Remarks:** Objection is unsustainable. Article 29 applies to minorities as it uses the words “ *any section of Citizens residing in the territory of India or any part thereof having a distinct language, script or culture of its own*” not “ **any section of society**” as suggested in the objection.

Key is correct

(i) **Question No. 6**

(ii) Objection/s : All options are Directive Principles of State Policy, Option A is Article 39A

(iii) **Remarks:** Objection is unsustainable. Option A is not exact reference to Article 39A which talks about “**Equal justice and free legal aid... not cheap legal aid as provided in option A**”

Key is correct

(i) **Question No. 7**

(ii) Objection/s: The correct answer regarding oath of president is option (b) he is administered and given oath by Chief Justice of India and not the option (c) he subscribes an oath in the presence of Chief Justice of India

(iii) **Remarks:** Objection is wrong. According to **Article 60** of the **Constitution of India**, “Every President and every person acting as President or discharging the functions of the President shall, before entering upon his office, **make and subscribe in the presence of the Chief Justice of India** or, in his absence, the senior most Judge of the Supreme Court available, an oath or affirmation in the following form...”

Key is correct

(i) **Question No.19**

(ii) Objection/s: why Q 19 has been deleted as it carries a valid answer in option (c) i.e. Gujarat, as state of Gujarat has not been given any special status u/A 370 or 371 or 371A of the Constitution.

(iii) **Remarks:** Objection could not be sustained. The Q asked is which of the given states has no special status under the Constitution? As all the states referred to in the question, including Gujarat have been given some kind of special status either under Article 370 or 371 or 371 A, thus for lack of proper option, Q 19 has been rightly deleted.

Deletion is proper.

(i) **Question No. 23**

(ii) Objection/s : 4 objections relate to this Q saying that maximum period of state emergency under Article 356 is 3 years not 5 years as suggested by the answer key, as the Q asked has no reference to State of Punjab.

(iii) **Remarks:** The objections do not seem valid. The question asked is about maximum period of state emergency **as amended by 68th amendment**. This amendment related to state of Punjab only.

Key is correct

- (i) **Question No. 24**
- (ii) Objection/s: Art.35A has not been incorporated in Constitution, so this Q needs to be strike down.
- (iii) Remarks: The objection is untenable, as the Q only asks to which state Art.35A relates to.

Key is correct

- (i) **Question No. 31**
- (ii) Objection/s : Option C is correct
- (iii) Remarks: Objection is not proper.

Key is correct

- (i) **Question No. 55**
- (ii) Objection/s : Best option is A , C could also be correct.
- (iii) Remarks: As per S 494 IPC and explanation thereto, objection is wrong.

Key is correct

- (i) **Question No. 88**
- (ii) Objection/s: As per one objection, both options A and C are correct. Other objection says that right option is A only, as admitted facts could be both judicial and extrajudicial.
- (iii) Remarks: Section 58 of Evidence Act uses the term “facts admitted” and further clarifies their meaning and scope. Thus such facts are popularly called “judicial admissions”.Accordingly, any of the two options A or C maybe taken as correct.

To resolve the possible confusion Q 88 may be deleted

- (i) **Question No. 90**
- (ii) Objection/s: Option C instead of B is the right choice. Oral admissions as to the content of document could be relevant under certain circumstances like Sections 63 and 65 of the Evidence Act.
- (iii) Remarks: The objection is wrong, as the Q uses the term “usually” and is thus excludes the exceptional circumstances.

Key is correct

Subject: Master in Disaster management

- i. Question No : 18
 - ii. Objections: Question No 18 answer given key is c –Kaziranga National Park, but the correct answer is “A-Gir National Park”....
 - iii. Remarks of Coordinator: **Objection Valid /Key changed to “A”**
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- i. Question No :31
 - ii. Objections: Question no 31 whose answer according to answer key is “D” which is not correct.....
 - iii. Remarks of Coordinator: **Objection Valid / Question to be deleted**
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Subject: Mater in Public Health

- i. Question No : 32
- ii. Objections: In question No 32 ans key has given D as correct but according to book-book reference –k-Park Edition 24 it should be have been option b as 20 is for whispering
- iii. Remarks of Coordinator: **Objection is not Valid /Key is correct**

- i. Question No : 37
 - ii. Objections: In question No 37 there is asked about hazardous metals according to me hazardous metal is lead but in answer key arsenic is mentioned which is not answer....
 - iii. Remarks of Coordinator: **Objection is Valid /Key changed to “C”**
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Subject:M.Sc. (Microbial Biotechnology)

- i. Question No : 19
 - ii. Objections: Question Number 19 had a misprint the answer key suggests option D, which is misprint. None other option is correct.
 - iii. Remarks of Coordinator: **Objection is not Valid /Key is correct**
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Subject: M.P.Ed.(Mater of Physical Education)

- i. Question No : 12
 - ii. Objections: in the answersheet option C is marked correct I agree with that but even D option also satisfies the answer as well as (a) option.
 - iii. Remarks of Coordinator: **Objection is not Valid /Key is correct.**

 - i. Question No : 40
 - ii. Objections: verify the answer key.
 - iii. Remarks of Coordinator: **Objection is not Valid /Key is correct.**

 - i. Question No : 37 and 71
 - ii. Objections: wrong answer for question 37 and 71. Ryder cup is related to golf and bunker is related to polo but in answer key ryder cup is related to hockey and bunker is related to track and field.
 - iii. Remarks of Coordinator: **Objection Valid / Key changed to "D" for Q.No. 37 and & 71.**
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Subject:MCA

- i. Question No : 6,7,17,38,41
 - ii. Objections: objections to pucetpg-mca.
 - iii. Remarks of Coordinator: **Objections are not Valid /Key is correct.**
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Subject: Master in Remote Sensing and GIS

- i. Question No : 53
 - ii. Objections: India's time zone is 82.5 latitude so near to it is 80 degree latitude – answer should be C
 - iii. Remarks of Coordinator: **Objection is not Valid /Key is correct.**
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Subject: Master of Entrepreneurship and Family Business

- i. Question No : 38
 - ii. Objections: there is a mistake in answer no.38 which is the state bird of Punjab. It is baz but answer key ask its peacock which is wrong.
 - iii. Remarks of Coordinator: **Objection is Valid / Key changed to "D"**.
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Subject: Forensic Science and Criminology

- i. Question No : 19
- ii. Objections: As per your answer C is correct option but it can have multiple option C and B.
- iii. Remarks of Coordinator: **Objection is not Valid /Key is correct.**

- i. Question No : 84
- ii. Objections: As per your answer A is correct option but it can have option C as melanin control the skin colour of human being.
- iii. Remarks of Coordinator: **Objection is not Valid /Key is correct.**

- i. Question No : 103
 - ii. Objections: The answer of this question should be D but as per key it is A.
 - iii. Remarks of Coordinator: **Objection is not Valid /Key is correct.**
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Subject: M.Com (Business Innovation)

- i. Question No : 72
 - ii. Objections: Answer should be C only 2 follows.
 - iii. Remarks of Coordinator: **Objection is not Valid /Key is correct.**
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Subject: M.Com (Honors)

i. Question No : 26

ii. Objections: As per the answer key the quoted "Leadership is the activity of influencing people to stress for group objectives" has been said by (a) George R. Terry. However the exact statement said by George Terry defining leadership is "Leadership is the activity of influencing people to strive willingly for group objectives."

iii. Remarks of Coordinator: **Objection is not Valid /Key is correct.**

i. Question No : 57

ii. Objections: The MRTP 1969 Act was abolished in 2002. So this should not be a bonus question and (b) 2002 should be the correct answer. It appears that there has been a typing mistake in question, where MRTP has been mistakenly typed MRTF.

iii. Remarks of Coordinator: **Objection is not Valid /Key is correct**

i. Question No : 58

ii. Objections: there is a typing mistake in question classification has been typed as clarification. The classification of Capital and revenue items is based on the principle of periodicity or matching principle, which is not there in any of the options. The principles given in option do not lead to classification of revenue and capital items. Accordingly this should be a bonus question.

iii. Remarks of Coordinator: **Objection is not Valid /Key is correct**

i. Question No : 73

ii. Objections: The answer to this question should be option (B) moral rights approach. However, as per the answer key, the answer is (D) Individualism.

iii. Remarks of Coordinator: **Objection is Valid /Key changed to (B).**

i. Question No : 77

ii. Objections: the formula for margin of safety ratio is Profit/Contribution per unit. Option A Capital employed /Net worth is incorrect, option B contribution/sales is the formula for P/V ratio. So, this option is also incorrect. Option D contribution / sales at breakeven point is also incorrect, as breakeven point, profit = 0. Hence, at breakeven point, margin of safety=Profit/contribution per unit= 0. Hence, option C operating profit/ contribution should be the correct answer and this should not be a bonus question.

iii. Remarks of Coordinator: **Objection is not Valid / Question to be deleted**

I. Question No : 83

II. Objections: the question is silent with regard to the assessment year for which surcharge is livable. For the AY-2017-18, surcharge is levied @15% of income tax, if total income exceeds Rs. 1 crore.

For the AY-2018-19, surcharge is levied @ 10% of income tax, if total income exceeds Rs. 50 lakhs, and surcharge is levied@ 15% total income exceeds Rs 1 crore. Hence both C and D option should be the correct answer.

III. Remarks of Coordinator: **Objection is not Valid / Key is correct**

I. **Question No : 85**

II. Objections: In context Indian Company law, Memorandum of association is known as the constitution of company and defines how the external affairs of a company will be managed. Article of Association defines how the internal affairs a company will be managed. The question is framed in manner that it mixes the features of two deferent documents.

Hence, both C and D option should be correct.

III. Remarks of Coordinator: **Objection is not Valid /Key is correct**

Subject: M.A (Geography)

I. Question No : 02

II. Objections: The answer of the question no 2 is wrong. And the right answer of question 2 is D.

III. Remarks of Coordinator: **Objection is not Valid /Key is correct**

I. Question No : 14

II. Objections: The answer of the question no 14 is wrong. And the right answer of question 14 is D.

III. Remarks of Coordinator: **Objection is not Valid /Key is correct**

i. Question No : 23

ii. Objections: The answer of the question should be both C and B, as both of their tributaries meet the mail river at 90 degree i.e. right angle.

iii. Remarks of Coordinator: **Objection is not Valid /Key is correct**

I. Question No : 37

II. Objections: the fourth largest ocean is Arctic Ocean. So the answer should be option C

III. Remarks of Coordinator: **Objection is not Valid /Key is correct**

i. Question No : 39

ii. Objections: The answer of the question should be option D

iii. Remarks of Coordinator: **Objection is not Valid /Key is correct**

I. Question No : 40

II. Objections: The answer of the question should be D option,

III. Remarks of Coordinator: **Objection is not Valid /Key is correct**

I. Question No : 43

II. Objections: Chorochromatic method is Qualitative method. So the answer should be option A.

III. Remarks of Coordinator: **Objection is not Valid /Key is correct**

I. Question No : 57

II. Objections: Answers can be both option B and C because either we can subtract 10m elevation from 50m or we can add it to become 60m. So grace marks should be given in the question.

III. Remarks of Coordinator: **Objection is not Valid /Key is correct**

- I. **Question No : 59**
- II. Objections: Contour lines of U shaped valley are U shaped and that of V shaped valley are Vshaped. Since the shape of valley is not mentioned in the question so the answer could be both C and D. So grace marks should be provided
- III. Remarks of Coordinator: **Objection is not Valid /Key is correct**
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Subject: M.Sc. (Biotechnology)

I. Question No : 01

- II. Objections: The correct answer should be option A.
- III. Remarks of Coordinator: **Objection is not Valid /Key is correct**

I. Question No : 7

- II. Objections: The answer should be option B.
- III. Remarks of Coordinator: **Objection is not Valid /Key is correct**

i. Question No : 18

- ii. Objections: Answer A is incorrect because the complementary strand of 5' to 3' would be nucleotide sequence in the direction 3' to 5'.
- iii. Remarks of Coordinator: **Objection is not Valid /Key is correct**

I. Question No : 63

- II. Objections: Answer A is incorrect
- III. Remarks of Coordinator: **Objection is not Valid /Key is correct**

I. Question No : 75

- II. Objections: Answer A is incorrect because southern hybridization is used to detect DNA sample.
 - III. Remarks of Coordinator: **Objection is not Valid /Key is correct.**
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Subject: M.Sc.(Hons School/ 2 years Course) Chemistry

- I. Question No : 02, 13, 20, 30, 34, 36, 38, 39, 42, 43, 45, 47,59, 61, 63, 73, 75
- II. Objections: The correct answer should
02-C, 07-D and A, 13-A, 20-A, 30-B, 34-A, 36-A, 38-D, 39-A, 42-C, 43-A and D, 45-B, 47-C, 59-C,
61-all option are incorrect, 63-A, 73-A, 75-C
- III. Remarks of Coordinator: **Objections are not Valid /Keys are correct for above all.**

- I. **Question No :19**
- II. Objections: question no 19 will have A and C two answer because monosaccharide's and oligosaccharides both are sweetening agent
- III. Remarks of Coordinator: **Objection is Valid both A and C are valid /Question to be deleted.**

- I. **Question No :27**
- II. Objections: There is no relevant answer to question no 27, its answer would be 3.70 for (4s) and 7.85 for (3d).
- III. Remarks of Coordinator: **Objection is Valid / Question to be deleted.**

- I. **Question No :35**
 - II. Objections: Question no 35 has MM quadruple bond and has M-M triple so option D should be right answer.
 - III. Remarks of Coordinator: **Objection is Valid /Keys is changed to D.**
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Subject: M.Sc.(Hons School/ 2 years Course) Botany

- I. **Question No :06**
- II. Objections: correct answer is option A and D.
- III. Remarks of Coordinator: **Objection is valid /Question to be deleted.**

- i. **Question No :19**
- ii. Objections: correct answer is C.
- iii. Remarks of Coordinator: **Objection is valid /Question to be deleted.**

- I. **Question No :23**
 - II. Objections: Correct option is A
 - III. Remarks of Coordinator: **Objection is not Valid /Keys is correct.**
 - IV.
-

- I. **Question No :39**
- II. Objections: correct answer is option B
- III. Remarks of Coordinator: **Objection is not Valid /Keys is correct.**

- i. **Question No :41**
- ii. Objections: correct answer should be D
- iii. Remarks of Coordinator: **Objection is valid /Question to be deleted.**

- I. **Question No :49**
- II. Objections: correct answer is option C.
- III. Remarks of Coordinator: **Objection is not Valid /Keys is correct.**

- I. **Question No :53**
- II. Objections: Both option A and C are correct.
- III. Remarks of Coordinator: **Objection is not Valid /Keys is correct.**

V.

Subject: Mathematics

- I. Question No :10
- II. Objections: Correct answer should be C.
- III. Remarks of Coordinator: **Objectionis Valid /Key is changed to C**

- I. Question No :22**
- II. Objections:Correct answer should be option A.
- III. Remarks of Coordinator: **Objection is not Valid /Key is Correct**

- I. Question No :23**
- II. Objections: Correct answer should be option A.
- III. Remarks of Coordinator: **Objection is not Valid /Key is Correct.**

- I. Question No :29**
- II. Objections: Correct answer should be option A.
- III. Remarks of Coordinator: **Objection is Valid / Key is changed to A.**

- I. Question No :35**
- II. Objections: Correct answer should be option C.
- III. Remarks of Coordinator: **Objections is Valid / Key is changed to C.**

- I. Question No :39**
- II. Objections: Correct answer should be option D.
- III. Remarks of Coordinator: **Objections is not Valid / Key is Correct.**

- I. Question No : 50**
- II. Objections:_____.
- III. Remarks of Coordinator: **Objections is not Valid / Key is Correct.**

- I. Question No : 53**
- II. Objections: Correct answer should be option D.
- III. Remarks of Coordinator: **Objections is Valid /Two options are possible so Question is to be deleted.**

- I. Question No : 68**
- II. Objections: Correct answer should be option A.
- III. Remarks of Coordinator: **Objections is Valid / key is changed to optionA**

Subject: Physics

(i) **Question No. 3**

(ii) Objection:

(iii) Remarks of the Coordinator : Checked, Option (A) is correct
key is correct

(i) **Question No. 5**

(ii) Objection:

(iii) Remarks of the Coordinator : Although D' Alembert principle, also known as Lagrange D' Alembert principle, is not explicitly mentioned in the syllabus, yet it is related to Lagrange's equation of motion and Lagrange's equation of motion can be derived from it. Key A is also correct.

Question is valid and Key is correct.

I. **Question No. 6**

II. Objection:

III. Remarks of the Coordinator:**Question 6:** Bernoulli's principle forms part of +2 syllabus and concept is used in B.Sc. syllabus. Therefore, it is expected that students/candidates seeking admission to Post Graduate course should know the Physics studied up to B.Sc.

Question is valid and Key is correct.

I. **Question No. 9**

II. Objection:

III. Remarks of the Coordinator:**Question 9:** Correct option is B. One can take vector sum of all forces; resultant force need not necessarily pass through the centre of gravity.

key is correct.

I. **Question No. 13**

II. Objection:

III. Remarks of the Coordinator:**Question 13:** Correct option is D. Plasma waves are reproduced by the oscillations of charged particles, generally electrons (since ions are heavy). But these waves are electromagnetic waves like other UV or gamma waves. UV radiations can also be produced by oscillating electrons. Do not confuse between plasma and wave associated with plasma (plasma waves).

key is correct

I. **Question No. 14**

II. Objection:

III. Remarks of the Coordinator:**Question 14:** Option B is correct. See any book of quantum mechanics in which derivation of Schrodinger equation from a wave $\psi = A e^{i(kx - \omega t)}$ is given. Moreover energy operator $E = i\hbar$ times the partial differential of ψ with respect to time (t).

key is correct

I. **Question No. 24**

II. Objection:

III. Remarks of the Coordinator: Option A is correct. See any text book on physics. Also, 10+2 level gives this equation on Doppler effect.

key is correct

I. **Question No. 26**

II. Objection:

III. Remarks of the Coordinator:**Question 26:** Option C is correct. Calculate frequencies, combine two waves and calculate resultant frequency. Convert frequency to time period.

key is correct

I. Question No. 33

II. Objection:

III. Remarks of the Coordinator: Option C is correct. Pure second order transition is from ferro-magnetic to paramagnetic at the Curie temperature.
In option D, it involves change from superconductor to normal conductor in the presence of magnetic field.

key is correct

I. Question No. 36

II. Objection:

III. Remarks of the Coordinator: Option C is correct. See Stefan–Boltzmann law.

key is correct

I. Question No. 37

II. Objection:

III. Remarks of the Coordinator: Option C is correct. Proportional to the reciprocal of the volume of unit cell in direct lattice. But proportionality constant in this case is $(2\pi)^3$, hence Option C is correct. See the following: Page 55, Chapter 2: Geometrical description of crystals: direct and reciprocal lattices. Book: Solid State Physics by GROSSO and PASTORIPARRAVICINI, ACADEMIC PRESS Second printing 2003

key is correct

I. Question No. 39

II. Objection:

III. Remarks of the Coordinator: Option A is correct.
Option D is incorrect as conducting materials are not always slightly repelled by the magnetic field. For example iron.

key is correct

I. Question No. 44

II. Objection:

III. Remarks of the Coordinator: Option A is correct.
Rydberg levels are the energy levels with very high value of principal quantum number n . These are near to the ionization level. Valance bands are the highest occupied overlapping levels.

key is correct

I. Question No. 46

II. Objection:

III. Remarks of the Coordinator: Option A is correct. See the formula of resolution power of grating.

key is correct

I. Question No. 47

II. Objection:

III. Remarks of the Coordinator: Option B is correct. The path difference is 2 times the difference in the mirror positions since a given wave will initially travel towards the mirrors and after reflection from the same mirror it will once again cover the same distance.

key is correct

I. Question No. 49

II. Objection:

III. Remarks of the Coordinator: Option C is correct. Directions of Wave and Ray are same only for isotropic medium. In Anisotropic medium both are in different directions, as E (electric field) vector and D (displacement) vector are not co-linear. As Ray direction is taken as the direction of energy flow, hence option C is the most general answer for every medium and therefore correct option. (see Laser and Electro-optics by CC. Davis, Cambridge Univ Press (1996) Chapter 18: Optics of Anisotropic Media, Page 445.

key is correct

I. Question No. 50

II. Objection:

III. Remarks of the Coordinator: Option A is correct. Dielectric constants of vacuum, air, paper and water are 1, slightly more than one, 2-4 and 80, respectively.

key is correct

I. Question No. 51

- II. Objection:
- III. Remarks of the Coordinator: Correct option is A. Efficiency of a rectifier is the ratio of the DC output power to the AC input power. The value of resistance in forward bias is small. Thus, it can be neglected. Therefore, efficiency will be 0.406. Thus, 40.6% the maximum possible efficiency of a half wave rectifier.

key is correct

I. Question No. 52

- II. Objection:
- III. Remarks of the Coordinator: Correct option is A. Standard configuration is obviously the basic one used to explain action of transistor - with forward biased emitter-base junction and reversed biased base-collector junction. Output impedance is high.

key is correct

I. Question No. 55

- II. Objection:
- III. Remarks of the Coordinator: When it is written less negative: it is from more negative to less negative (relative term). When one has to start from zero, then it should have been mentioned 'small negative' and not 'less negative'. Negative value to gate indirectly infers the kind of JFET (n-channel). When gate voltage is made less negative, the width of the conducting channel is increased.

key is correct

I. Question No. 59

- II. Objection:
- III. Remarks of the Coordinator: Option D is correct. In all other processes listed in options (A)-(C), gamma rays either loose energy or completely lost. Option (D) process does not involve gamma ray in its initiation.

Question is valid and key is correct

I. **Question No. 66**

II. Objection:

III. Remarks of the Coordinator: **Question 66:** Option A is correct.

In all other options, only characteristic X-rays wavelengths are emitted, which are discrete in nature, not continuous.

key is correct

I. **Question No. 67**

II. Objection:

III. Remarks of the Coordinator: Key C is correct. It is linear oscillator. For one dimensional oscillator, all the energy levels are nondegenerate.

key is correct

I. **Question No. 75**

II. Objection:

III. Remarks of the Coordinator: Option B is correct. Since temporal coherence is phase related property of a wave along the direction of propagation (longitudinal).

The coherence length is used for quantifying the degree of temporal (not spatial) [coherence](#) as the propagation length (and thus propagation time) over which coherence degrades significantly. It is defined as the [coherence time](#) times the vacuum [velocity of light](#).

key is correct